A STUDY ON HEALTH RELATED CARE AND SUPPORT SERVICES RENDERED TO INDUSTRIAL WORKFORCE OF GUJARAT WITH SPECIAL REFERENCE TO HIV/AIDS RELATED SERVICE

A Thesis submitted to Gujarat Technological University

for the Award of

Doctor of Philosophy

In

MANAGEMENT

By

SHIRISH SRIVASTAVA

159997292011

Under supervision of

DR. RITESH K. PATEL

GUJARAT TECHNOLOGICAL UNIVERSITY

AHMEDABAD

[OCTOBER – 2021]

A STUDY ON HEALTH RELATED CARE AND SUPPORT SERVICES RENDERED TO INDUSTRIAL WORKFORCE OF GUJARAT WITH SPECIAL REFERENCE TO HIV/AIDS RELATED SERVICE

A Thesis submitted to Gujarat Technological University

for the Award of

Doctor of Philosophy

In

MANAGEMENT

By

SHIRISH SRIVASTAVA

159997292011

Under supervision of

DR. RITESH K. PATEL

GUJARAT TECHNOLOGICAL UNIVERSITY

AHMEDABAD

[OCTOBER – 2021]

DECLARATION

I declare that the thesis entitled "A Study On Health Related Care And Support Services Rendered To Industrial Workforce Of Gujarat With Special Reference To HIV/AIDS Related Service" submitted by me for the degree of Doctor of Philosophy is the record of research work carried out by me during the period from 2015 to 2021 under the supervision of Dr. Ritesh K. Patel and this has not formed the basis for the award of any degree, diploma, associateship, fellowship, titles in this or any other University or other institution of higher learning.

I further declare that the material obtained from other sources has been duly acknowledged in the thesis. I shall be solely responsible for any plagiarism or other irregularities, if noticed in the thesis.

Signature of the Research Scholar: Shirish Srivastava

Date: 08 th October 2021

Name of Research Scholar: Shirish Srivastava

Place: Ahmedabad

CERTIFICATE

I certify that the work incorporated in the thesis "A Study On Health Related Care And Support Services Rendered To Industrial Workforce Of Gujarat With Special Reference To HIV/AIDS Related Service" submitted by Shri Shirish Srivastava was carried out by the candidate under my supervision/guidance. To the best of my knowledge: (i) the candidate has not submitted the same research work to any other institution for any degree/diploma, Associateship, Fellowship or other similar titles (ii) the thesis submitted is a record of original research work done by the Research Scholar during the period of study under my supervision, and (iii) the thesis represents independent research work on the part of the Research Scholar.

Signature of Supervisor:..... Date: 08 October 2021

08/OCT/2021

Name of Supervisor: Dr. Ritesh K. Patel

Place: Ahmedabad

Annexure – IV (A)

Course-work Completion Certificate

This is to certify that Mr./Mrs./Ms. SHIRISH SRIVASTAVA enrolment no. 159997292011 is a PhD scholar enrolled for PhD program in the branch Management of Gujarat Technological University, Ahmedabad.

(Please tick the relevant option(s))

☒ He/She has been exempted from the course-work (successfully completed during M.Phil Course)

☒ He/She has been exempted from Research Methodology Course only (successfully completed during M.Phil Course)

☑ He/She has successfully completed the PhD course work for the partial requirement for the award of PhD Degree. His/ Her performance in the course work is as follows-

Grade Obtained in Research Methodology (PH001)	Grade Obtained in Self Study Course (Core Subject) (PH002)
BB	AA

Supervisor's Sign 08/OCT/2021

(Name of Supervisor)

Originality Report Certificate

It is certified that PhD Thesis titled "**A Study On Health Related Care And Support Services Rendered To Industrial Workforce Of Gujarat With Special Reference To HIV/AIDS Related Service**" by **Mr. Shirish Srivastava** has been examined by us. We undertake the following:

a. Thesis has significant new work / knowledge as compared already published or are under consideration to be published elsewhere. No sentence, equation, diagram, table, paragraph or section has been copied verbatim from previous work unless it is placed under quotation marks and duly referenced.

b. The work presented is original and own work of the author (i.e. there is no plagiarism). No ideas, processes, results or words of others have been presented as Author own work

c. There is no fabrication of data or results which have been compiled / analyzed.

d. There is no falsification by manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

e. The thesis has been checked using Urkund (copy of originality report attached) and found within limits as per GTU Plagiarism Policy and instructions issued from time to time (i.e. permitted similarity index <10%).

Signature of the Research Scholar: ..... Date: 8 October 2021

Name of Research Scholar: Shirish Srivastava

Place: Ahmedabad

Signature of Supervisor: ..... Date:8 October 2021

Name of Supervisor: Dr. Ritesh K. Patel Place: Ahmedabad

Curiginal

Document Information

Analyzed document	Final Thesis-Shirish Srivastava.docx (D109146332)
Submitted	6/17/2021 3:36:00 PM
Submitted by	Srivastava Shirish
Submitter email	srvstv_shirish@yahoo.com
Similarity	8%
Analysis address	srvstv.shirish.gtuni@analysis.urkund.com

Sources included in the report

SA **PR.pdf**
Document PR.pdf (D108750449) 9

PhD THESIS Non-Exclusive License to

GUJARAT TECHNOLOGICAL UNIVERSITY

In consideration of being a PhD Research Scholar at GTU and in the interests of the facilitation of research at GTU and elsewhere, I **Shirish Srivastava** having (Enrollment No.) **159997292011** hereby grant a non-exclusive, royalty free and perpetual license to GTU on the following terms:

a) GTU is permitted to archive, reproduce and distribute my thesis, in whole or in part, and/or my abstract, in whole or in part (referred to collectively as the "Work") anywhere in the world, for non-commercial purposes, in all forms of media;

b) GTU is permitted to authorize, sub-lease, sub-contract or procure any of the acts mentioned in paragraph (a);

c) GTU is authorized to submit the Work at any National / International Library, under the authority of their "Thesis Non-Exclusive License";

d) The Universal Copyright Notice (©) shall appear on all copies made under the authority of this license;

e) I undertake to submit my thesis, through my University, to any Library and Archives. Any abstract submitted with the thesis will be considered to form part of the thesis.

f) I represent that my thesis is my original work, does not infringe any rights of others, including privacy rights, and that I have the right to make the grant conferred by this non-exclusive license.

g) If third party copyrighted material was included in my thesis for which, under the terms of the Copyright Act, written permission from the copyright owners is required, I have obtained such permission from the copyright owners to do the acts mentioned in paragraph (a) above for the full term of copyright protection.

h) I retain copyright ownership and moral rights in my thesis, and may deal with the copyright in my thesis, in any way consistent with rights granted by me to my University in this non-exclusive license

i) I further promise to inform any person to whom I may hereafter assign or license my copyright in my thesis of the rights granted by me to my University in this nonexclusive license.

j) I am aware of and agree to accept the conditions and regulations of PhD including all policy matters related to authorship and plagiarism

Signature of the Research Scholar: Shirish Srivastava

Name of Research Scholar: Shirish Srivastava

Date: 08 October 2021 Place: Ahmedabad

Signature of Supervisor: Ritesh

Name of Supervisor: Dr. Ritesh K. Patel

Date: 08 October 2021 Place: Ahmedabad

Seal:

Annexure-VII

Thesis Approval Form

The viva-voce of the PhD Thesis submitted by Shri/~~Smt./Kum.~~ Shirish Srivastava, Enrolment No. 159997292011 entitled "A Study on Health Related Care and Support Services Rendered to Industrial Workforce of Gujarat with Special Reference to HIV/AIDS Related Service" was conducted on Friday, 08th October 2021 (day and date) at Gujarat Technological University.

(Please tick any one of the following option)

☑ The performance of the candidate was satisfactory. We recommend that he/she be awarded the PhD degree.

☒ Any further modifications in research work recommended by the panel after 3 months from the date of first viva-voce upon request of the Supervisor or request of Independent Research Scholar after which viva-voce can be re-conducted by the same panel again.

(briefly specify the modifications suggested by the panel)

☒ The performance of the candidate was unsatisfactory. We recommend that he/she should not be awarded the PhD degree.

(The panel must give justifications for rejecting the research work)

NA

Dr. Ritesh K. Patel
08/10/2021

Name and Signature of Supervisor with Seal

DR. RICHARD CHINOY

1) (External Examiner 1) Name and Signature

DR. KULDEEP CHARAK

2) (External Examiner 2) Name and Signature

3) (External Examiner 3) Name and Signature

Abstract

Health care is the preservation or improvement of health via the prevention, diagnosis, treatment, recovery, or cure of disease, illness, injury in people. The means of "Health care services" is to the furnishing of medical or surgical treatment, nursing, hospital service, dental service, optometrically service, complementary health services, or any or all of the enumerated services, whether or not contingent upon sickness or personal injury, as well as the furnishing to any person and all other services and goods to prevent, cure or healing human illness, physical disability or injury.

In this study, the researcher focussed on health care services offered by our health system to the general population with special reference to HIV/AIDS-related services rendered to the industrial workforce Offered by an employer to their employees.

The researcher also evaluated efficiency & healthcare infrastructure & benefit passed to the urban &rural population of Gujarat in context with the workforce of organization & services related to HIV/AIDS.The informal industrial workforce bears a heightened risk of epidemic infection, which results from the condition, and structure of the migration process. Available evidence suggests that the migration of the informal workforce might be responsible for the spread of the epidemic in high-out migration states such as Uttar Pradesh, Bihar, Rajasthan, Orissa, Madhya Pradesh, and Gujarat. In this study quantitative data was collected from the employees engaged in different company industries Small, Medium, and Large scales industry of Gujarat. A sample of 800 respondents was shortlisted, interview 610 respondents but after the data cleaning process, 539 valid responses were

used for the analysis and testing model. The researcher collected the data from Ankaleshwer GIDC, Bharuch GIDC, Hazira & Sachin GIDC, Surat, Waghodia, GIDC, Vadodara. Tools selected for analysis are Descriptive and Inferential Analysis, Exploratory Factor Analysis, Confirmatory Factor Analysis, Cross Tabulation, Cluster Analysis, and Content Analysis. The research has used SPSS 25 and AMOS to perform varied statistical techniques to analyze the data. The data was first inserted into an Excel sheet and then imported to SPSS software for further analysis.

At last, the researcher draws vital suggestions.

- To serve this vulnerable group by this study.
- To motivate stakeholders to invest proper funds to achieve program objectives.
- Developing a sustainable model for delivering health-related care & support services with special reference to HIV/AIDS rendered to an industrial workforce of Gujarat.
- Getting zero infection & stigma related to HIV/AIDS

Key Words: Industrial workforce, Migration process, Informal workforce, epidemic

Acknowledgement

I would like to acknowledge everyone who has assisted me throughout my doctoral studies over the years. I wanted to take this opportunity to thank you personally those who have been a source of encouragement in my entire endeavor.

I wish to express my sincere gratitude to my research supervisor, **Dr. Ritesh K. Patel**, Assistant Professor, Gujarat Technological University, who has the substance of a genius: he convincingly guided and encouraged me to be professional and do the right thing even when the road got tough. I have learned extensively from him, including how to do positive thinking I always get a second wind with a new perspective and how to approach the problem through systematic thinking. I am very much indebted to him for his philosophical approach, guidance, and spending valuable time to letting the cat out of the bag. Without their assistance and dedicated involvement in every step throughout the process, this would have never been accomplished. He guided me as a teacher, as a mentor, and enlighten me whenever it required. I especially appreciate the information and advice you have provided and the contacts you have shared with me. Your assistance has been invaluable to me during this process.

I take this opportunity to convey my sincere thanks to my Doctoral Progress Review Committee Members **Dr. Viral G. Bhatt** – Principal SAL Institute of Management, Ahmedabad, Associate Professor, **Dr. Kaushal A. Bhatt**, Assistant Professor, Gujarat Technological University, Ahmedabad. I am very grateful for their valuable suggestions and guidance throughout my research.

I am thankful to all staff of Gujarat Technological university staff especially the Ph.D. Department for giving me the retreat to have this thesis rushed to the printer.

Most importantly, none of this could have happened without my family. My Father **Shri. Dinesh Kumar Srivastava** & My Mother **Smt. Gita Srivastava** who offered her encouragement through phone calls every week – despite my limited devotion to correspondence.

I express my earnest gratitude towards my wife **Mrs. Meenakshi Srivastava** who always stands by me and encourages me in any of my endeavours. My twelve years old son **Shrestha** and loving five years old son **Shravan**, has motivated me a lot to complete my research as early as possible as both of my son has missed quite a few fun days, some social functions and outing due to my research work. I remain grateful to my family members for their patience, tolerance, sacrifice, and understanding.

Last but not the least I am thankful to Great God and Nature who are enduring sources of inspiration.

SHIRISH SRIVASTAVA

TABLE OF CONTENTS

List of Figures

List of Tables

List of Appendices

CHAPTER - 1

Introduction

This introductory chapter discusses the brief overview of research topic. The chapter covers background of research topic, concept related topic, overview of HIV/AIDS, Migration and Informal workforce health status, research problem and significance of the study. The chapter finally discusses chapterization of thesis.

CHAPTER 1

Introduction

1.1 Introduction

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. (WHO)

Health care is the preservation or improvement of health via the prevention, diagnosis, treatment, recovery, or cure of disease, illness, injury in people. **(Reviews, 2020)**

In our study, we will focus on health care services offered by our health system to the general population with special reference to HIV/AIDS-related services rendered to the industrial workforce. Offered by employers to their employees.

We will also evaluate efficiency & healthcare infrastructure & benefit passed to the urban & rural population of Gujarat in context with the workforce of organizations& services related to HIV/AIDS.

1.2 National Health Mission

(Mission, 2018-19) The NHM shall be a major instrument to support financially and technically the states for strengthening public health systems and health care infrastructure of the state. Financial support to the state will be based on the state's Programme Implementation Plan (PIP). The PIP shall have the following parts:

1. NRHM RCH Flexi pool
2. NUHM Flexi pool,
3. Flexible Pool for Communicable Diseases Part

4. Flexible Pool for Non-Communicable Diseases, Injury and Trauma Part
5. Infrastructure Maintenance

The State PIPs would be an aggregate of the village/district/city health action plans and include activities to be carried out at the state level. They would be expected to inculcate the individual district plans considering the medical needs of the district. This has a lot of advantages: It will strengthen local planning at the district/city level, two; it would ensure approval of adequate resources foran aspirational district with high medical needs and enable communication of approvals to the districts at the same time as to the state.**(National Health Mission, 2018)**

All medical and health programs shall be horizontally integrated at state, district, and block levels. This will mean incorporation into an integrated state, district/city program implementation plan, sharing data and information across these structures. It shall also mean streamlining the use of infrastructure and human resources across these vertical programs. The District/City Health Action Plan would give an idea and outline the facility strengthening plan- essentially listing the facilities and defining the assured services each would provide and ensure that all essential health services are provided within the district. These plans would require the current status of a package of services available in each facility, the inputs, activities, manpower, and funds required to expand this package,improve the quality of medical care, expand access, and enable positive outcomes in medical services to last people in the society at rural and micro rural level. **(National Health Mission, Govt. Of Kerala)**

Strengthening district hospital capacity necessitates the creation of a minimum number of hospital beds in the public sector for serving the secondary care clinical needs of thedistrict population. As per WHO norms mandate 1500 beds for a ten lakh (1,000,000) population. However given the country's existing context, i.e. limited public sector capacity, and low private sector presence and capacity, the starting point for all districts should be the provision of 500 public hospital beds for a population of 10 lakhs. Thus for a10 lakh district population, a minimum of 500 beds is required across all facilities. **(Healthand Medicine, 2015)**

sub-centers are the focal point for delivering effective outreach services in rural areas. Most of the outreach activities will take place at the village level, with the ASHA

workers, Anganwadi Centre being the usual platform for service delivery. For the sub-centers to become the first port of call, and assured set of services page. **(spb kerala)**

Social protection of the general population from the rising cost of health care services is a desirable and critical component of an effective health system. To achieve the objective NHM objectives, good quality medical services and safe medicines, diagnostics, and therapeutic procedures must be accessible, available, and affordable to the general population. The public provisioning of medical services is expected to provide social protection and ensure equity of access in hospitals.

1.3 Rural & Urban health infrastructure in India

The National Rural Health Mission (NRHM) was introduced government of India toprovide high quality accessible and affordable health care to the rural population, especially the exposed groups. **(National Rural Health, 2021)**

NHM seeks to provide equitable, affordable, and quality health care to the rural population, especially the vulnerable groups. The thrust of the mission is on establishing a fully functional, community-owned, decentralized health care delivery system with inter- sectoral conjunction at all levels, to ensure simultaneous action on a wide range of determinants of health. Institutional integration within the fragmented health sector was expected to provide a focus on outcomes, measured against Indian Public Health Standards for all health facilities. **(NRHM, 2021)**

The key structures to attain the goals of the National Health Mission include making the public health delivery system fully functional and accountable to the community level, human resources management, community involvement, decentralization of health care services, close monitoring & evaluation against health standards, the convergence of health and related programs from village level upwards, innovations and flexible financing and also interventions for improving the health indicators. **(Vikas pedia, 2020)**

1.4 Goals of National Health Mission:

- Need-based city-specific urban health care system to meet the diverse health care needs of the urban poor and other vulnerable sections.

- Induct Institutional mechanisms and management systems to meet the health-related challenges of a rapidly growing population in urban as well as rural areas.
- Partnership with the local community and local stakeholders for more proactive involvement in planning, implementation, and monitoring of health care services.
- Ensure availability of resources for providing essential primary health care to the general population.
- Ensuring partnerships with local NGOs, for-profit and not for profit health service providers, and other stakeholders at the ground level **(coverfox, 2013).**

NHM would cover all State capitals, district headquarters, and cities. It would primarily focus to serve marginalized and vulnerable groups like rickshaw pullers, street vendors, railway and bus station coolies, homeless people, street children, construction site workers.

The center-state funding pattern will be in the ratio of 75:25 for all the States except North-Eastern states including Sikkim and other special category states of Jammu &Kashmir, Himachal Pradesh, and Uttarakhand, for whom the center-state funding pattern will be I the ratio of 90:10.The Programme Implementation Plans (PIPs) sent by the states are approved by the Health Ministry **(down to earth, 2013).**

To effectively address the health concerns of the poor population, the Ministry proposes to launch a new sub-mission National Urban Health Mission (NUHM). The Mission Steering Group of the NHM will be expanded to work as the zenith body for NUHM also. Every Municipal Corporation, Municipality, Notified Area Committee, and Town Panchayat will become a unit of planning with its own approved broad norms for setting up of medical and health facilities. The Municipal Corporations will have a distinct plan of action as per broad norms for the people of urban areas. The existing structures and mechanisms of governance under NHM will be duly adapted to fulfill the needs of the general population **(national urban health).**

1.5 Healthcare in India

A rural Healthcare service in India is particularly based totally on primary health care, which expects accomplishment of healthy role for all. Also being worldwide in nature it intends to provide quality treatment, recommends curative and reconstructive precaution

offerings. The specific Healthcare regulations and Programs of the country purpose at reaching a good enough standard of Healthcare for the overall population of the area. Preserving correct and consistent with this objective, an entire approach become promoted, which covered improvements in individual Health care.Significance was givento reduce disparities in Healthcare throughout regions and communities through protection to get admission to rational health, specifically to the weaker section ofsociety.

1.6 Rural Healthcare infrastructure: A Statistical view

The Healthcare infrastructure in rural areas has been established as a three-tier system and is based on the following population structure.

Table: 1.1 Rural Healthcare three tier system

	Population Norms	
Centre	**Plain area**	**Hilly/Tribal/Difficult area**
Sub Centre	5000	3000
Primary Health Centre	30,000	20,000
Community Health Centre	1,20,000	80,000

Source: Rural Healthcare system in India, Ministry of Health and Family Welfare(MOHFW), Government of India (GOI)

As of 31st March 2015, there are 153655 Sub Centers in India,while 25308 Primary Health Centers and 5396 Community Health Centerswere established and working inthe country.

1.7.1 Sub Centres (SCs)

The sub-center is the first remote and primary contact point between the primary healthcare system and the community. Sub centers are assigned tasks concerning interactive conversation in a good way to result in behavioral changes and render offerings in terms of maternal and infant fitness, family welfare, vitamins, immunization, diarrhea control, and control of communicable sicknesses packages. Each sub-center is expected to be managed by at least one Auxiliary Nurse Midwife (ANM)/ girl health worker and one male health worker. Under NRHM, there is a provision for one additional 2dANM on the

agreement foundation. One lady health visitor (LHV) is assigned the task of supervision of six sub-centers. The government of India bears the salary of ANM and LHV whilst the salary of the male medical examiner is borne by state governments **(Rural healthcare system).**

1.7.2 Primary Health Centres (PHCs)

PHC is the first point of contact between the village community and the medical officer. The PHCs were visualized to offer an integrated curative and preventive Healthcare to the serve rural population with emphasis on prophylactic and promotive elements of health care. The PHCs are equipped and maintained by way of the state government under the Minimum Needs Programs (MNP)/ Basic minimum services (BMS) program. A PHC is to be controlled with the aid of a Medical officer supported all through 14 paramedical and another workforce. Under NRHM, there is a provision for 2 extra teams of workers nurses at percent on the agreement foundation. It acts as a referralcenters for 6Sub Centers and 4-6 beds for patients. The activities of PHC consist of healing, preventive, promotive, and family welfare services **(Rural health system).**

1.7.3 Community health Centres (CHCs)

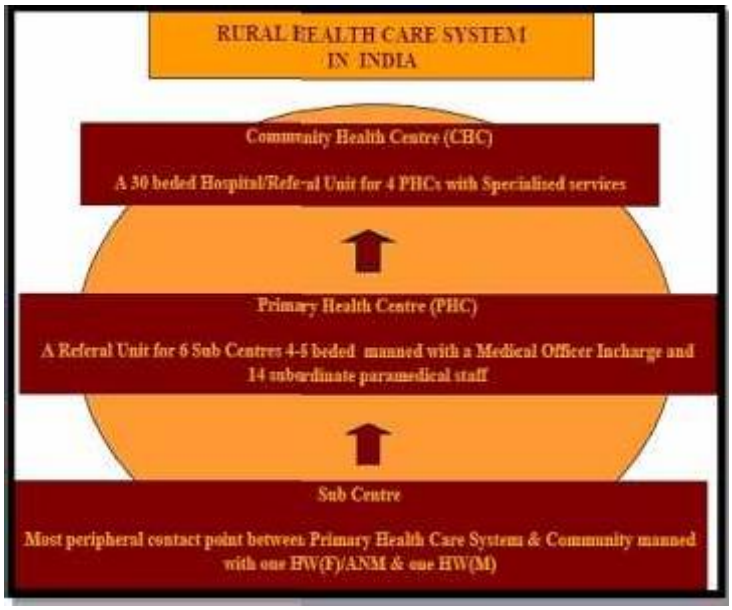
CHCs are being established and maintained by the state government under MNP/BMS program. A CHC is required to be managed by using 4 medical specialists' i.e. surgeon physician, gynecologist, and pediatrician supported by 21 paramedical and different personnel. It has 30 in-door beds with one OT, X-ray, and labor room, and laboratory centers. It provides a referral center for PHC and also presents facilities for obstetric care and specialist consultations. **(MOHFW).**

First Referral Units (FRUs) Current facility (District hospital, Sub-divisional health facility, network health Centre and so on.) may be stated a fully operational First Referral Unit (FRU) best if it is fortified to render spherical-the-clock services for emergency obstetric and newborn care **(vikaspedia)**

Primary Health Centers are the ponder of rural Healthcare offerings- a primary factor of call to a qualified health practitioner of the public region in rural areas for the despicable and those who at once record or denoted from Sub-centers for healing, preventive and promotive health care. As per guideline, a primary health Centre covers a population of

20,000 in hilly, tribal, or hard areas and 30,000 populations in plain areas with 4-6 indoor/remark beds. It acts as a referral unit for 6 sub-centers and refers out cases to CHC (30 bedded hospital) and higher-order public hospitals placed at sub-district and district. **(vikaspedia)**

Figure: 1.1 Three tier rural Healthcare system in India



Source: Rural Healthcare system in India, Ministry of Health and Family Welfare (MOHFW), Government of India (GOI)

1.7.4 Indian Public Health Standards

Standards are the principal intention force for consistent upgrades in quality. The

performance of the Primary Health Centre may be evaluated against the set standards. On the way to provide a perfect stage of respectable health care, a set of requirements are being cautioned for the number one health Centre to be known as Indian Public health standards (IPHS)for Primary Health Standards. The requirements prescribed are for a Primary Health Centre covering 20,000 to 30,000 populations with 6 beds. Setting standards is a vibrant procedure. **(IPHS, 2012)**

The overall goal of IPHS for Primary Health Centre is to provide high Healthcare- quality-focused and thinking about the wishes of the network. Those requirements can beuseful for improving the functioning of the PHCs. **(IPHS, 2012)**

1.7.5 Healthcare Services Delivery:

- All assured medical facilities as predicted within the PHC should be available, which includes routine, preventive, promotive, healing, and emergency care further to all the countrywide health applications.
- Suitable schemes for each country-wide use for control of general and emergency cases are being furnished to the PHC.
- All of the help medical services to fulfill the targets could be reinforced at the PHC level. The minimum requirement for delivery of the Healthcare services.

The essentials are projected based on the idea of forty patients per health practitioner in line with day, the estimated quantity of recipients for maternal and infant Healthcare and own family making plans, and about sixty percent usage of the prevailing indoor/ statement beds. It would be a dynamic process inside the feel that if the consumption goes up, the requirements might be further upgraded as per the need of the area.

1.7.6 Intentions of Indian Public health standards (IPHS) for number one health Centres

- To deliver ample number one Healthcare to the community through PHC
- To obtain and sustain excellent health service equality
- To make the services more consistent and correct treatment that should be

approachable and considerate to the wishes of the community.

Table: 1.2 Staffing pattern for rural health care

A	Staff for Sub-Centre	Number of posts
1	Health Worker (Female)? ANM	**1**
2	Additional second ANM (Contract basis)	**1**
3	Health worker (Male)	**1**
4	Voluntary Worker	**1**
	Total (excluding contractual staff)	**3**
B	**Staff for Primary Health Centre (PHC)**	
1	Medical Officer	**1**
2	Pharmacist	**1**
3	Staff Nurse	**1 +2 on the basis of contract**
4	Health worker (Female)/ ANM	**1**
5	Health Educator	**1**
6	Health Assistant (Male)	**1**
7	Health Assistant (Female)/LHV	**1**
8	Upper Division Clerk	**1**
9	Lower Division Clerk	**1**
10	Laboratory Technician	**1**
11	Driver (Subject to availability of vehicle)	**1**
12	Class IV	**4**
	Total (Excluding contractual staff)	**15**
C	**Staff for Community Health Centre**	
1	Medical Officer #	**4**
2	Nurse Mid-Wife (Staff Nurse)	**7**
3	Dresser	**1**
4	Pharmacist/Compounder	**1**
5	Laboratory Technician	**1**

6	Radiographer	**1**
7	Ward boys	**2**
8	Dhobi	1
9	Sweepers	3
10	Mali	1
11	Chowkidar	1
12	Aya	1
13	Peon	1
	Total	25

#: Qualified or specially trained

Source: Government of India, M. &. (n.d.). Indian Public Health Standards(India, Ministry of Health & Family Welfare, Directorate General of HealthService). Retrieved from https://gujhealth.gujarat.gov.in/images/pdf/2-2-IPHS- PHC-Standard-2012.pdf

1.7.7 The Centres working

The Primary Healthcare infrastructure has been developed as a three-tier system including the Sub-center, Primary Health Centre (PHC), and Community Health Centre (CHC) considered as three pillars of the Primary Healthcare system.

Sub Centers are the most peripheral first contact point for among the primary health care system and the general population. Sub-centers are a prerequisite for the overall development of the entire health care system. There were 84376 Sub Centers at the sixth plan that is in 1981-85 which increased up to 156231 as on 31st March 2017 which is at the end of the eleventh plan (2007-12).

The same progress we can observe of the numbers of Primary health care centers which was 9115 at the end of the Sixth plan (1981-85) & now there are 25650 primary healthcare centers are functioning in India at the end of 31March 2017.

Some of the Primary healthcare centers upgraded to Community health care system level in many states. In context with this development total of 5624 Community healthcare centers are functional as of 31st March 2017.

Growth of Healthcare facilities in India we can observe in India by this graphical view, which clearly states that there is a substantial growth in all the health facilities to serve the population at rural and micro rural level.

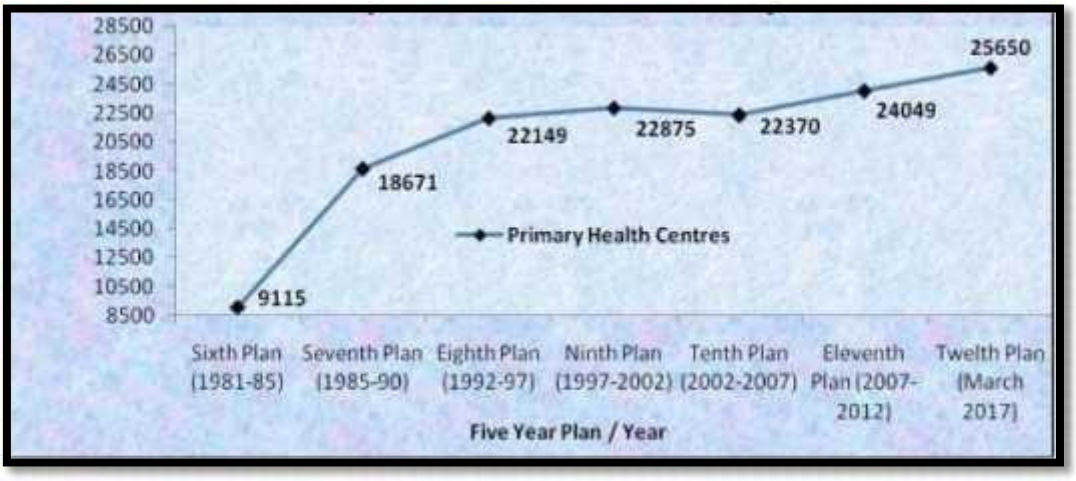


Figure: 1.2 Status of Primary Health Centres

Source: Government of India, M. &. (n.d.). (2017, November 07) Rural Healthcare system in India [PDF]. Government of India.

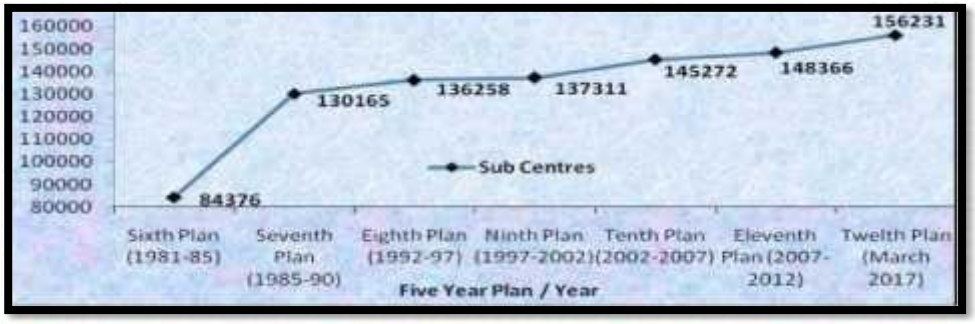
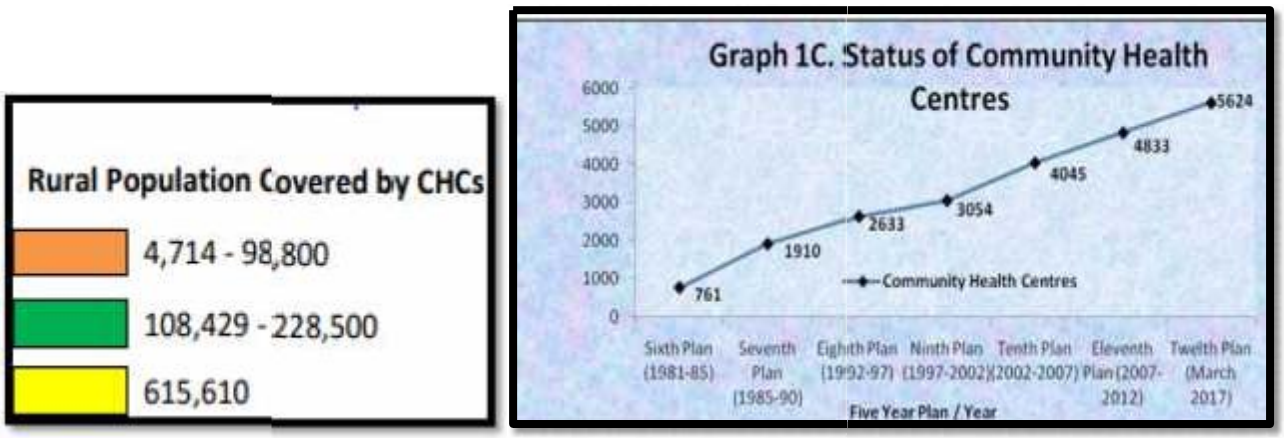


Figure: 1.3 Status of Community Health Centres

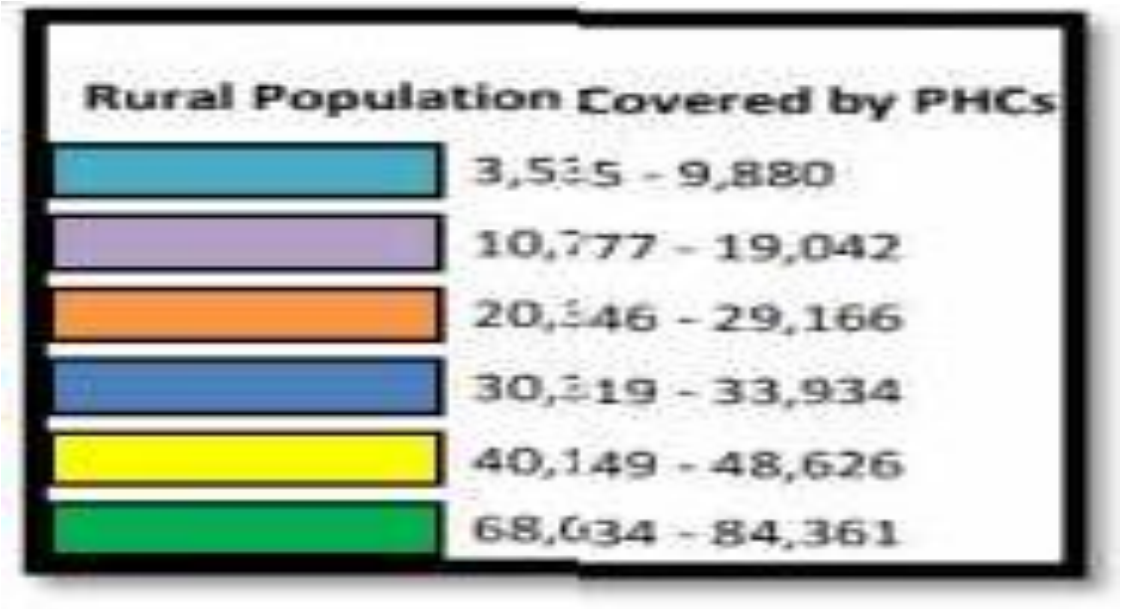


Source: **Government of India, M. &. (n.d.). (2017, November 07) Rural Healthcare system in India [PDF]. Government of India.**

Figure: 1.4 Average Rural Population covered by Sub-centres

Source: Census, 2011

Figure: 1.5 Average rural population covered by PHC - Source: Census, 2011



1.8 Indian Public Health Standard for Rural HealthCare

1.8.1 Medical care for patients

- OPD services: four hours within the morning and two hours in the afternoon/evening. Time table will vary from state to state. Minimal OPD presence ought to be 40 patients in keeping with day according to physician.
- 24 hours emergency offerings: suitable control of grievances accident, first aid, stabilization of the condition of the patient before referral.
- Referral services
- In-patient offerings (6 beds)

1.9 National AIDS Control Program

The key objectives of the National health mission will be concerning enabling and achieving the stated vision, making the system more responsive to the needs of the general population, building a good evidence-based inclusive partnership for realizing National health goals, focusing on the survival and good health of women and children, reducing existing disease burden and ensuring financial support for households to strengthen their family. To ensure unbiased health care and to bring about sharper improvements in health outcomes, a logical effort to effectively address the intrastate disparities in health outcomes would be undertaken.

As far as concerned with HIV/AIDS an estimated 4.2 million people are living with HIV in Asia, 90% of them are in India, China, and Thailand. India contributes 49% of it (2.4 million people). The first few cases of HIV in India were detected in 1986 among sex

workers in Chennai and the first AIDS case was reported in 1987 in Mumbai. Like in other countries, HIV was supplemented with stigma, discrimination, depression, suicidal tendencies, and violence. As more cases began to be detected, a National AIDS Committee was set up under the Union Ministry of Health and Family Welfare in 1986. The sole objective of this committee was to control the spread of the infection and family-based care to people with HIV/AIDS. The National AIDS Control Organization (NACO) was formed in 1992 and the first National AIDS Control Programme (NACP) was launched. Its main aim at that time was to undertake reconnaissance to know modes of spread, to screen blood, and increase awareness.

1.9.1 India and HIV/AIDS

When we discussed National AIDS Control Program, four phases have been introduced by the union ministry of health and family welfare. The sole objective of the National AIDS control program is to remove stigma and discrimination from the general population and getting zero infections by awareness. At the same time provide counselling and treatment services to the patient suffering from HIV/AIDS.

So many NGOs, Community based organizations, self-help groups, and corporate houses CSR divisions are providing support to achieve the program objective. State AIDS control societies providing funds to NGOs at the district level to cover high-risk groups, run integrated counselling and testing centers, Anti-retroviral treatment centers, and other information education and communication activities. They are providing proper coverage through a systematic approach to reduce the HIV prevalence in the state.

Condom promotion program run by social marketing organization to ensure availability and accessibility of condom at a subsidized rate. They ensure the supply chain on a condom at rural and micro rural levels. They are also conducting information education and communication activities like poster exhibitions, road shows for condom promotion, inter personal communication activities in rural areas with the support of gram Pradhanand health care workers.

The objective of SMO’s is to provide protection against unprotected sex and remove the stigma from the general population. They are trying to ensure the availability of condoms with walking distance of 15 minutes in rural and 10 minutes in urban areas.

1.9.2 Schemes run by NACO/SACS for HIV/AIDS prevention & cure

1. Targeted interventions (TIs) –

This is the very unique program designed by NACO and implemented by NGOs at the district level to cover a high-risk group of states. When we talk about a high-risk group we can further divide it into the following categories

Female sex workers, Male sex workers, Truckers , Migrant workers , Injective drug users

In this program, the State AIDS control societies protect these groups against the HIV/ AIDS provide other HIV/AIDS-related services, and submit monthly/quarterly/annual reports to SACS/NACO.

2. Link Worker Scheme

This program is run by SACS to provide HIV/AIDS-related services to the rural population. It is a rural-based intervention for the prevention and care needs of HRGs including referral to Integrated Counselling and Testing Centres (ICTC) services andsexually transmitted disease. Condom promotion, raise awareness and risk perception among the general population, particularly youth and women

3. Red Ribbon Express (RRE):

This is also a unique step taken by NACO under this activity a special exhibition train that travels across the country disseminating the messages on HIV/AIDS and general health in rural and remote areas of the country. Along with the train, special outreach programs are organized in the villages through information education and communication (IEC) exhibition vans and folk troupes.

4. **The Integrated Counselling and Testing Centre:**

This is the centre where NACO is offering counselling and testing services for HIV, includes three main components:

ICTC-Integrated counselling and testing services, PPTCT -Prevention of parent to child transmission of HIV/AIDS, HIV-TB collaborative activities.

5. **The CST program:**

Under this component, NACO offers prevention and treatment of opportunistic infections, ART (first line and second line), psychosocial support, home-based care, positive prevention, and impact mitigation

6. **Employer Led Model program**

Under this program, NACO establishing a network with private partners and offering HIV/AIDS-related services for industrial workers.

1.10 Industrial Workforce & HIV/AIDS

An important aspect of the quality of employment in India is the majority of the informal sector. The size of the organized sector, characterized by higher earnings and job security is small, it accounted for less than 6% of the total employment in 2004-05. Around two-thirds of the total organized sector employment is in the public sector. Over the years, organized sector employment has developed more slowly than total employment, stunning the faster growth of employment in the unorganized sector. As a result, there has been increasing in-formalization of employment over the years.

HIV/AIDS and Sexually transmitted infection (STI) is one of the highly malignant diseases, which affect now a day to the informal female migrant. This group is unaware of the disease and secondly, they are not ready to share with anyone about this part.

1.11 Problem Statement

The research problem means the main problems for which the whole research is being carried out. The title “A study on healthcare and support services rendered to an industrial workforce of Gujarat with special reference to HIV/AIDS-related services”. In this research, special

reference is given to HIV/AIDS disease-related services is being provided to the employees in the industries.

The societal approach regarding the disease HIV/AIDS is very conservative, and the people who are being affected either in or way, are not treated well. At the same, this study will focus on the services provided by the industries to their employees regarding creating the awareness and prevention of HIV/AIDS.

Besides, this research is also focusing on the other healthcare services, which are being provided to employees, the proper counseling with the concerned authorities regarding awareness, survival, and prevention is being provided to employees. As this HIV/AIDS is not at all curable disease, but it can be controlled with the help of proper medications, so it becomes very much necessary to involve the authorities, committees working in the welfare of such people who all are being infected.

1.12 Research Objectives

1. To study the factors influencing to the health care support services in the industries.
2. To understand the valuation amongst the various factors related to health are Support services with respect to demographic variables.
3. To identify the factors affecting the healthcare support services in the industries.
4. To confirm the factors affecting the healthcare support services in the industries.
5. To clarify the factors affecting the healthcare support services in the industries.

1.13 Research Questions

A good analysis ought to have an ideal mix of the speculation and the sensible learning. Research design could be a blue print of any scientific research. The analysis style could be an elaborated define to direct the study towards accomplishment of the analysis objective and involves selections on analysis process and information assortment strategies used (Aaker et al, 2001). It primarily is that the abstract structure of the analysisinside that the whole analysis works is to be distributed. Research design shall answer the six Ws and one H (What, Why, When, Where, Who, that and How) for the analysis works.

.

What:

What is the purpose of the research? What is being studied in this research?
For any research, it is important to decide what exactly the research is about. Therefore, from a research we would like to know the current condition regarding the healthcare and support services of the employees working with the industries. And specifically the researcher is focusing on the healthcare services related to the disease like HIV AIDS.

The present research will also be helpful in making the clear road map to the facilities provided by the various companies in different industries regarding the Healthcare. How much the companies for the well-being of the employees are making efforts. This research will also help to understand what kind of provisions company are having against the disease like HIV AIDS.

Why:

Why is this study required? It is important to understand why this research is being conducted.

The healthcare and supported services are always important for the workers engaged in the company. These services are the necessity of the companies having the nature of the work that it is having direct impact on the worker's health. In addition, the research will focusing on the approach of the companies regarding to such chronic diseases. The basic understanding regarding the HIV ADIS is necessary for every worker in the organization. and the awareness education

Where:

The geographical area to be covered under the research is another important question. It not possible to cover entire population under any research the same way it is also not possible to cover entire geographical area under any research. Hence, it becomes important to decide where the research is to be conducted.

It is very important to decide the geographical area for any researcher to conduct successful and useful research. Therefore, in the current research the researcher is the resident of Gujarat, hence the data collected is within from different cities of Gujarat Statethrough online and offline both method.

Who:

After deciding the geographical are the questions comes who will be studied. Respondents need to be identified very carefully as the correctness and reliability of the research depends on the quality of the responses received.

Therefore, in the research the researcher had chosen the respondent very carefully, and only collected the data from the workers who are working in the industries where the issues regarding employee healthcare services is being addressed properly. Along with managers and employees both are having sound knowledge about every thick, and thin of this industry.

Which:

In order to collect relevant data appropriate questions are to be asked and studied. Which questions are to be asked is the next question.

For answering the above question, the researcher have collected the data through Primary and Secondary methods. For Primary data the researcher have used the structured questionnaire with 7 point Likert scales, where **1 denoted the Highest Disagreement while 7 denoted the Highest Agreement**. The questionnaire was developed after referring the related literature reviews.

For Secondary data we have used the online journal, research papers the authenticated website data that are being owed by some public and private institutions.

How:

This question is the sub-set of above question: "Which". The data collected through both the resources should be analysed in authenticated in order to obtain the reliable and genuine results. The question here raised is how to analyse the data?

Therefore, for the unbiased and genuine result analysis we have applied some statistical tools which is again having a base of literature review. As per the various statistical tools and techniques applied in the various literature reviews, the researcher had also applied the same tests and tools applicable to our data.

The data is being analyzed by the usage of statistical tools like SPSS 25 and AMOS.

The data analyzed using the Frequency Distribution, Graphical Presentation, and Cross Tabulation.

Descriptive Analysis, Inferential Analysis, Analysis of Variance, Multivariate Analysis, Exploratory and Confirmatory Factor Analysis, Two way Cluster Analysis.

1.14 Research Gap

In this research, special reference is given to HIV/AIDS disease-related services is being provided to the employees in the industries.

Currently, there is no such system that provides healthcare support/coverage to the informal industrial workforce of Gujarat.

There are so many schemes run by the government but due to unawareness and proper linkages between corporate and healthcare workers, they are not getting benefitted from health schemes run by the government.

There is a huge gap between coordination of health department with other departments like Industry health and family, Labour department, State migrant cell, etc which are working with the same objective, but collaboration is lacking at every level, so the researcher needs to identify these gaps and develop a model by specifying the role of every department for improving the healthcare system.

At the same time the societal approach regarding the disease HIV/AIDS is very conservative, and the people who are being affected either in or way, are not treated well, this study will focus on the services provided by the industries to their employees regarding creating the awareness and prevention of HIV/AIDS.

Additionally, this research is focusing on the other healthcare services, which are being provided to employees, the proper counselling with the concerned authorities regarding awareness, survival, and prevention is being provided to employees. As this HIV/AIDS is not at all curable disease, but it can be controlled with the help of proper medications, so it becomes very much necessary to involve the authorities, committees working in the welfare of such people who all are being infected.

****

CHAPTER - 2

Literature Review

This Chapter refers the different research studies going on in India as well as abroad. The literature always helped in understanding how an availability of health care services, expectations, service quality influencing over patient's satisfaction. Widespread research studies going on these aspects in foreign country. So far as India in concern, in general and precisely for the state of Gujarat, there is no such study covering all zones in detail. A good number of Research papers from bulbous journals and magazines were mentioned. Journal of Services Sector, Development sector, Social service sector, quite a few books relating to rural & urban health care from renowned Authors have been referred.

CHAPTER – 2

LITERATURE REVIEW

2.1 HIV / AIDS (Human immunodeficiency virus infection and Acquired Immune Deficiency Syndrome)

Whilst the international community's focus has been on the region most devastated by HIV/AIDS, namely sub-Saharan Africa, India now appears on the brink of a significant AIDS epidemic. In thinking about the implications of HIV/AIDS, considerable attention was initially drawn to its clinical aspects. More recently, other dimensions of HIV, including economic, have been explored. The primary objective of this review is to elaborate on the major elements of the national and international economic research to dataon HIV/AIDS, and to infer lessons from it, for India. It also examines the evidence on the aggregate and household-level economic impacts of HIV, the economic roots that drive its transmission and the methods economists use to assess the efficacy of alternative interventions to address HIV and AIDS. Available evidence suggests that whereas aggregate impacts may be limited, the adverse household-level economic implications of AIDS may be serious; public resources that are available for health are also likely to be putunder strain. Paucity of economic research on HIV and AIDS relating to India is highlighted. (Mahal & Rao, 2005)

There were an estimated 300,000 new HIV infections in the Asia and Pacific region in 2015, with young people aged 15 to 24 years accounting for 37% of all new HIV infections. The number of adolescents living with HIV has risen by 28% between 2005 and2015 in this region. The HIV/AIDS-related knowledge, attitudes, behaviour and HIVtesting status study was done among young people aged 15 to 24 years in Myanmar, 2016(Oo, 2018)

The Migration phenomenon especially informal workers occupy a prominent place on the canvas of Indian economy, India has about total work force of 402 million, of which 313 million are main workers and 89 million are marginal workers (Census, 2001). The total employment in both organized and unorganized sector in India is about 46.5 Crore. Out of this, Organized sector – 6% (2.8 crore) and Unorganized sector – 94% (43.7 crore).

Large majority of unorganized labour force is engaged in agriculture, construction, fishing, small scale industries and daily wage work. According to NSSO (2010-11), 30 million workforce in unorganized sector are constantly on the move (migrant labourers). The importance of unorganized sector is of high importance since more than 50% of the GDP is contributed by the unorganized sector.

Study of the HIV risk environment shows that prevention strategies need to support large scale community risk avoidance as well as change individual behaviour, examples of interventions fostering environmental change. These strategies focus on ameliorating the conditions underpinning increased risk of HIV as well as structural change. Examples include interventions removing legal, economic, or policy obstacles to prevention, such as creating legal access to free sterile injecting equipment without fear of arrest.

Moreover, many of the health effects of large scale social, economic, or political transition, as well as complex emergencies, are beyond the immediate reach of human prevention. This underscores the need for a broader and long term vision for health intervention that encompasses alleviation of poverty, economic reform, policy change, human rights, and community action. Equally, this emphasises the need to raise awareness of population health as a determinant of large scale social and political forces operating regionally as well as globally.(Rhodes & Simic, 2005)

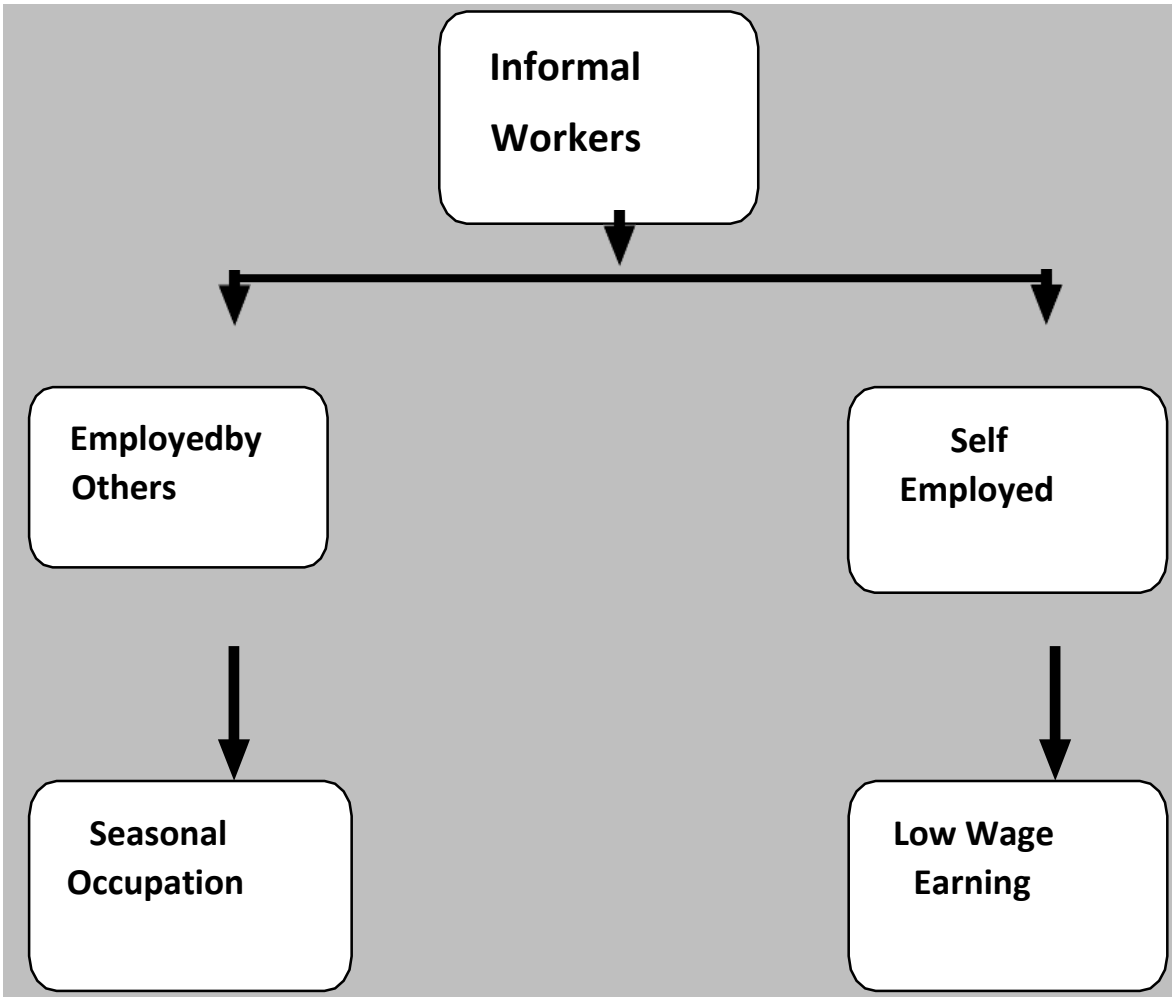
An analysis of Census 2011; SRS 2011 and NSS 64th Round indicates the net migration share in urban growth is up from 21% over the last decade to about 24% over 2001-2011.

The larger unorganised workforce is out of the scope of the Social and Employment benefits, making them vulnerable to socio-economic and health related problems. HIV/AIDS is emerging as one of the important health problems among migrants because of their vulnerability and risk pattern.

2.2 Migrants vs. Informal workers

Migration could include formal and informal workers, rural to urban, etc. – the typification are many. Informal workers are unskilled labourers who work largely in unorganised sector. When they do work in formal settings, it is to address fluctuations in production or in low skill activities which support the formal entities within the sector (like alliedactivities, supply chains – up or down stream) or in small and medium enterprises. Some ofthe informal workers (like construction) work in cities which are growing due to industries
– but not directly working in those industries.

Informal workers can be categorised further as follows and this is important in view of understanding the vulnerability to HIV.



Informal labours who are employed by others constitute 29% as casual employers and among them those who are into seasonal occupations are at vulnerable to HIV because of lack of social and economic security, involvement in peer driven risk taking and pleasure seeking activities like exposure to alcoholism, casual sex with unknown partners etc. The important industries where a large proportion of informal seasonal workers are employed are: Brick Klins (10 million, Source: Migration and Human Development in India, UNDP,April2009), Textile Industry (35 million, out of which 78% are in smaller power looms and handlooms, Source: Migration and Human Development in India, UNDP,April2009), Leather Industry (2 million), Mines and Quarries (4-5 million), Agriculture (35-40 million approx.), Food Processing (7.85 million).

In addition, agricultural labourers who migrate to urban areas work mainly in construction[1] sector and are covered under current destination TIs. Other than the Agriculture sector, the five key sectors of manufacturing, construction, textiles, tobacco and mining employ 99 million workers account for 59 percent [2] of the workers, of whom 34 percent[3] are female.

Unorganised or informal sector constitutes a pivotal part of the Indian economy. More than 90 per cent of workforce and about 50 per cent of the national product are accounted for by the informal economy. A high proportion of socially and economically underprivileged sections of society are concentrated in the informal economic activities. Informal

1 Some amount of double counting is inevitable as most people move and take up more than one job for diversified livelihood in resource poor settings.

2 Excluding Agriculture

3Economic Survey, 2004-05

employment is generally a larger source of employment for women than for men in the developing world. Other than in North Africa where 43 per cent of women workers are in informal employment, 60 per cent or more of women workers in the developing world are in informal employment(outside agriculture). In sub-Saharan Africa 84 per cent of women non-agricultural workers; in Latin America 58 per cent for women in comparison to 48 percent for men. In Asia, the proportion of women and men non-agricultural workers in informal employment is roughly equivalent to Women and Men in the Informal Economy .The informal economy in India employs about 86 per cent of the country's work force and 91 per cent of its women workers. Many of these women workers are primary earners for their families. Their earnings are necessary for sheer survival.(Mohapatra, 2012)**.**

2.3 Migration and HIV Link

There is increasing evidence and growing recognition of the importance of migration/mobility in the spread of HIV infection.

Data indicates that there are about 7.2 million migrants in India are at risk. About 60% are in the age group of 15-39 years and 68% are highly mobile (i.e. frequently changing their place work). Evidence in India and elsewhere shows that the migrants are vulnerable to HIV due to a higher prevalence of risky sexual behaviour, which results from a variety of social and economic factors as well as their work patterns (Operational Guidelines- Targeted Interventions under NACP III (Vol 2); NACO, Ministry of Health and Family Welfare) . The national BSS of 1999 indicates that 40% migrants visit sex workers as Migrants alone has been reported to be 0.89% as against 0.29% among general population. Migrants therefore, constitute an easily identifiable and programmatically addressable sub-segment of men at risk.

The association of work participation and incidence of migration has been extensively reported firstly as the main reason of migration and secondly as the consequences of migration. The socio-economic condition of the migrant workers is far below the desirable level, due to migrant's transitional and informal nature of employment (Misra & Mohd, 2014)**.** In India, the activities of the secondary and tertiary sectors are concentrated mostly in large towns and cities, and attract internal migration. Workers' participation has led to spectacular growth in the economy during the past two decades. By analysing data

collected from slum households in three states, i.e. the National Capital Territory (NCT) of Delhi and in two towns of the National Capital Region (NCR) of Haryana and Uttar Pradesh states in India, this paper seeks to assess if this growth has improved workers' employment conditions. The finding reveals that the workers are employed in low- productivity jobs with low incomes and wages; they work without job safety, medical health and social security provisions. All these deteriorate both living and working conditions of the workers. In spite of their working and living in one of the most developedparts of the country they live economically marginalized and neglected life**.**(Bora, 2014)

There are studies that have shown that informal workers are significantly at higher risk than general population – their knowledge levels are lower, two[4] to four times more number of informal workers has non-regular partners or visit sex workers, only 25-29 percent use condoms in these encounters – compared to 42 percent by others. 5 percent and13 percent (M/F) report STI symptoms – nearly double the national average. In another study, 2/3rd of the locations where informal workers operate, sex workers were also found to operate. Studies have also shown evidence that informal workers, are at a higher risk than the general population, to acquire STIs or HIV. The country's National Family Health Survey (NFHS), which covered over 15,576 households, reiterates the vulnerabilities.

Low income women workers, especially in the informal sector form one of the most vulnerable groups in the Indian economy. The reasons for their vulnerability are-(a) irregular work, (b) low economic status, (c) little or no bargaining power, (d) lack of control over earnings, (e) need to balance paid work with care for children and homework,
(f) little or no access to institutional credit, training and information, and (g) lack of assets. Unequal gender relations play a very important role in defining their insecurities. Given their vulnerable status at home and at work, income generation alone may not improve the socio-economic status of women attached to the informal sector. Their economic empowerment needs to go along with political empowerment, which could improve their bargaining power both in household and at work. This means that organizing women workers in the informal economy could have beneficial impacts on their work and their lifeif such organization combines voices representation along with access to resources such as credit and information- a holistic strategy that provides political empowerment allied with

[4]Behaviour Surveillance Study of NACO, 2006 and other studies – More on this in sections 4.5.1

economic empowerment. The present study aims at understanding the degree of vulnerability of the women workers in informal sector in India. Towards fulfilling the objective, a small study has been conducted in the State of Odisha, to find out the realities. Results suggest that a highly visible percentage of occupational group irrespective of their monthly average income, continue to face multiple constraints which otherwise compel them to live a life full of compromises.(Mohapatra, 2012)

2.4 HIV & Business Link

Creating awareness on how severe the impact of HIV/AIDS can be on businesses is the most important element to get the businesses respond effectively to the epidemic. The high HIV prevalence among migrants is (0.89% which is 3 times higher than the percentage reported among the men in general population) not only a national burden that poses a challenge to the country's efforts to contain the spread of this disease to the general population, but also a serious threat to the business and the industry at large.

The effects of the epidemic on business require urgent responses if businesses are to remain competitive. HIV/AIDS has a significant impact on the business operations:business supply chains, increase in health expenditure, absenteeism, replacement costs, loss of tacit knowledge, death related costs and loss in terms of shortage of skilled labour and adverse effects on output and productivity. More difficult to measure is the impact of an increasing burden of workforce, the loss of colleagues and the fear of infection, which can lower morale and productivity in the work place. While assessing the economic impactof AIDS is very difficult, studies suggest that some of the hardest-hit countries may forfeit 2% or more of GDP growth per year as a result of the epidemic (Good Practice Note – HIV/AIDS in the workplace; IFC)

Transmission of HIV, like that of other behaviourally mediated infections, is influenced by the particular environments in which risk is produced. The spread of HIV is shaped by variations in population behaviour and public health response, which are themselves shaped by differences in social, cultural, economic, and political condition. Prevention strategies aimed at individual behaviour may therefore only partially reduce the risk of transmission. We also need strategies to create the local environments and social structural conditions supportive of risk reduction by individuals and communities.

reduction, weakening the capacity of public health responses. We suggest the concept of risk environment as a way of analysing the effect of large scale and abrupt social, economic, and political change in eastern Europe and the western Balkans on the spread of HIV and show how it can be used to plan a response.(Rhodes & Simic, 2005)

Thus, it is important to the industry as well as the migrant community that the industry actively involves itself and lends a hand in NACO's attempt to arrest the spread of HIV/AIDs.

Migration and HIV research in sub-Saharan Africa has focused on HIV risks to male migrants, yet women's levels of participation in internal migration have met or exceeded those of men in the region. Moreover, studies that have examined HIV risks to female migrants found higher risk behaviour and HIV prevalence among migrant compared to non-migrant women. However, little is known about the pathways through which participation in migration leads to higher risk behaviour in women. This study aimed to characterize the contexts and processes that may facilitate HIV acquisition andtransmission among migrant women in the Kisumu area of Nyanza Province, Kenya. We used qualitative methods, including 6 months of participant observation in women's common migration destinations and in-depth semi-structured interviews conducted with 15male and 40 female migrants selected from these destinations. Gendered aspects of the migration process may be linked to the high risks of HIV observed in female migrants — in the circumstances that trigger migration, livelihood strategies available to female migrants, and social features of migration destinations. Migrations were often precipitated by household shocks due to changes in marital status (as when widowhood resulted in disinheritance) and gender-based violence. Many migrants engaged in transactional sex, of varying regularity, from clandestine to overt, to supplement earnings from informal sector trading. Migrant women are at high risk of HIV transmission *and* acquisition: the circumstances that drove migration may have also increased HIV infection risk at origin; and social contexts in destinations facilitate having multiple sexual partners and engaging in transactional sex. We propose a model for understanding the pathways through which migration contributes to HIV risks in women in high HIV prevalence areas in Africa, highlighting potential opportunities for primary and secondary HIV prevention at origins and destinations, and at key 'moments of vulnerability'

in the migration process. (Camlin, Kwena, Dworkin, Cohen, & Bukusi, 2014)

Based on the BER's 2005 survey, this paper provides a snapshot view of the nature and the extent of the impact of HIV/AIDS on selected economic sectors in South Africa, as well as their response to the epidemic. Whereas the focus of most of the previous surveys has been on "evaluating workplace responses", this study also considers the *economic* impact of HIV/AIDS. With 1032 participants from the mining, manufacturing, building & construction, trade, transport and financial services sectors, it is the largest survey on the economic impact of HIV/AIDS in South Africa to date. The survey results suggest that the mining sector, followed by the manufacturing and transport sectors, are the worst affected among the sectors surveyed. The companies that are the most active in the fight against HIV/AIDS seem to be the ones that are the hardest hit by the epidemic. The survey results also confirmed that fear of stigma is a significant impediment to the effectiveness of HIV/AIDS (Ellis, 2007)

This article is concerned with the moral economy of HIV treatment in a transnational mining company. Based on multi- sited ethnography in the world's third biggest mining company, I explore how relations between employer and employee are being transformed as a result of corporate HIV programmes, creating connections between the personal realm of sexual conduct and family life and the political economy of global corporate capitalism.I argue that corporate social responsibility serves as a mechanism through which the company consolidates its authority over a particular field of society, in this case its workforce, conflating the exigencies of human care with the interests of capital.(Rajak, 2010)

2.5 Organizational Health Care Support

Compared with other racial/ethnic groups in the United States, Asian Americans andPacific Islanders (AAPIs) are more likely to be at an advanced stage of AIDS disease and have opportunistic infections at the time of diagnosis. However, it is not clear how these two findings are related to issues such as HIV testing and access to HIV care-related services. We examined HIV testing and awareness of care-related services among a group of HIV-positive AAPIs in the United States. Data are from a multisite supplemental

surveillance project, 1990–1999. Compared with Whites, a higher percentage of AAPIs cited "illness" as the main reason for HIV testing and had their tests done as hospital inpatients—although these differences were not statistically significant. A significantly lower percentage of AAPIs than Whites were aware of their current CD4 count; AAPIsalso had significantly lower awareness about a number of care-related services. Among AAPIs, educational level was positively associated with awareness of these services. Efforts are needed to promote service availability among HIV-positive AAPIs.(Wong, Campsmith, Nakamura, Crepaz, & Begley, 2004)

Scaling- up for new capacity is ideally approached as a holistic, multi- faceted process which considers the total assets within delivery systems, service catchments and communities as potentially being engaged and deployed. (Aherne & Pereira, 2008)

Health care organizations, well positioned to address health literacy, are beginning to shift their systems and policies to support health literacy efforts. Organizations can identify barriers, emphasize and leverage their strengths, and initiate activities that promote health literacy–related practices. The current project employed an open-ended approach to conduct a needs assessment of rural federally qualified health centre clinics. Using customized assessment tools, the collaborators were then able to determine priorities for changing organizational structures and policies in order to support continued health literacy efforts. Six domains of organizational health literacy were measured with three methods: environmental assessments, patient interviews, and key informant interviews with staff and providers. Subsequent strategic planning was conducted by collaborators from the academic and clinic teams and resulted in a focused, context-appropriate action plan. The needs assessment revealed several gaps in organizational health literacy practices, such as low awareness of health literacy within the organization and variation in perceived values of protocols, inter staff communication, and patient communication.Facilitators included high employee morale and patient satisfaction. The resulting targeted action plan considered the organization's culture as revealed in the interviews, informing a collaborative process well suited to improving organizational structures and systems to support health literacy best practices. The customized needs assessment contributed to an ongoing collaborative process to implement organizational changes that aided in addressing health literacy needs. (Weaver, Wray, Zellin, , Gautam, , & Jupka, 2012)

As reviewed in the article by Perry and colleagues (2014) in this volume, ample evidence has documented the contributions of peer support (PS) to health, health care, and prevention. Building on that foundation, this article discusses characteristics, contexts, and dissemination of PS, including (*a*) fundamental aspects of the social support that is often central to it; (*b*) cultural influences and ways PS can be tailored to specific groups; (*c*) key features of PS and the importance of ongoing support and backup of peer supporters and other factors related to its success; (*d*) directions in which PS can be expanded beyond prevention and chronic disease management, such as in mental health or interventions to prevent rehospitalisation; (*e*) other opportunities through the US Affordable Care Act, such as through patient-cantered medical homes and chronic health homes; and (*f*) organizational and policy issues that will govern its dissemination. All these demonstrate the extent to which PS needs to reflect its contexts—intended audience, health problems, organizational and cultural settings—and, thus, the importance of dissemination policies that lead to flexible response to contexts rather than constraint by overly prescriptive guidelines. (Fisher, Coufal, & Parada, 2014)

2.6 External Health Care Support.

37% of South Africa's PLHIV live in metros. Progress along the HCC for metro and non-metro populations was 53% of PLHIV in care and 45% on ART for both populations and 27% of metro/26% of non-metro populations virally suppressed. Achievement varied widely by metro, 35%-63% of PLHIV were on ART, 21%-48% of ART clients werevirally suppressed. The largest treatment gap was in Ekurhuleni metro. The metros spend approximately US$383 million per year on ART. Annual VL testing of all ART clients in the eight metros would amount to approximately US$ 42 million or 11% of ART programme cost. This secondary data analysis determined how far the eight South African metropolitan municipalities have progressed in the expansion of HIV treatment (Fraser- Hurt, et al., 2016)

Community involvement is increasingly identified as a "critical enabler" of an effective HIV/AIDS response. We explore pathways between community participation and HIV prevention, treatment and impact mitigation in Zimbabwe, reviewing six qualitative studies in Manic land. These find that community group membership is often (not always) associated with decreased HIV incidence, reduced stigma and improved access to some services, particularly amongst women. Participation in formal community groups (e.g.,

church or women's groups) and informal local networks (e.g., neighbours, families) provides opportunities for critical dialogue about HIV/AIDS, often facilitating renegotiation of harmful social norms, sharing of previously hidden personal experiences of HIV/AIDS, formulation of positive action plans and solidarity to action them. However, implementation of new plans and insights is constrained by poverty, social uncertainty and poor service delivery. Furthermore, dialogue may have negative effects, spreading false information and entrenching negative norms. The extent that formal groups and informal networks facilitate externally imposed HIV/AIDS interventions varies. They potentially provide vital practical and emotional support, facilitating service access, treatment adherence and AIDS care. However, they may sometimes play a negative role in prevention activities, challenging stereotypes about sexuality or gender. There is an urgent need for greater recognition of the role of indigenous community groups and networks, andthe inclusion of "strengthening local responses" as a key element of interventions and policy. Such efforts require great sensitivity. Heavy-handed external interference in complex indigenous relationships risks undermining the localism and bottom–up initiative and activism that might be central to their effectiveness. Cautious efforts might seek to enhance the potentially beneficial effects of groups, especially for women, and limit potentially damaging ones, especially for men. Efforts should be made to facilitate contexts that enable groups to have beneficial effects, through nesting them within wider comprehensive responses, and supporting them through strong partnerships with service providers. (Campbell, , et al., 2013)

This qualitative study investigated the process of engagement in HIV medical care from the perspective of people living with HIV/AIDS (PLWHA). In-depth interviews were conducted with 76 participants in six cities. All participants were considered underserved because of histories of substance use, mental illness, incarceration, homelessness, or cultural barriers to the traditional health care system. A semi structured interview guide elicited narratives related to health care and the role of program interventions in facilitatingaccess to care. Data analysis revealed that participants cycled in and out of care, a process that was influenced by (1) their level of acceptance of being diagnosed with HIV, (2) their ability to cope with substance use, mental illness, and stigma, (3) their health care provider relationships, (4) the presence of external support systems, and (5) their ability to overcome practical barriers to care. Outreach interventions played a role in connecting participants to care by dispelling myths and improving knowledge about HIV, facilitating access to HIV care and treatment,

providing support, and reducing the barriers to care. The findings suggest that outreach programs can interrupt this cyclical process and foster sustained, regular HIV care for underserved PLWHA by conducting client-cantered risk assessments to identify and reduce sources of instability and improve the quality of provider relationships; implementing strategies that promote healthy practices; creating a network of support services in the community; and supporting adherence through frequent follow-ups for medication and appointment keeping.(Rajabiun, et al., 2007)

2.7 Government – Aided Health Care Support.

Compared with other racial/ethnic groups in the United States, Asian Americans andPacific Islanders (AAPIs) are more likely to be at an advanced stage of AIDS disease and have opportunistic infections at the time of diagnosis. However, it is not clear how these two findings are related to issues such as HIV testing and access to HIV care-related services. We examined HIV testing and awareness of care-related services among a group of HIV-positive AAPIs in the United States. Data are from a multisite supplementalsurveillance project, 1990–1999. Compared with Whites, a higher percentage of AAPIs cited "illness" as the main reason for HIV testing and had their tests done as a hospital inpatients—although these differences were not statistically significant. A significantly lower percentage of AAPIs than Whites were aware of their current CD4 count; AAPIsalso had significantly lower awareness about a number of care-related services. Among AAPIs, educational level was positively associated with awareness of these services.Efforts are needed to promote service availability among HIV-positive AAPIs**.** (Wong, Campsmith, Nakamura, Crepaz, & Begley, 2004)

(Galvão, 2005) Have explored the relationship between public health and human rights by examining the Brazilian government's policy of free and universal access to anti-retroviral medicines for people with HIV/AIDS.

The Brazilian government's management of the HIV/AIDS epidemic arose from initiatives in both civil society and the governmental sector following the democratization of the country. The dismantling of authoritarian rule in Brazil was accompanied by a strong orientation toward human rights, which formed the socio-political framework of Brazil's response to the HIV/AIDS epidemic.

Even if the Brazilian experience cannot be easily transferred to other countries, the model of the Brazilian government's response may nonetheless serve as inspiration for finding appropriate and lifesaving solutions in other national contexts.

For several years (Galvão, 2005) have studied Brazil's management of the HIV/AIDS epidemic and the ways in which Brazil's policies have contributed to the global fight against the HIV/AIDS epidemic. In this article, I analyse the links between public health and human rights, using the Brazilian government's policy of free and universal access to anti-retroviral medicines (ARVs) for people with HIV/AIDS as an example. Although I refer to the production of generic versions of AIDS drugs as well as the role of international pharmaceutical companies, both topics are explored in greater detail elsewhere.

Globally, ARVs remain beyond the reach of the majority of people with HIV/AIDS. Of the 6 million people worldwide who needed ARVs in 2003, fewer than 8% were receiving them. Although Brazil is considered a middle-income country, its government provides ARVs to its constituents free of charge. To make such a policy viable, the government has limited the drugs' high cost by producing some ARVs domestically and by negotiating with international pharmaceutical companies to import other ARVs; of the 15 ARVsutilized in the country in 2002, 7 were produced in local laboratories, either public or private, and the remainder were purchased on the international market.

The relative success of the ARV program in Brazil reflects a somewhat privileged position compared to lower-income countries, some of which have higher levels of HIV infection. In turn, using the Brazilian government's management of HIV/AIDS as a model may not transfer easily to other nations. However, Brazil's experience offers inspiration for finding appropriate and life-saving solutions in other contexts. To gain a wider perspective on Brazil's HIV/AIDS policy—and in particular the synergy between health and human rights—I solicited comments from several individuals, quoted in this article, who work for Brazilian and international organizations that are currently at the forefront of the struggle against HIV/AIDS. By reviewing Brazil's policies and relating other people's experiences, I hope to demonstrate the importance of community mobilization, political will, international solidarity, and financial commitment in the fight against HIV/AIDS.(Galvão, 2005)

How should we implement disease control programmes so as to strengthen existing health systems? To answer this question, we re- examined the integration of these programmes from a managerial perspective. Based on a literature review, we concluded that integration is essential in the majority of cases. We went on to examine the mechanisms whereby the integration of disease control activities can jeopardize health care delivery, resulting in low service utilization, low detection and cure rates, and patient delays. To do this we clustered disease control programmes into three categories and assessed the impact of each on local health care facilities. From these results, we suggest a series of measures designed to help aid agencies and national governments support local health care infrastructures or, as a minimum, avoid damaging them. Whilst some vertical programmes should never be integrated, two conditions are essential to the integration of others: (1) Disease control needs to be integrated with *general* health care delivery—which implies the possibility to deliver general practice/family medicine care in publicly oriented health services. (2) Integration of both operational and administrative aspects should take place simultaneously. Any health policies in developing countries tending to allocate disease control programmes to government facilities and general health care to private facilities preclude their integration. They risk unravelling the fabric on which both disease control and health care delivery depend**.** (Unger , De Paepe, & Green, 2003)

2.8 Organizational Policy Support.

The Pallium Integrated Capacity- building Initiative offers model elements useful to others seeking theory- informed practices to rapidly and effectively scale- up learning and development efforts.(Aherne & Pereira, 2008)

In the study South Africa sees rapid growth of its urban centres which are chiefly affected by HIV. There are currently large gaps in the metro's 90-90-90 level of achievements. The District Implementation Plans offer a mechanism to focus investment on ART scale-up. Supporting factors are the existing expertise, service integration and infrastructure for large scale ART, the close network of service delivery sites and service delivery solutions. Ensuring scale and quality of the HIV treatment programmes is vital for the metros' economic prosperity - and for South Africa as a whole.(Fraser-Hurt, et al., 2016)

Most governments and international agencie have only belatedly acknowledged, or have ignored, the effectiveness and efficiency of the approaches these groups have advocated. Extensive attention has been given to aid packages (promised and realized) from bilateral, United Nations and foundation donors. However, the largest financial contributors to the care and treatment of people with HIV/AIDS are families and a variety of civil society groups. Their contributions far exceedwhat governments and international agencies have provided. Yet again, the implications of this are largely ignored. This article discusses the role of civil society groups in respondingto the HIV/AIDS epidemic. The focus is primarily, but not exclusively, on Africa, as that iswhere the most extensive evidence exists. Both the strengths and the limitations of civil society organizations are discussed. Special attention is given to the political factors that place civil society at the forefront of the responses to the epidemic but reward its achievements with little more than lip service from international and national HIV/AIDS agencies. Throughout the article, 'civil society' is used to describe NGOs, CBOs, faith based groups and the many ad hoc groups that come together to undertake specific tasks. Not included in this definition of civil society are businesses, trades unions, governments and international donor agencies, although some overlap inevitably occurs in the membership of groups. For example, a mine worker may belong to a union, be involved in a company-sponsored HIV/ AIDS programme and work with others to provide care for people living with HIV/AIDS (PLWHA) in his/her own community when not at the salaried job.(Rau, 2006)

In countries with a high AIDS prevalence, the health workforce is affected by AIDS in several ways. In Zambia, which has a prevalence rate of 16.5%, a study was carried out in 2004 with the aim to: explore the impact of HIV/AIDS on health workers, describe their coping mechanisms and recommend supportive measures. The qualitative study was complemented by a survey using self-administered questionnaires in four selected health facilities in two rural districts in Zambia, Mpika and Mazabuka. It is one of the few studies to have explored the impact of HIV/AIDS from the perspective of health workers and managers in the region. Thirty-four in-depth interviews and five group discussions were conducted with health workers, managers and volunteers, and 82 self-administered questionnaires were filled out by health workers. In addition, burnout among 42 health workers was measured using the Maslach Burnout Inventory (MBI). The MBI measures three components that contribute to burnout: emotional exhaustion, depersonalization and

personal accomplishment. The results show that in both districts, HIV/AIDS has had a negative impact on workload and has considerably changed or added tasks to already overburdened health workers. In Mpika, 76% of respondents (29/38), and in Mazabuka, 79% (34/ 44) of respondents, expressed fear of infection at the workplace. HIV-positive health workers remained 'in hiding', did not talk about their illness and suffered in silence. Despite the fact that health workers were still relatively motivated, emotional exhaustion occurred among 62% of the respondents (26/42). The interviews revealed that counsellors and nurses were especially at risk for emotional exhaustion. In each of the selected facilities, organizational support for health workers to deal with HIV/ AIDS was either haphazardly in place or not in place at all. AIDS complicates the already difficult work environment. In addition to health workers, management also needs support in dealing with AIDS at the workplace. (Dieleman,, Biemba, Mphuka, & Sichinga-Sic, 2007)

China is moving towards greater rule of law and more accountable governance, including civil society participation. China's AIDS response has moved from denial to pragmatic policy. This change has come both through global influence and domestic pressure and led to adoption of many international norms for prevention, treatment, and care, sometimes in conflict with cultural attitudes and political positions. Connections between China's AIDS non-governmental organizations (NGOs) and transnational civil society organizations have contributed to transfer of new norms and approaches. Policies on sex worker rights, NGOs' role in governance, legal protection from discrimination, compensation for some infected by medical procedures and intellectual property rights for essential medicines have begunto change. Advocacy and expert input from domestic NGOs connected to global groups have played a role. This paper argues that these soft power processes accompanyingglobalization are creating inroads even in China regarding universal human rights and protection of citizen's interests. (Kaufman, 2012)

This paper addresses the broad question: 'How should government policies in the area of food security, nutrition, agriculture and the environment be altered to better meet the needs of the poor within the context of the HIV/AIDS pandemic?' We review the literature on the impact of HIV/AIDS on livelihoods, with special reference to agriculture, food security and nutrition. We highlight public policy options for effective HIV/AIDS mitigation in the areas of agriculture and nutrition and discuss the role of research in stimulating effective action for AIDS mitigation and ultimately for HIV prevention. (Haddad & Gillespie, 2001)

Kyrgyzstan has adopted a number of policy initiatives to deal with an accelerating HIV/AIDS epidemic. This article explores the main actors in HIV/ AIDS policy-making, their interests, support and involvement and their current ability to set the agenda and influence the policy-making process. Fifty-four semi-structured interviews were conducted in the autumn of 2011, complemented by a review of policy documents and secondary sources on HIV/AIDS in Kyrgyzstan. We found that most stakeholders were supportive of progressive HIV/AIDS policies, but that their influence levels varied considerably. Worryingly, several major state agencies exhibited some resistance or lack of initiative towards HIV/AIDS policies, often prompting international agencies and local NGOs to conceptualize and drive appropriate policies. We conclude that, without clear vision and leadership by the state, the sustainability of the national response will be in question. (Ancker & Rechel, 2015)

2.9 Organizational Recreational Support.

While staff issues have been discussed in corporate and not-for-profit settings, little research has been conducted in organizations that specifically serve young people. Understanding program context is important to developing successful youth development programs. One important setting for youth development is summer camp. Adult staff members strongly influence the climate of camp and can perhaps be considered the primary program input. However, staff members likely have differing theories and beliefs about the value of camp for youth, and how and why various outcomes emerge from youths' participation. We used a qualitative case-study approach to investigate the adult staff stakeholders (i.e., counsellors, health care providers, social workers, and administrative staff) and organizational culture of a camp for youth with HIV/ AIDS and explored how staff-level values, beliefs, and actions potentially influenced the outcomes ofparticipation for campers. Interviews, focus groups, and observations were conducted and data analysis followed procedures as outlined by Strauss and Corbin (1998). Analysis ofthe data indicated two major components. First, findings emerged related to the organizational cultures (i.e., values, beliefs, and actions) of staff-level stakeholder groups: the counsellors and the psychosocial, medical, and administrative teams. Second, even though there were inconsistencies and gaps in values, beliefs, and actions between stakeholder groups, people enacted unified structure and program efforts that supported four positive camper outcomes: experiencing caring people;

developing a sense of belonging; experiencing reprieve and recreation; and increasing knowledge, skills, and attitudes. However, there were variations between stakeholder groups in beliefs about how these outcomes were achieved and which outcomes were or should have been cultivated. While researchers and practitioners may assume that a cohesive group of leaders with clear and defined goals is needed to best produce positive developmental outcomes, the findings from this study suggest that cohesion is not a critical element. Camp may be such a powerful process in itself that meaningful youth outcomes can still occur even in the presence of high levels of stakeholder role differentiation and low levels of role integration. This article also reviews organizational management literature related to the findings from this study (Gillard,, Witt, & Watts, 2010)

Although leisure is held to provide positive health benefits, structural and social obstacles deny equal participation to the disenfranchised. Employing quantitative and unique qualitative (e.g., Photo voice) methods, we examined the leisure behaviours of olderwomen who were living in the United States and diagnosed with HIV/AIDS. Findings pointed to differences in time for, access to, and meaning of leisure in pre- vs. post- infection leisure for these women. As the disease progressed, however, each womanexhibited resilience in transcending systemic barriers to derive a spiritual view of leisure asa metaphor for the meaning of life. We believe our findings of spiritual transcendence will resonate among people living with HIV/AIDS throughout both Western and non-Western cultures.(Gosselink & Myllykangas, 2007)

This paper explored the readiness of Victorian State Sporting Organisations (SSOs) in Australia to implement health promotion (HP) programs and sought to understand how they implemented capacity building strategies to promote health. Ten SSOs that received funding to develop and implement HP were recruited for the study. Interviews were conducted with key staff from SSOs and focus groups were undertaken with their Boards of Management. Factors analysed were SSO organisational readiness and capacity building strategies to implement change in organisational processes, organisation and resources, and systems and controls. SSOs made a concerted effort to create and support sport andrecreation contexts that promote healthy behaviours. A number of SSOs achieved changes in their culture and systems by implementing formalised and systematic programs such as the club development program. The club development program supported the implementation and sustainability of HP throughout the organisational system of the SSO.

These changes, however, were dependent upon organisational readiness; particularly climate and capacity, whereby financially "well off" SSOs had the capacity to engage in HP in a significant way. This paper highlights opportunities and challenges for policy makers to fund HP within sporting organisations; especially when the delivery of sport is a more immediate responsibility than HP (Casey, Payne, & Eime, 2012)

This article offers a critique of Alexis DE Tocqueville's observation that Americans have a tendency to "constantly form associations" and suggests that the process is considerably more complex. Portraits of newly created New York City non-profit organizations developed in response to the HIV/AIDS epidemic suggest that the pace of forming organizations might be particularly high during periods of cultural and social change and that the non-profit sector responds to social change by creating new organizations.(Chambreé, 1995)

This article addresses two practical and theoretical issues: the role of non-profits in the implementation of social policies and studies of organizational development. It considers two questions: (a) what is the impact of differential levels of community resources on the founding and evolution of new organizations? (b) Does the classic organizational life cycle model apply to new organizations or are there other patterns of organizational development? Drawing on case studies ofl6 non-profit organizations that were established to 'fight" the HIV/AIDS epidemic, the article points to the synergistic relationship between non-profits and social policy development and the impact of varied levels of resources and social capital in the creation of new non-profit organizations.(Chambre, 1997)

This report reviews progress made until the end of 2010 in scaling up access to health sector interventions for HIV prevention, treatment, care and support in low- and middle- income countries. It contains 8 chapters. Chapter 1 outlines the purpose of the report and reviews and analyses global progress towards universal access during the past decade. Chapter 2 provides updated epidemiological information on the HIV epidemic, including global and regional trends in incidence, prevalence and mortality from AIDS-related causes. Chapter 3 reviews progress in scaling up health sector interventions for HIVprevention in the general population. Chapter 4 presents global progress in expandingthe availability and uptake of HIV testing and counselling. Chapter 5 presents global progress in scaling up access to treatment and care for people living with HIV andhighlights recent efforts to optimize treatment through the Treatment 2.0 initiative. Chapter

6 presents global progress towards scaling up HIV services for key populations at higher risk of HIV infection and transmission. Chapter 7 reviews progress in scaling up HIV services for women and children, including eliminating mother-to-child transmission and improving maternal and child health. Chapter 8 identifies the main challenges and the way forward towards achieving universal access to HIV prevention, treatment, care and support. The statistical annexes and explanatory notes at the end of this report provide supplementary information on data sources and methods.(UNAIDs, 2011)

2.10 Tabular summary of Major Research Paper

Table: 2.1 Tabular Summary of Literature Review

Sr.No	Name of Author & Year	Topic	Abstract	Findings/Conclusion
01	(Mahal & Rao, 2005)	HIV/AIDS epidemic in India: An economic perspective	Whilst the international community's focus has been on the region most devastated by HIV/ AIDS, namely sub-Saharan Africa, India now appears on the brink of a significant AIDS epidemic. In thinking about the implications of HIV/AIDS, considerable attention was initially drawn to its clinical aspects. More recently, other dimensions of HIV, including economic, have been explored. The primary objective of this review is to elaborate on the major elements of the national and international economic research to data on HIV/AIDS, and to infer lessons from it, for India. It also examines the evidence on the aggregate and household-level economic impacts of HIV, the economic roots that drive its transmission and the methods economists use to assess the efficacy of alternative interventions to address HIV and AIDS. Available evidence suggests that whereas aggregate impacts may be limited, the adverse household-level economic implications of AIDS may be serious; public resources that are available for health are also likely to be put under strain. Paucity of economic research on HIV and AIDS relating to India is highlighted.	Clearly, economics can contribute usefully to thinking about and measuring the potential impacts of the HIV/AIDS epidemic in India and in the development of optimal strategies to address it. Although at the present time, such research is sorely lacking in India, we believe that a few salient points do emerge from the literature discussed in this paper. First, it is unlikely that effects on output due to AIDS at the all India, or even at the state level, will be large in the next 15-20 yr. Second, there may be sector level effects, particularly in the health sector in the form of growing use of health services and increased public spending on health. Perhaps most importantly, AIDS will substantially lower the wellbeing of affected households and their members. Female members of households and households belonging to the poor and less educated groups appear to be at especially high risk of bearing the economic burden of AIDS. Policies aimed at ameliorating, or preventing these effects are likely to be among the most cost- effective.
02	(Bharat, Ramakrishna, Heylen, &	Differences in testing	The study examined the association of gender-based attitudes, HIV misconceptions and community	Structured measures were used to assess avoidance intentions and denial of rightsof people with HIV/AIDS. Mean age of

	Ekstrand, 2014)	Stigma and perceived consequence of stigmatization among heterosexual men and women	feelings for marginalized groups with stigmatizing responses towards people with HIV/AIDS in Mumbai, India. Participants included 546 men and women sampled in hospital settings during 2007-2008. Structured measures were used to assess avoidance intentions and denial of rights of people with HIV/AIDS. Mean age of participants was 32 years; 42% had less than 10 years of education. Higher HIV transmission misconceptions (β=0.47; p<0.001), more traditional gender attitudes (β=0.11; p<0.01) and more negative feelings towards HIV-positive people (β=0.23; p<0.001) were related to higher avoidance intentions. Endorsement of denial of rights was also significantly associated with higher transmission misconceptions (β=0.20; p<0.001), more traditional gender attitudes (β=0.33; p<0.001) and greater negative feelings towards HIV-positive people (β=0.12; p<0.05), as well as with a lower education level (β=-0.10; p<0.05). The feelings respondents had towards people with HIV/AIDS were more strongly correlated with their feelings towards those with other diseases (tuberculosis, leprosy) than with feelings they had towards those associated with 'immoral' behaviour (e.g. sex workers). Eliminating HIV transmission misconceptions and addressing traditional gender attitudes are critical for reducing HIV stigma in Indian society	participants was 32 years; 42% had less than 10 years of education. Higher HIV transmission misconceptions (β=0.47; p<0.001), more traditional gender attitudes (β=0.11; p<0.01) and more negative feelings towards HIV-positive people (β=0.23; p<0.001) were related to higher avoidance intentions.
03	(Oo, 2018)	HIV/AIDS-related Knowledge, Attitudes, Behaviour and HIV testing status among Young People in Myanmar	There were an estimated 300,000new HIV infections in the Asia and Pacific region in 2015, with young people aged 15 to 24 yearsaccounting for 37% of all new HIV infections. The number of adolescents living with HIV has risen by 28% between 2005 and 2015 in this region. The HIV/AIDS-related knowledge, attitudes, behaviour and HIV testing status study was done among young people aged 15 to 24 years in Myanmar, 2016.	The young people in the study group have the high awareness about HIV, but limited knowledge about HIV/ AIDS prevention which varied across residenceand education level. The stigma and discrimination of HIV/AIDS still prevalent among young people. Theprevalence of HIV testing was lowamong young men. HIV related knowledge, attitude and behaviour among young people is the key area to focus on young people living in the rural area with low education and income in Myanmar. The policymakers and HIV program managers should focuson the most vulnerable groups on HIV prevention by awareness raising

				campaign and by creating an enabling environment for HIV counselling andtesting.
04	(Wong, Campsmith, Nakamura, Crepaz, & Begley, 2004)	HIV Testing And Awarene ss Of Care-Related Services Among A Group Of HIV - Positive Asian America ns And Pacific Islanders In The United States: Findings From A Supplem ental HIV /Aids Surveilla nce Project	Compared with other racial/ethnic groups in the United States, Asian Americans and Pacific Islanders (AAPIs) are more likely to be at an advanced stage of AIDS disease and have opportunistic infections at the time of diagnosis. However, it is not clear how these two findings are related to issues such as HIV testing and access to HIV care-related services. We examined HIV testing and awareness of care-related services among a group of HIV-positive AAPIs in the United States. Data are from a multisite supplemental surveillance project, 1990–1999. Compared with Whites, a higher percentage of AAPIs cited "illness" as the main reason for HIV testing and had their tests done as a hospital inpatients—although these differences were not statistically significant. A significantly lower percentage of AAPIs than Whites were aware of their current CD4 count; AAPIs also had significantly lower awareness about a number of care-related services. Among AAPIs, educational level was positively associated with awareness of these services. Efforts are needed to promote service availability among HIV-positive AAPIs.	In this study, 62% of HIV-positive AAPI MSM were unaware of their status at the time of testing. Moreover, AAPI MSM who were younger, with less education, and without access to a primary care provider were significantly less likely to have ever tested.
05	(Aherne & Pereira, 2008)	Learning and develop ment dimensio ns of a pan- Can adian primary health care capacity - buildin g project	The purpose of this paper is to use a descriptive case study to establish how collaboration, innovation and knowledge- management strategies have scaled- up learning and development in rural, remote andother resource-constrainedCanadian delivery settings. Intervention design was realizedthrough a one- time, collaborative,national capacity- building project.A project portfolio of 72sub-projects, initiatives and strategic activities was used toimprove access, enhance qualityand create capacity for palliativeand end- of- life care services.Evaluation was multifaceted,including participatory action research, variance analysis and impact analysis. This has been	The purposeful use of collaboration, innovation and knowledge- management strategies have been successfully used to support a rapid scaling- up of learning and development interventions. This has enabled enhanced and new pan- Canadian health delivery capacity implemented at the local service deliverycatchment- level.

			supplemented by post- intervention critical reflection and integration of relevant literature.	
06	(Fraser-Hurt, et al., 2016)	Fast-Tracking of the HIV Response : Do the Metros Lead the Way to Reaching 90-90-90 in South Africa?	This secondary data analysisdetermined how far the eight South African metropolitan municipalities have progressed in the expansion of HIV treatment. The framework of HIV care cascades (HCC) was used. 37% of South Africa's PLHIV live in metros. Progress along the HCC for metro and non-metro populations was 53% of PLHIV in care and 45% on ART for both populations and 27% of metro/26% of non-metro populations virally suppressed. Achievement varied widely by metro, 35%-63% of PLHIV were on ART, 21%-48% of ART clients were virally suppressed. The largest treatment gap was in Ekurhuleni metro. The metros spend approximately US$383 million per year on ART. Annual VL testing of all ART clients in the eight metros would amount to approximately US$ 42million or 11% of ART programme cost.	South Africa sees rapid growth of its urban centres which are chiefly affected by HIV. There are currently large gaps inthe metro's 90-90-90 level of achievements. The District Implementation Plans offer a mechanism to focus investment on ART scale-up. Supporting factors are the existing expertise, service integration and infrastructure for large scale ART, the close network of service delivery sites and service delivery solutions. Ensuring scale and quality of the HIV treatment programmes is vital for the metros' economic prosperity - and for South Africa as a whole.
07	(Mohapatra, 2012)	Women Workers in Informal Sector in India: Understanding the Occupational Vulnerability	Unorganised or informal sector constitutes a pivotal part of the Indian economy. More than 90 per cent of workforce and about 50 per cent of the national product are accounted for by the informal economy. A high proportion of socially and economically underprivileged sections of society are concentrated in the informal economic activities [1]. Informal employment is generally a larger source of employment for women than for men in the developing world. Other than in North Africa where 43 per cent of women workers are in informal employment, 60 per cent or more of women workers in the developing world are in informal employment(outside agriculture). In sub-Saharan Africa 84 per cent of women non-agricultural workers; in Latin America 58 per cent for women in comparison to 48 percent for men. In Asia, the proportion of women and men non-agricultural workers in informal employment is	The crux of the study are Women workers in informer sector, on account of their poor and unhygienic living and working environment bear the undue share of health burden. In unorganised sector work is characterised by low wages that are often insufficient to meet minimum living standards at the work sites. Researcher also find that a highly visible percentage of women workers continue to live a life full of subsistence, compromises and most of their own access in terms of right to life is subsidized.

			roughly equivalent to Women and Men in the Informal Economy [2].The informal economy in India employs about 86 per cent of the country's work force and 91 per cent of its women workers [3]. Many of these women workers are primary earners for their families. Their earnings are necessary for sheer survival. Low income womenworkers, especially in the informal sector form one of the most vulnerable groups in the Indian economy. The reasons for their vulnerability are-(a) irregular work, (b) low economic status, (c) little or no bargaining power, (d) lack of control over earnings, (e) need tobalance paid work with care for children and homework, (f) little or no access to institutional credit, training and information, and (g) lack of assets. Unequal gender relations play a very important role in defining their insecurities. Given their vulnerable status at home and at work, income generation alonemay not improve the socio- economic status of women attached to the informal sector. Their economic empowerment needs to go along with political empowerment, which could improve their bargaining power both in household and at work. This means that organizing women workers in the informal economy could have beneficial impacts on their work and their life if such organization combines voices representation along with access to resources such as credit and information- a holistic strategy that provides political empowerment allied with economic empowerment. The present study aims at understanding the degree of vulnerability of the women workers in informal sector in India. Towardsfulfilling the objective, a smallstudy has been conducted in the State of Odisha, to find out the realities. Results suggest that ahighly visible percentage of occupational group irrespective of their monthly average income, continue to face multiple constraints which otherwise compelthem to live a life full of	

			compromises.	
08	(Mukherjee, Paul, & Pathan, 2009)	Migrant Workers in Informal Sector: A probe into working Conditio ns	The objective of the study is to evaluate socio economic status ofmigrant labour of urban India	As per study researchers found that people who are migrating from rural to urban, be it short term or long term, majorly disadvantaged a lot, deeply entrenched in human development deficits and lack of rights needed for a decent living. Researchers also found that it is vital to empower the villageeconomy so that it can play a vital role insocio-economic status of local people, sothat they don't feel any need to migrate to larger cities.
09	(Bhat, & Yadav, 2017)	Economi c Inform al Sector and the P erspectiv e of Infor mal Wor kers in In dia	This paper has highlighted four maj or issues that are issue related to working women, child labourmigration , and social security, which are the backbone problems of informal sect or.Further, researcherhave dealt with an important concern of perception and problems of informal workersin India	Even though, Government and the general public know about adversities related to workforce in informal sector still none of the associations or government organizationsare coming forward to safeguard inform al workers. Researchers suggestthat Government must formulate a policy , which is apparatus, but also non-governmental organization and other con cerned sections to design a credible comprehensive and workable social security package for unorganized women workers of India . Otherwise, social security in informal sector will be a myth.
10	(Misra & Mohd, 2014)	URBAN INFOR MAL SECTOR & MIGRA NTS	The association of work participation and incidence of migration has been extensively reported firstly as the main reasonof migration and secondly as the consequences of migration. The socio-economic condition of the migrant workers is far below the desirable level, due to migrant's transitional and informal nature of employment.	Study gives an overview of spatial distribution of rural-urban migration and its relationship with some urban characteristics. The association of work participation and incidence of migration has been extensively reported firstly as the main reason of migration and secondly as the consequences of migration. The socio-economic condition of the migrant workers is far below the desirable level, due to migrant's transitional and informal nature of employment. In addition, lack of skill and educational attainment among migrants renders them to a vulnerable economic and social life in the city.
11	(Bora, 2014)	Migrant Informal Workers: A Study of Delhiand	In India, the activities of the secondary and tertiary sectors are concentrated mostly in large towns and cities, and attract internal migration. Workers' participation has led to spectacular growth in the	Over the decade, the economy of the NCT and NCR has witnessed spectacular growth, but this has spread totalinequality as far as migrant slum dwellers and working in informal activities are concerned. The importance

		Satellite Towns	economy during the past two decades. By analysing data collected from slum households in three states, i.e. the National Capital Territory (NCT) of Delhi, and intwo towns of the National Capital Region (NCR) of Haryana and Uttar Pradesh states in India, thispaper seeks to assess if this growth has improved workers' employment conditions. The finding reveals that the workers are employed in low-productivity jobs with low incomes and wages; they work without job safety, medical health and social security provisions. All these deteriorate both living and working conditions of the workers. In spite of their working and living in one of the most developed parts of the country they live economically marginalized and neglected life.	of education was not being fully realized as one-third of the respondents as well asabout 50 percent workers were illiterate. Among the literates, higher level of educational attainment was negligible. This has prevented them to acquiremarketable skills and denied access togood jobs; it seems very difficult to sustain their survival strategy. In the NCT and NCR regions, the inequalitybetween rich and poor seems to be considerable as the per capita income of this region is the third highest in the country. The gains of this high per capita income did not percolate to the population living in slums.
12	(Rhodes & Simic, 2005)	Transitio n and the HIV risk environm ent	Transmission of HIV, like that of other behaviourally mediated infections, is influenced by the particular environments in which risk is produced. The spread of HIV is shaped by variations in population behaviour and public health response, which are themselves shaped by differences in social, cultural, economic, andpolitical condition. Prevention strategies aimed at individual behaviour may therefore only partially reduce the risk of transmission. We also needstrategies to create the local environments and social structural conditions supportive of risk reduction by individuals and communities. Transition is a form of environmental change that can disrupt individual and community level risk reduction, weakening the capacity of public health responses. We suggest the concept of risk environment as a way of analysing the effect of large scale and abrupt social, economic, and politicalchange in eastern Europe and thewestern Balkans on the spread ofHIV and show how it can be used to plan a response.	Study of the HIV risk environmentshows that prevention strategies need to support large scale community risk avoidance as well as change individual behaviour, examples of interventions fostering environmental change. These strategies focus on ameliorating the conditions underpinning increased risk ofHIV as well as structural change. Examples include interventions removing legal, economic, or policyobstacles to prevention, such as creating legal access to free sterile injectingequipment without fear of arrest. Moreover, many of the health effects of large scale social, economic, or political transition, as well as complex emergencies, are beyond the immediate reach of human prevention. This underscores the need for a broader and long term vision for health intervention that encompasses alleviation of poverty, economic reform, policy change, human rights, and community action. Equally, this emphasises the need to raise awareness of population health as a determinant of large scale social and political forces operating regionally as well as globally.

****

CHAPTER - 3

Research Methodology

This chapter discusses research methods adopted and used for the existing research. It provides detailed information on research approach, research design, research instruments, data collecting methods, sampling tools & techniques, sample size calculations & justifications, construct reliability, construct validity. Later, it discusses data analysis approaches and techniques used in the current research study. The chapter ends with the major limitations of the study.

CHAPTER – 3

RESEARCH METHODOLOGY

3.1 Introduction:

Research is defined as careful consideration of study regarding a particular concern or problem using scientific methods. According to the American sociologist Earl Robert Babbie, “research is a systematic inquiry to describe, explain, predict, and control the observed phenomenon. It involves inductive and deductive methods.”

Research methodology is a systematic theoretical analysis of the methods applied to a field of study. In this chapter, the researcher lays down the procedure adopted to conduct the study and reach a conclusive end. This chapter is providing the detailing regarding the appropriate methodology adopted through which the validity of the research is determined. This research has been developed on basis of the literature review followedby the conceptual approach. In this chapter, the researcher is elaborating regarding the research methodology including data collection and analysis along with measurement scale, variables to be examined and developing the questionnaire.

This chapter is having all the information regarding the causes for undergoing the research along with the managerial implications for the same. Based on the 6W research questions major variables were identified and were utilized to prepare the primary research instrument i.e. a structured instrument and followed by the model which has beentested in the later part of this research. While framing the questionnaire, items were adapted from established scales. Pilot study was conducted on the research instrument so as to measure its reliability in Indian context. Based on the opinion of the respondent and field experts few changes were incorporated in the final version of the questionnaire to justify the research objectives. After finalizing the research instrument a proper sampling plan was made to conduct the field survey. This chapter includes details of the same alongwith summary of the pilot study.

3.2 Research Philosophy:

The research problem means the main problems for which the whole research is being carried out.

The title "A study on healthcare and support services rendered to industrial workforce of Gujarat with special reference to HIV/AIDS related services". In this research the special reference is given to HIV/AIDS disease related services is being provided to the employees on the industries.

Research Philosophy

Research philosophy deals with the source, nature, and development of knowledge. In simple terms, a research philosophy is belief about the ways in which data about a phenomenon should be collected, analyzed, and used.The choice of a specific research philosophy is impacted by practical implications. There are important philosophical differences between studies that focus on facts and numbers.

The choice between positivist and interpretivist research philosophies or between quantitative a qualitative research method has traditionally represented a major point of debate. However, the latest developments in the practice of conducting studies have increased the popularity of pragmatism and realism philosophies as well. The researcher used positivism method in this research with interpretivism approach.

The societal approach regarding the disease HIV/AIDS is very conservative, and the people who are being affected either in or way, are not treated well. At the same, this study will focus on the services provided by the industries to their employees regarding creating the awareness and prevention of the HIV/AIDS.

In addition, this research is also focusing on the other healthcare services, which are being provided to employees, the proper counselling with the concerned authorities regarding the awareness, survival, and prevention, are being provided to employees. As this HIV/AIDS is not at all curable disease, but it can be controlled with the help of proper medications, so it becomes very much necessary to involve the authorities, committees working in the welfare of such people who all are being infected.

Non-Probability Convenience sampling approach has been utilized in this study – In non-

probability sampling, there is an assumption that there is an even distribution of characteristics within the population. This is what makes the researcher believe that any sample would be representative and because of that, results will be accurate. In non-probability sampling, since elements are chosen arbitrarily, there is no way to estimate the probability of any one element being included in the sample. Also, no assurance is given that each item has a chance of being included, making it impossible either to estimate sampling variability or to identify possible bias.

Researchers use various sampling techniques in situations where there are large populations. In most cases, testing the entire community is practically impossible because they are not easy to reach. Researchers use convenience sampling in situations where additional inputs are not necessary for the principal research. There are no criteria required to be a part of this sample. Thus, it becomes incredibly simplified to include elements in this sample. All components of the population are eligible and dependent on the researcher's proximity to get involved in the sample.

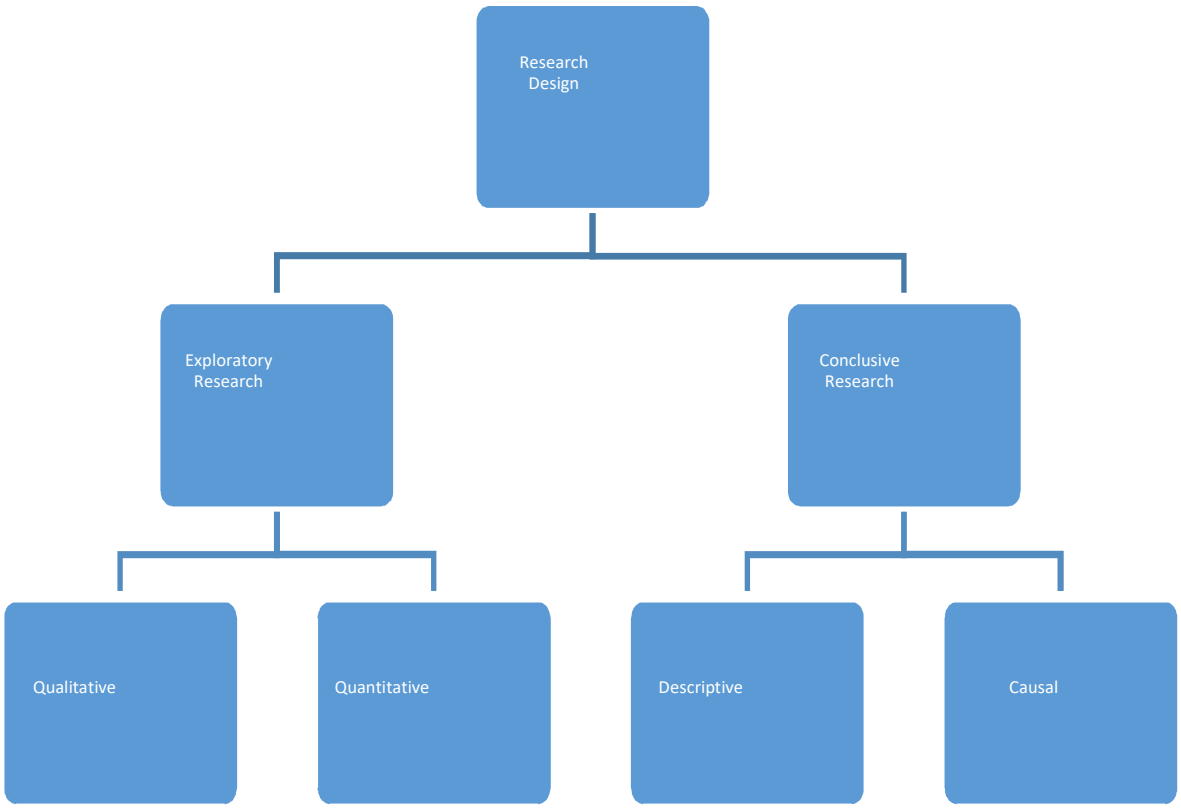
3.3 Research Design:

According to (Saunders, Thornhill, & Lweis, 2009) research can, in general, be divided into three categories; exploratory, descriptive and explanatory. The aim of the study and the design of the research question are main determinants of which one of these three categories to use. When conducting an exploratory research, the authors aim to gain a deeper understanding of a particular phenomenon or problem (Saunders, Thornhill, & Lweis, 2009). Moreover, this approach provides flexibility in the emergence of noveldata.
Another choice faced with is, which research strategy to use in study (Saunders, Thornhill, & Lweis, 2009) Examples of research strategies are experiment, survey, ethnography and case study. The case study method refers to an empirical investigation ofa certain problem or phenomenon in its natural setting and ultimately should result in a better and in-depth understanding of this (Yin, 2009; Seuring, 2008; Eisenhardt, 1989). Moreover, a case study is often preferable in an exploratory study since it allows the researcher to gain insights into a less researched topic (Ellram, 1996; Bryman, 1995). Furthermore, the case study strategy is suitable for this research since it is designed to answer "*how*" and "*why*" questions (Yin, 2009).

Research Design

Research Design can be defined as the systematic planning of research to permit valid conclusion (Reis, Harry & Judd, Charles, 2000). It engrosses the specifications of the population to be studied, the treatment to be administered, and the dependent variables to be measured. (Polit, Hungler, & Beck, 2001)define a research design as ―the overall plan for collecting and analyzing data including specifications for enhancing the internal and external validity of the study.

Burns & Grove, 2009 define a research design as ―a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings. (Parahoo, 2006)describes a research design as ―a plan that describes how, when and where data are to be collected and analyzed. (Polit, Hungler, & Beck, 2001) define a research design as ―the researcher‘s overall for answering the research question ortesting the research hypothesis.



Research is an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and

experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic approach concerning generalization and the formulation of a theory is also research. As such the term _research refers to the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the facts or data, analyzing the facts and reaching certain conclusions either in the form of solutions(s) towards the concerned problem or in certain generalizations for some theoretical formulation

The study is to be done on the basis of past data as well as on the responses and the reaction of various stakeholders Retail experts, Retail Managers across retail chains.

Exploratory research design is intended to develop hunches or insights and to provide direction for any further research needs (Parasuraman , Berry, & Zeithaml, 1991). Conclusive research design aims at determining best course of action for measurement of clearly defined phenomena to assist decision makers (Malhotra & Briks, 2006)

Descriptive Research Design:

(Malhotra & Das, 2009) Stipulate that Descriptive Research design describe the characteristics of relevant group. A major difference between exploratory and descriptive research is that descriptive research is characterized by the prior formulation of specific hypotheses. So the information is clearly defined. Descriptive research is pre planned and well structured. It is based on the large sample size.

The study is related to **Descriptive Research;** at the same time we will try to study questions related to the concern related to the processing industry and with the related Hence we will apply the Descriptive Research design as well as Conclusive Research Design.

3.4 Sampling Design

Sampling Design mentions the methods and techniques utilized for choosing of samples. It determines the detailed structure of selection of samples from the universe. The details like Universe, Target Population, Sampling Techniques, Sample size etc. are provided as under.

3.4.1 Universe and Target Population:

A target population is a certain group of the population that share similar characteristics and is identified as the intended audience for a product, advertising or research. It is a portion of the whole universe of people selected as the objective audience.

Also known as target audience, this term refers to a group of people that possess certain attributes that can be classified properly to separate them from the entire population. The purpose of this technique is to understand and evaluate their preferences and behaviours in order to market a given product or service or to study a given element that appears among them like behaviour patterns.

3.4.2 Sampling Techniques:

Sample techniques are used for selecting sample from population by reducing the number of respondents in controllable size. Sample technique is broadly classified as non-probability sampling and probability sampling. The researcher decides the technique on the basis of the process, nature of population i.e. whether it is finite or infinite, and types of research. One is the probability sampling and the other is non-probability sampling. Probability is random sampling and the non probability is non-random sampling. According to (Malhotra & Das, 2009), in probability technique researcher can decide what elements to include in the sample. This technique also gives good estimation of the population characteristics.

Non-Probability Convenience sampling approach has been utilized in this study – In non-probability sampling, there is an assumption that there is an even distribution of characteristics within the population. This is what makes the researcher believe that any sample would be representative and because of that, results will be accurate. In non-probability sampling, since elements are chosen arbitrarily, there is no way to estimate the probability of any one element being included in the sample. Also, no assurance is given that each item has a chance of being included, making it impossible either to estimate sampling variability or to identify possible bias.

Researchers use various sampling techniques in situations where there are large populations. In most cases, testing the entire community is practically impossible because they are not easy to reach. Researchers use convenience sampling in situations where additional inputs are not necessary for the principal research. There are no criteria required

to be a part of this sample. Thus, it becomes incredibly simplified to include elements in this sample. All components of the population are eligible and dependent on the researcher's proximity to get involved in the sample.

3.4.3 Sample Size

Sample size plays a very crucial role as far as research analysis is concerned and it is proved that precision of the results profoundly depends on the size of the sample. Larger the size, better it is, as it becomes perfectly distributive as well as representative. It is quite significant to derive as well as representative. It is quite significant to derive correct sample size. To achieve this, researcher can adopt few days to have an appropriate samplesize. [Sarmah and Hazarika, 2012].

1. Usage of Census - this can be used when the population is very small and each unit can be included in the sample for data collection [Singh, 2014]
2. Similar study – in case of similar type of study that has been done previously, the same sample taken [Hamed, 2017]
3. Published tables – Scholars have derived the formulas and as per the varying population readymade tables of sample size are also prescribed by them [Israel, 1992]
4. Applying Formulas - Formula provided by various scholars can be used to determine the sample size. [Sarmah and Hazarika, 2012]

This refers to the number of items to be selected from the universe to constitute a sample. This is a major problem before a researcher. The size of sample should neither be excessively large, nor too small. It should be optimum. An optimum sample is one which fulfils the requirements of efficiency, representativeness, reliability and flexibility. While deciding the size of sample, researcher must determine the desired precision as also an acceptable confidence level for the estimate.

Sample size has an effect on how the sample findings accurately represent the population (Burns & Bush, 2010). The larger the sample is, the more likely that the generalizations are an accurate reflection of the population (Saunders, Thornhill and Lewis, 2009). In general, there has been an understanding among authors of statistical books that the largerthe sample the more appropriate for the use of various statistical analysis (Connelly, 2008).

In this study quantitative data was collected from the employees engaged in different company industries Small, Medium and Large scales industry of Gujarat. For collection of data, a convenience sampling was used among the various employees/workers working at different level likewise senior, Middle and junior level in the different industries ofGujarat. The sample size for the study was taken as 539.

3.4.4 Data Collection:

Sources of information are categorized as Primary Data and Secondary data. As per (Malhotra & Das, 2009), Primary Data are originated by a researcher for the particular purpose of addressing the matter at hand. Primary Data is collected through market research. Secondary data is obtained from journals, books, websites, library of IIMA, summary proceedings of seminar/conferences and published & unpublished research articles and bank manuals.

I. Secondary Data

The data which was collected and used earlier by another researcher for similar or related studies or could also be for various quite studies which is useful in conducting this research is termed secondary data. Secondary data is already published data in numerous forms like newspapers, research papers, articles in periodicals, books, magazines, websites etc. For this research secondary data has been collected from all possible data collection sources.
Research articles published in reputed national moreover as international journals are referred for collection of knowledge analysis besides leading magazines, reports published in various journals. Careful deliberation has been stressed abreast of while selecting secondary data source so as to make sure relevance to the subject and gentility of the information.

II. Primary Data:

Primary data is that the data specifically collected by the researcher for the aim of this research. Its original data collected by the researcher himself/herself. Primary data is often customized as per the necessity of the present research. Primary data gives more confidence to researcher because the same is collected by him / her for specific purpose.

However, utmost care is also required for collecting primary data as a bit mistake can make an enormous difference within the results and take it far-off from the fact. There is apair of the way of collecting primary data through Structured Questionnaire method.

III. Questionnaire Method:

Questionnaire Method during this method researcher prepares a questionnaire using a set of questions associated with the study and required data. The responses from respondents are then collected for the questionnaire which is analyzed to induce the outcome. Researcher can use either open ended questions or closed ended questions depending upon requirement of the study. Responses of closed ended questions are often easily grouped and analyze whereas responses to open ended questions have to be analyzed subjectively. For the current research primary data was collected employing a structured questionnaire.

Extreme care was taken while drafting the questions so because the respondents can understand the identical within the manner it was asked. The identical was being checked through the pilot survey also and corrections were being made where required. 45 Statements are measured on Seven points Ranking scale was accustomed record the responses.

3.5 Questionnaire Development and Pre-testing:

When a researcher is conducted in social science with quantitative and qualitative approach, conclusions are derived based on responses provided by the target respondents through questionnaire and interviews. It is of utmost importance to construct the questionnaire carefully and following the correct methodology. Questionnaire designing becomes very crucial for this type of research. In absence of fitting instrument, the results of the research can be greatly misleading, and it might result into a failure on the part of policy making, academics and knowledge gain [Acharya, 2010]. A questionnaire is defined as a document containing questions and other items designed to solicit information appropriate to analysis [Babbie, 1991].

Questionnaire was framed based on literature review and was structured in nature. In this research the questionnaire is divided into 6 different headings with Seven Point Likert Scale for the measurement:

1	2	3	4	5	6	7
Disagree Completely	**Strongly Disagree**	**Somewhat Disagree**	**Neutral**	**Somewhat Agree**	**Strongly Agree**	**Agree Completely**

3.5.1 First part:

Discuss about the demographic details and about the workers are engaged in the industries.

3.5.2 Second Part:

(SECTION I STATEMENTS) – This section discuss about the basic medical facilities available in the organization where worker is working. This section also includes the questions regarding the medi-claim policies issued by company, regular medical camps organized by company, any tie-ups of company with nearby or any super speciality hospital or not. In brief, all such information is being collected from 11 statements from this section.

3.5.3 Third Part:

(SECTION II STATEMENTS) – This section consists of 5 statements having more emphasis on the special reference to HIV AIDS. The information related to this segment will help to analyse that how much companies are pro-actively providing the healthcare services related to such chronic disease. Whether the company is allowing frequent visit of health workers working in Aaganwadi, for coming up with various necessary awareness programs that might help workers to fight against and even to reduce the riskof being infected of such diseases.

3.5.4 Fourth Part:

(SECTION IV STATEMENTS) - This section consist of 7 statement having emphasis on the special treatment, or any facility given to the employees who are suffering from HIV AIDS. Statements like how the other subordinates behaving with the positive employees, is there any different facility provided to them for transportation or not.

3.5.5 Fifth Part:

(SECTION V STATEMENTS) – This section deals with the requirements of the employees who are positive. Here 9 statements are dealing with the accommodations of the employees provided by the company and the facilities provided by the company to all employees.

3.6 Sampling Process:

Sampling process include various steps including defining the population to choose a sampling frame, selecting a sampling technique, and to decide about sample size at the end. [Malhotra & Das, 2016].

3.6.1 Data Analysis & Statistical Tools:

The research has used SPSS 25 and AMOS to perform varied statistical techniques to analyse the data. The Data was first inserted to Excel sheet and then imported to SPSS software for further analysis.

Tools selected for analysis are: Descriptive and Inferential Analysis, Exploratory Factor Analysis, Confirmatory Factor Analysis, Cross Tabulation, Cluster Analysis, and Content Analysis.

3.6.2 Descriptive Analysis and Inferential Analysis:

Descriptive Analysis has been done by using Graphical Pie Chart/Bar Chart and Cross Tabulation. Inferential Analysis and Testing of Hypothesis has been carried out by executing the different tests like Exploratory and Confirmatory Factor Analysis, Chi-Square Test, ANOVA, Cluster Analysis.

3.6.3 Reliability:

Reliability of the research is anxious with credibility and accuracy of the measurement. It demonstrates procedure and therefore the ability of instrument to repeat the research and its consistency over time. The capacity of being replicable and also the repetition of research findings establish the reliability of an exploration study. It absolutely was assured that data would be kept confidential which helps to cut back the topic bias. Being survey format by employing a questionnaire it failed to face any observer error. The

survey instrument items reliability are often checked by internal consistency method (Hussey & Hussey, 1997). Cronbach's coefficient alpha was used here to live the inner reliability of survey. Additionally the survey was verified by academicians and industry experts to live internal consistency of the questionnaire.

Overall reliability of scales was .875 which shows higher internal consistency among the scales. As per the pilot study higher internal consistency of all scales is confirmed, exceeding the appropriate value of 0.07 (Nunnally, 1978) aside from affect organizational commitment scale where the quality has been relaxed due to the exploratory nature of the size.

3.6.4 Validity:

Content validity refers to accuracy of measurement tool. Because the scales were built on the idea of the previous literature and hence include items employed in scales already been validated for measuring similar concepts during a different founded and assessed by questionnaire pre-test, it absolutely was ensured that every item had the required content validity.

3.6.5 Exploratory Factor Analysis:

In order to identify the factors affecting to the Health Industries factor analysis has been carried out with principal component extraction with Varimax rotation. To assess the internal consistency of scale "Coefficient of Internal Consistency (Cronbach Alpha) has been computed.

3.6.6 Cluster Analysis:

Cluster analysis may be a multivariate method which aims to classify a sample of subjects (or objects) on the idea of a group of measured variables into variety of various groups such that similar subjects are placed within the same group. An example where this could be used is in the field of psychiatry, where the characterisation of patients on the idea of clusters of symptoms are often useful within the identification of an appropriate sort of therapy.

Cluster analysis could be a computationally hard problem. For many real-world problems, computers don't seem to be ready to examine all the possible ways during which objects is grouped into clusters. Thousands of algorithms are developed that try to provide

approximate solutions to the matter. The three main ones are:

- Hierarchical clustering. This technique starts by treating each object as an autonomous cluster. Then, it repeatedly executes the following two steps: (1) recognize the two clusters that are adjacent together and (2) merge the two most similar clusters. This process will be continued unless and until all the clusters are merged together.
- K-means cluster analysis. In this system the researcher requires to depict a required number of clusters. Initially, observations are allocated to clusters using some arbitrary process (e.g., randomly) and then the cluster means are calculated, and objects are allocated to the adjunct cluster. The last two steps are repeated until the clusters don't change.
- Latent class analysis. In terms of process, this can be like k-means, except that it may be used with both numeric and non-numeric data.

3.6.7 Chi Square Test:

The Chi sq.data points often used for testing relationships between categorical variables. The null hypothesis of the Chi-Square check is that no relationship exists on the explicit variables within the population; they're freelance.

3.6.8 Inferential Analysis:

We have seen that descriptive statistics give info regarding our immediate cluster of information. As an example, we tend to might calculate the mean and variance of the test marks for the one hundred students and this might give valuable info regarding this any cluster of information like this, which incorporates all the information you're inquisitive about, is termed a population. A population will be tiny or massive, as long because it includes all the information you're inquisitive about. as an example, if you were solely inquisitive about the test marks of one hundred students, the one hundred students would represent your population. Descriptive statistics area unit applied to populations, and also the properties of populations, just like the mean or variance, area unit referred to as parameters as they represent the mean or variance, area unit referred to as parameters as they represent the full population (i.e., everyone you're interested in).

3.7 Managerial Implication:

The research concentrates on the factors affecting the health care services provided by the industries to the employees working with them. Health is very important aspect to be taken care of any individual and when it comes to the employees, this is the matter which can never be compromised. So, the research will not only helping in contributing towards the health of employees, the health services provided to them by the industries, but also will be contributing towards the various approaches for providing special treatment and medications to the diseases like HIV/AIDS.

Well done is better than well said. - Benjamin Franklin

This research will be also contributing towards the direction of how to treat the people who are already going through the humiliation of being HIV/AIDS positive. The proper medication, proper counselling and how they can prevent it from spreading further, all these parameters will be clearly addressed in this research. Also the research will focus onthe factors affecting the health services being provided to employees, the industries will also have a clear picture regarding the factors which will be helping them to make their practices somewhat more different, or they may upgrade the services provided by them to the employees' health.

3.8 Limitations

Research is an activity that happens on a regular basis, actively/passively, formally/ informally, in an organized or unorganized way, the researcher keeps doing research most of the time into various matters that may catch interest. Any research work is possibly liable to more or less limitation:

- The industries might keep on changing their policies related to the healthcare facilities of the employees with the passage of time.
- The data is being collected from the employees, and which is again based on the perception and basic understanding of them. It might show some variation as the level of the employees will be changing in the organization.
- The information provided by respondents might be subject to bias which might influence reliability of data and shall influence the study results.

- The time selected and taken for any research is another critical aspect to bring the real facts out of it.
- The results are subject to geographical location and generalization of the result may require further research.
- Another very palpable and enormous limitation with most of the individual researcher is Resource restriction. Resource restrictions affect both: the research aswell the outcomes. It affects the scale of the research too. As compared to thelarge gradation research, this research falls short in terms of manpower and money involved as well as the tools of analysis is relatively less.

****

CHAPTER - 4

Data Analysis

This chapter covers results, analysis, and interpretations of various data analysis techniques collected during primary survey. This chapter identifies key variables of health care services provided to informal workforce with special reference to HIV/AIDS related service.

CHAPTER - 4

Data Analysis

The primary objective of this study is to find out the correlation between the factors which are impacting health related services by Industries and organizations to industrial workers with special reference to HIV/AIDS in Gujarat.

4.1 Introduction:

The data analysis has been done for the research work to achieve this objective on basis of the collected primary data. The responses of 539 industrial workers have been collected in this research. These respondents were selected from various cities of the Gujarat state so as the responses are received from all the major areas of the city– Ankleshwar, Bharuch, Surat, Dahej and Vadodara Most of the response has been taken in terms of 7 point scaling where_7‘ indicates influence on the higher sidewhere_1‘indicates influence on the lower side. Frequencies calculation has been doneby the researcher for all the study variables to understand the characteristics of the collected data.

In this chapter, researcher has used SPSS version 20.0 and AMOS 24.0 to perform various statistical techniques to analysis the data. Data were first coded in excel sheet andexported to Statistical Software for further analysis. The tools selected for the analysis are: exploratory factor analysis, confirmatory factor analysis, structured equation modelling, Pearson correlation, graphical analysis, cross tabulation, ANOVA, An exploratory factor analysis was performed in which the principal component method withVarimax rotation was selected.

Graphical Analysis

Graphical analysis helps us to understand how various respondent of research are proportionate. The researcher has recognized certain categories of the respondents like gender, designation, salary, marital status, family status and home town with help of literature review. The researcher wants to examine the magnitude of each categorical

variable and some of the internal subcategories that has been classified for each demographic factor As a research tool, here the researcher has applied cross tab and bar charts to understand the classification.

4.2 Respondent's profile / Demographic characteristics of the data:

In this topic researcher explained about various demographic characteristics of respondents like marital status, gender, type of family, monthly income level, industrial area, city of employment, year of establishment of company, etc. This is very important part, which explains about demographic profile of respondents. The brief explanation of each demographic characteristic are given below.

4.2.1 Marital Status and Gender:

Table: 4.1

		Marital Status of Worker					
		Married		Unmarried		Divorced	
		Sex of Worker		Sex of Worker		Sex of Worker	
		Male	Female	Male	Female	Male	Female
		Count	Count	Count	Count	Count	Count
Type of Family Worker Lives in at Workplace	Joint	101	2	66	3	0	0
	Nuclear	33	4	6	2	0	0
	Alone	177	0	115	4	25	2
	Total	311	6	187	9	25	2

(Source: Primary data)

From the table above, it can be easily interpreted that the total number of married men living alone is higher, 177 out of 311. While the total number of married women is higher in the nuclear family, that is, 4. In the joint family, the number of married men is 101 and in the nuclear family, the married man is 33 years old, which is the lowest of all.

If we analyze the data of single workers, the largest number of single men is left alone and not with the family, which is 115 out of 187. And the largest number of single women is also in the same category that is left alone instead of stay with someone. . If we talk about divorced data, the highest number of respondents is in the category of alone and in the category of male gender.

Table: 4.2

		Age Group					
		16-21	22-27	28-37	38-45	46-52	Total
		Count	Count	Count	Count	Count	Count
Monthly Income (Personal)	0000-4999	0	1	0	1	0	2
	10000-14999	14	9	19	6	0	48
	15000-19999	15	32	89	44	2	182
	20000-24999	3	15	43	58	9	128
	25000-29999	0	2	4	8	0	14
	30000-40000	0	0	7	10	1	18
	5000-9999	2	31	102	13	0	148

(Source: primary data)

The previous table gives the income bifurcation of the respondents. The researcher can interpret that the highest respondents are at the level Rs 15000-19999 per month that is 182. The highest respondents are also in the same age group which is 89 in 28-37 years. If we argue about the lowest number of respondents, then it is the income group of R0000-4999. The middle range of respondents is between the Rs 5000-9999 income groups. In the same income group, the tallest respondent's are3 in the age group of 28 to 37 years, that is, 102 respondents.

Table: 4.3

		City Name of Employment				
		Ankleshwar	Bharuch	Dahej	Surat	Vadodara
		Count	Count	Count	Count	Count
Industrial Area / GIDC of Worker	Ankleshwar GIDC, Ankleshwar	100	3	0	0	0
	Bharuch GIDC, Bharuch	0	53	3	0	0
	Dahej GIDC, Bharuch	0	0	34	0	0
	Dahod GIDC, Dahod	0	0	0	0	1
	Dumbhal GIDC, Surat	0	0	0	1	0
	Godhra GIDC, Godhra	0	0	0	0	1
	Gorwa GIDC, Vadodara	0	0	0	1	4
	Hajira GIDC, Surat	0	0	0	24	0
	Jambusar GIDC, Bharuch	0	1	0	0	0
	Kadodara GIDC, Surat	0	0	0	10	0
	Kumbhariya GIDC, Surat	0	0	0	2	0
	Majura Gate GIDC, Surat	0	0	0	1	0
	Makarpura GIDC, Vadodara	0	0	0	0	157

	Manjusar GIDC, Vadodara	0	0	0	0	7
	Nabipur GIDC, Bharuch	0	1	0	0	0
	Nandesari GIDC, Vadodara	0	0	0	0	7
	Narmada GIDC, Bharuch	0	1	0	0	0
	Piplod GIDC, Surat	0	0	0	1	0
	Ring Road, Surat	0	0	0	1	0
	Sachin GIDC, Surat	0	0	0	79	0
	Savli GIDC, Vadodara	0	0	0	0	23
	Textile Market, Surat	0	0	0	3	0
	Udhana GIDC, Surat	0	0	0	19	0
	Vadodara GIDC, Vadodara	0	0	0	0	1
	Waghodiya GIDC, Vadodara	0	0	0	0	1
	Total	100	59	37	142	202

(Source : Primary data)

In the table above there are data for the city and the place of employment of the workers. The highest number of respondents is from Vadodara city and from makarpura GIDC which is 157. The second highest is from Ankleshwar city and Ankleshwar GIDC which is 100. If we discuss about city data, the highest respondents are they rank between the city of Vadodara which is 202 and the second highest is from the city of Surat which is 142. The lowest respondents regarding the city are from Dahej which is 37.

Table: 4.4

Establishment_Size_Range (No. of Employees)							
		000-049	**050-099**	**100-199**	**200-399**	**400-500**	**Total**
		Count	**Count**	**Count**	**Count**	**Count**	**Count**
Years of Establishment	**00-10**	5	80	70	0	2	157
	11-25	162	121	16	1	1	301
	26-50	3	30	24	9	3	69
	50-100	0	0	7	6	0	13

(Source: primary data)

In above table there is comparison of years of establishment it means how old is company and number of employees. Highest number of respondents are from range 11-25 years that is 301 employees. The establishment size range is also from same level that is 162 respondents from 000-049 count. The lowest is from 50-100 years old company that is 13 respondents researcher get from this range.

Table: 4.5

Monthly Income (Personal)								
		0000-4999	10000-14999	15000-19999	20000-24999	25000-29999	30000-40000	5000-9999
		Count	Count	Count	Count	Count	Count	Count
City Name of Employment	Ankleshwar	0	6	43	41	5	5	0
	Bharuch	0	8	29	14	3	4	1
	Dahej	0	6	13	10	1	7	0
	Surat	2	12	70	55	2	1	0
	Vadodara	0	16	27	8	3	1	147
	Total	2	48	182	128	14	18	148

In above table researcher compared between city of employment and monthly income. The highest number of respondents are in range of Rs 15000-19999 that is 182 after that that range is 5000-9000 Rs that is 148. The lowest is in range of 0000-4999 Rs which is 2.

Table: 4.6

Years of Establishment					
		00-10	Nov-25	26-50	50-100
		Count	Count	Count	Count
Age Group	16-21	3	30	1	0
	22-27	31	47	12	0
	28-37	109	122	28	5
	38-45	14	94	26	6
	46-52	0	8	2	2
	Total	157	301	69	13

In above table there is comparison of age group of respondents and age of company. This highest number of respondents is in age category of 28-37 years for respondent's age and for company it is 11-25 years which is 122. The lowest number of respondents is from age group of respondents that is 16-21 and 22-27 years with age group of 50-100 years for company.

4.3 CROSS TABULATION ANALYSIS

Cross-tabulation is a two or more dimension table that records the frequencies of respondent that have specific characteristics described in the cells of the table. It provides relationship between two or more variables.

Table: 4.7

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Marital Status of Worker * Cluster Number of Case * Sex of Worker	539	100.00%	0	0.00%	539	100.00%

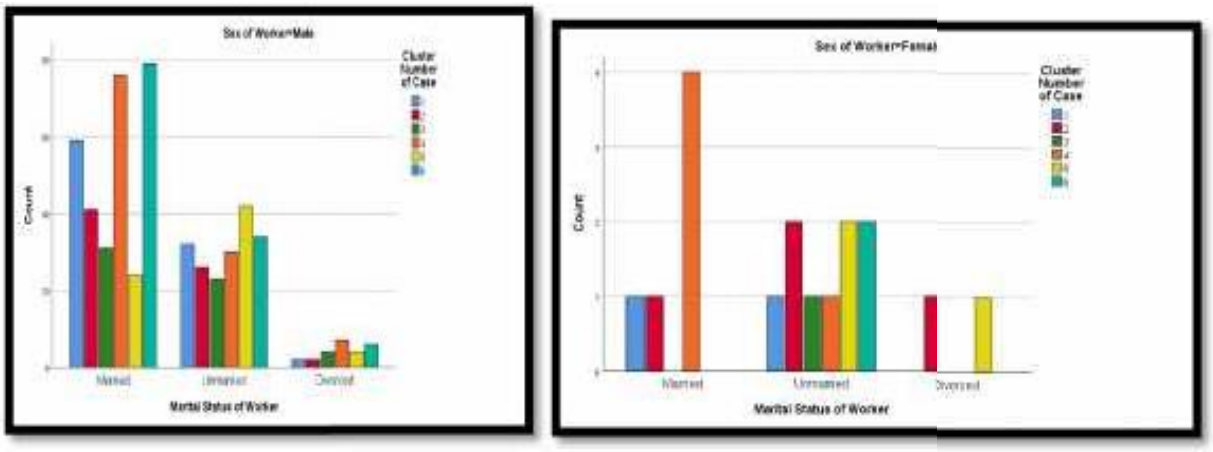
(Source: primary data)

Table: 4.8

Marital Status of Worker * Cluster Number of Case * Sex of Worker Cross tabulation								
Count								
Sex of Worker			Cluster Number of Case					Total
			1	2	3	4	5	6	
Male	Marital Status of Worker	Married	59	41	31	76	24	79	310
		Unmarried	32	26	23	30	42	34	187
		Divorced	2	2	4	7	4	6	25
	Total		93	69	58	113	70	119	522
Female	Marital Status of Worker	Married	1	1	0	4	0	0	6
		Unmarried	1	2	1	1	2	2	9
		Divorced	0	1	0	0	1	0	2
	Total		2	4	1	5	3	2	17
Total	Marital Status of Worker	Married	60	42	31	80	24	79	316
		Unmarried	33	28	24	31	44	36	196
		Divorced	2	3	4	7	5	6	27
	Total		95	73	59	118	73	121	539

(Source: primary data)

The above table shows relationship between gender and marital status of workers between six clusters. Out of total 539 respondents collected it is seen that married male are 310 and unmarried male are 187 and divorced male are 25. If we discuss about females than married females are 6, unmarried are 9 and divorced females are 2. Highest number of married male are from cluster six that is 79, than from cluster four that is 76 and then from cluster one that is 59. The lowest data of male married respondents are from cluster three that is 31.



4.4 ONE-WAY ANOVA (cluster):

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

From Anova table we can easily interpret hypothesis and check the significance level among different cluster by framing null hypothesis and alternate hypothesis.

H0: There is no significance difference among various clusters for overall health support services with respect to industrial workers suffering from HIV/AIDS

H1: There is significance difference among various clusters for overall health support services with respect to industrial workers suffering from HIV/AIDS

Table: 4.9

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
OHS	**Between Groups**	754.9	5	150.98	264.308	0
	Within Groups	304.464	533	0.571		
	Total	1059.36	538			
EHS	**Between Groups**	776.548	5	155.31	95.725	0
	Within Groups	864.773	533	1.622		
	Total	1641.32	538			
GHS	**Between Groups**	633.032	5	126.606	114.924	0
	Within Groups	587.181	533	1.102		
	Total	1220.21	538			
OPS	**Between Groups**	556.18	5	111.236	213.383	0
	Within Groups	277.851	533	0.521		
	Total	834.031	538			
ORA	**Between Groups**	530.659	5	106.132	77.899	0
	Within Groups	726.176	533	1.362		
	Total	1256.84	538			

(Source: primary data)

This is significant part of one way ANOVA analysis which will derive whether there is a significant difference amongst the group or not. Here the researcher has the model of test between the subject effects. The researcher here applied Anova test for various clusters. For the OHS group, the value of F ratio is 264.308; it states that variations between the groups and variations within the group is highest. On other end the F value for ORA is 77.89, it means that variations between and within the groups is lowest for that variable. The significance value is 0.000, which is less than 0.05, it indicates that Null Hypothesis cannot be accepted and in this case the researcher accepts the alternative Hypothesis. Hence there is significant difference among various tenure groups.

Once the researcher has derived statistical inferences amongst the four tenure groups, now the researcher wants to understand that which tenure group is significantly associated with remaining tenure groups and which tenure groups is significantly different than the remaining. Since the tenure groups having equal intervals the researcher has applied post hoc Tukey test to derive the facts.

Table: 4.10

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
OHS	1	95	2.2585	0.79967	0.08204	2.0956	2.4214	1.11	4.67
	2	73	5.446	0.70965	0.08306	5.2804	5.6115	3.67	6.33
	3	59	2.1827	0.84185	0.1096	1.9633	2.4021	1	3.67
	4	118	2.1827	0.77859	0.07168	2.0407	2.3246	1	3.67
	5	73	1.7108	0.80821	0.09459	1.5222	1.8994	1	3.67
	6	121	1.8411	0.63922	0.05811	1.7261	1.9562	1	3.67
	Total	539	2.4974	1.40324	0.06044	2.3787	2.6162	1	6.33
EHS	1	95	4.0505	1.88431	0.19333	3.6667	4.4344	1.4	6.4
	2	73	4.9534	1.35791	0.15893	4.6366	5.2702	1.4	6.4
	3	59	4.2203	1.85349	0.2413	3.7373	4.7034	1	6.4
	4	118	5.1322	0.9418	0.0867	4.9605	5.3039	1.6	6.4
	5	73	1.474	0.54925	0.06428	1.3458	1.6021	1	4
	6	121	5.0843	0.78262	0.07115	4.9434	5.2252	3.6	6.4
	Total	539	4.3113	1.74665	0.07523	4.1635	4.4591	1	6.4
GHS	1	95	5.1278	0.69658	0.07147	4.9859	5.2697	3.43	6.71
	2	73	3.4266	1.31438	0.15384	3.1199	3.7333	1.57	6.14
	3	59	2.9613	1.32821	0.17292	2.6151	3.3074	1	5.43
	4	118	3.4492	1.3412	0.12347	3.2046	3.6937	1	6.14
	5	73	1.7886	0.80005	0.09364	1.602	1.9753	1	3.71
	6	121	2.2031	0.69712	0.06337	2.0776	2.3285	1	3.57
	Total	539	3.1839	1.50601	0.06487	3.0565	3.3114	1	6.71

OPS	1	95	2.1342	0.58096	0.05961	2.0159	2.2526	1.5	5.13
	2	73	2.7911	1.33057	0.15573	2.4807	3.1015	1.5	6.13
	3	59	5.4555	0.47443	0.06177	5.3319	5.5791	4.25	6.13
	4	118	2.2055	0.48798	0.04492	2.1165	2.2945	1.5	4.25
	5	73	2.3527	0.86033	0.10069	2.152	2.5535	1.5	5.5
	6	121	2.1074	0.45136	0.04103	2.0262	2.1887	1.5	3.13
	Total	539	2.6259	1.24509	0.05363	2.5206	2.7313	1.5	6.13
ORS	1	95	2.7158	1.02052	0.1047	2.5079	2.9237	1.43	6.14
	2	73	3.2153	1.611	0.18855	2.8394	3.5911	1.43	6.14
	3	59	3.4939	1.5182	0.19765	3.0983	3.8896	1.43	6.14
	4	118	5.224	0.7295	0.06716	5.091	5.357	3.71	6.14
	5	73	3.4031	1.44971	0.16968	3.0649	3.7414	1.43	6.14
	6	121	2.523	0.88574	0.08052	2.3636	2.6825	1.43	5
	Total	539	3.4675	1.52844	0.06583	3.3382	3.5969	1.43	6.14

(Source: primary data)

This table shows the output of the ANOVA analysis and whether there is a statistically significant difference between our group means. We can see that the significance value is 0.011 (i.e., p=.011), which is below 0.05. In addition, therefore, there is a statistically significant difference in them enlengthen of time to complete the spread sheet problem between the different courses taken.

Table: 4.11

Test of Homogeneity of Variances					
		Levene Statistic	**df1**	**df2**	**Sig.**
OHS	Based on Mean	3.044	5	533	0.01
	Based on Median	2.847	5	533	0.015
	Based on Median and with adjusted Df	2.847	5	499.356	0.015
	Based on trimmed mean	3.115	5	533	0.009
EHS	Based on Mean	44.23	5	533	0
	Based on Median	31.991	5	533	0
	Based on Median and with adjusted Df	31.991	5	353.03	0
	Based on trimmed mean	43.26	5	533	0
GHS	Based on Mean	28.398	5	533	0
	Based on Median	16.864	5	533	0
	Based on Median and with adjusted Df	16.864	5	386.647	0
	Based on trimmed mean	27.2	5	533	0
OPS	Based on Mean	27.886	5	533	0
	Based on Median	13.86	5	533	0
	Based on Median and with adjusted Df	13.86	5	237.383	0
	Based on trimmed mean	22.974	5	533	0
ORS	Based on Mean	33.205	5	533	0
	Based on Median	20.215	5	533	0
	Based on Median and with adjusted Df	20.215	5	399.318	0
	Based on trimmed mean	31.557	5	533	0

(Source: primary data)

From the above table we can interpret that researcher undertook Levene's test in order to find better association between variables. In above table the significance value for all variables are less than 0.05 which means we can accept H1 and reject H0 which is null hypothesis.

Table 4.12

Robust Tests of Equality of Means					
		Statistic[a]	df1	df2	Sig.
OHS	Welch	294.943	5	221.741	0
EHS	Welch	379.481	5	218.322	0
GHS	Welch	239.098	5	217.541	0
OPS	Welch	478.109	5	216.821	0
ORS	Welch	162.985	5	211.038	0

a. Asymptotically F distributed.

(Source: primary data)

After performing Levene's test, researcher performed Welch test which provides better result between

Table 4.13

Multiple Comparisons							
Tukey HSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
OHS	1	2	-3.18749*	0.11763	0	-3.5239	-2.851
		3	0.07581	0.12528	0.991	-0.2825	0.4341
		4	0.07581	0.10418	0.979	-0.2222	0.3738
		5	.54767*	0.11763	0	0.2112	0.8841
		6	.41734*	0.1036	0.001	0.121	0.7137
	2	1	3.18749*	0.11763	0	2.851	3.5239
		3	3.26329*	0.13231	0	2.8849	3.6417
		4	3.26329*	0.11254	0	2.9414	3.5852
		5	3.73516*	0.1251	0	3.3774	4.093
		6	3.60483*	0.11201	0	3.2845	3.9252
	3	1	-0.07581	0.12528	0.991	-0.4341	0.2825
		2	-3.26329*	0.13231	0	-3.6417	-2.8849
		4	0	0.12051	1	-0.3447	0.3447
		5	.47187*	0.13231	0.005	0.0934	0.8503
		6	0.34154	0.12001	0.052	-0.0017	0.6848
	4	1	-0.07581	0.10418	0.979	-0.3738	0.2222
		2	-3.26329*	0.11254	0	-3.5852	-2.9414
		3	0	0.12051	1	-0.3447	0.3447
		5	.47187*	0.11254	0	0.15	0.7938
		6	.34154*	0.09778	0.007	0.0619	0.6212
	5	1	-.54767*	0.11763	0	-0.8841	-0.2112
		2	-3.73516*	0.1251	0	-4.093	-3.3774
		3	-.47187*	0.13231	0.005	-0.8503	-0.0934
		4	-.47187*	0.11254	0	-0.7938	-0.15
		6	-0.13033	0.11201	0.854	-0.4507	0.19
	6	1	-.41734*	0.1036	0.001	-0.7137	-0.121
		2	-3.60483*	0.11201	0	-3.9252	-3.2845
		3	-0.34154	0.12001	0.052	-0.6848	0.0017
		4	-.34154*	0.09778	0.007	-0.6212	-0.0619
		5	0.13033	0.11201	0.854	-0.19	0.4507
EHS	1	2	-.90290*	0.19825	0	-1.4699	-0.3359
		3	-0.16981	0.21113	0.967	-0.7737	0.4341

		4	-1.08168*	0.17558	0	-1.5839	-0.5795
		5	2.57655*	0.19825	0	2.0095	3.1436
		6	-1.03377*	0.17461	0	-1.5332	-0.5344
	2	1	.90290*	0.19825	0	0.3359	1.4699
		3	.73309*	0.22299	0.014	0.0953	1.3709
		4	-0.17878	0.18967	0.935	-0.7213	0.3637
		5	3.47945*	0.21083	0	2.8764	4.0825
		6	-0.13087	0.18877	0.983	-0.6708	0.409
	3	1	0.16981	0.21113	0.967	-0.4341	0.7737
		2	-.73309*	0.22299	0.014	-1.3709	-0.0953
		4	-.91186*	0.2031	0	-1.4928	-0.331
		5	2.74637*	0.22299	0	2.1086	3.3841
		6	-.86396*	0.20226	0	-1.4424	-0.2855
	4	1	1.08168*	0.17558	0	0.5795	1.5839
		2	0.17878	0.18967	0.935	-0.3637	0.7213
		3	.91186*	0.2031	0	0.331	1.4928
		5	3.65823*	0.18967	0	3.1157	4.2007
		6	0.04791	0.1648	1	-0.4234	0.5192
	5	1	-2.57655*	0.19825	0	-3.1436	-2.0095
		2	-3.47945*	0.21083	0	-4.0825	-2.8764
		3	-2.74637*	0.22299	0	-3.3841	-2.1086
		4	-3.65823*	0.18967	0	-4.2007	-3.1157
		6	-3.61032*	0.18877	0	-4.1502	-3.0704
	6	1	1.03377*	0.17461	0	0.5344	1.5332
		2	0.13087	0.18877	0.983	-0.409	0.6708
		3	.86396*	0.20226	0	0.2855	1.4424
		4	-0.04791	0.1648	1	-0.5192	0.4234
		5	3.61032*	0.18877	0	3.0704	4.1502
GHS	1	2	1.70121*	0.16336	0	1.234	2.1684
		3	2.16656*	0.17398	0	1.669	2.6642
		4	1.67867*	0.14468	0	1.2649	2.0925
		5	3.33917*	0.16336	0	2.8719	3.8064
		6	2.92475*	0.14388	0	2.5132	3.3363
	2	1	-1.70121*	0.16336	0	-2.1684	-1.234
		3	0.46536	0.18375	0.117	-0.0602	0.9909
		4	-0.02254	0.15629	1	-0.4696	0.4245
		5	1.63796*	0.17373	0	1.1411	2.1349
		6	1.22354*	0.15555	0	0.7787	1.6684
	3	1	-2.16656*	0.17398	0	-2.6642	-1.669
		2	-0.46536	0.18375	0.117	-0.9909	0.0602
		4	-.48789*	0.16736	0.043	-0.9666	-0.0092
		5	1.17261*	0.18375	0	0.6471	1.6981
		6	.75819*	0.16666	0	0.2815	1.2349
	4	1	-1.67867*	0.14468	0	-2.0925	-1.2649
		2	0.02254	0.15629	1	-0.4245	0.4696
		3	.48789*	0.16736	0.043	0.0092	0.9666
		5	1.66050*	0.15629	0	1.2135	2.1075

		6	1.24608*	0.1358	0	0.8577	1.6345
	5	1	-3.33917*	0.16336	0	-3.8064	-2.8719
		2	-1.63796*	0.17373	0	-2.1349	-1.1411
		3	-1.17261*	0.18375	0	-1.6981	-0.6471
		4	-1.66050*	0.15629	0	-2.1075	-1.2135
		6	-0.41442	0.15555	0.084	-0.8593	0.0305
	6	1	-2.92475*	0.14388	0	-3.3363	-2.5132
		2	-1.22354*	0.15555	0	-1.6684	-0.7787
		3	-.75819*	0.16666	0	-1.2349	-0.2815
		4	-1.24608*	0.1358	0	-1.6345	-0.8577
		5	0.41442	0.15555	0.084	-0.0305	0.8593
OPS	1	2	-.65689*	0.11238	0	-0.9783	-0.3355
		3	-3.32130*	0.11968	0	-3.6636	-2.979
		4	-0.0713	0.09952	0.98	-0.3559	0.2134
		5	-0.21853	0.11238	0.376	-0.5399	0.1029
		6	0.02677	0.09897	1	-0.2563	0.3098
	2	1	.65689*	0.11238	0	0.3355	0.9783
		3	-2.66441*	0.1264	0	-3.0259	-2.3029
		4	.58559*	0.10751	0	0.2781	0.8931
		5	.43836*	0.11951	0.004	0.0966	0.7802
		6	.68366*	0.107	0	0.3776	0.9897
	3	1	3.32130*	0.11968	0	2.979	3.6636
		2	2.66441*	0.1264	0	2.3029	3.0259
		4	3.25000*	0.11512	0	2.9207	3.5793
		5	3.10277*	0.1264	0	2.7413	3.4643
		6	3.34807*	0.11465	0	3.0202	3.676
	4	1	0.0713	0.09952	0.98	-0.2134	0.3559
		2	-.58559*	0.10751	0	-0.8931	-0.2781
		3	-3.25000*	0.11512	0	-3.5793	-2.9207
		5	-0.14723	0.10751	0.745	-0.4547	0.1603
		6	0.09807	0.09341	0.901	-0.1691	0.3652
	5	1	0.21853	0.11238	0.376	-0.1029	0.5399
		2	-.43836*	0.11951	0.004	-0.7802	-0.0966
		3	-3.10277*	0.1264	0	-3.4643	-2.7413
		4	0.14723	0.10751	0.745	-0.1603	0.4547
		6	0.2453	0.107	0.199	-0.0607	0.5513
	6	1	-0.02677	0.09897	1	-0.3098	0.2563
		2	-.68366*	0.107	0	-0.9897	-0.3776
		3	-3.34807*	0.11465	0	-3.676	-3.0202
		4	-0.09807	0.09341	0.901	-0.3652	0.1691
		5	-0.2453	0.107	0.199	-0.5513	0.0607
ORS	1	2	-0.49947	0.18167	0.068	-1.0191	0.0201
		3	-.77816*	0.19348	0.001	-1.3315	-0.2248
		4	-2.50818*	0.1609	0	-2.9684	-2.048
		5	-.68734*	0.18167	0.002	-1.2069	-0.1677
		6	0.19277	0.16	0.835	-0.2649	0.6504
	2	1	0.49947	0.18167	0.068	-0.0201	1.0191

		3	-0.27868	0.20434	0.749	-0.8631	0.3058
		4	-2.00871*	0.17381	0	-2.5058	-1.5116
		5	-0.18787	0.1932	0.927	-0.7404	0.3647
		6	.69224*	0.17298	0.001	0.1975	1.187
	3	1	.77816*	0.19348	0.001	0.2248	1.3315
		2	0.27868	0.20434	0.749	-0.3058	0.8631
		4	-1.73002*	0.18611	0	-2.2623	-1.1977
		5	0.09082	0.20434	0.998	-0.4936	0.6753
		6	.97092*	0.18534	0	0.4408	1.501
	4	1	2.50818*	0.1609	0	2.048	2.9684
		2	2.00871*	0.17381	0	1.5116	2.5058
		3	1.73002*	0.18611	0	1.1977	2.2623
		5	1.82084*	0.17381	0	1.3237	2.318
		6	2.70095*	0.15102	0	2.269	3.1329
	5	1	.68734*	0.18167	0.002	0.1677	1.2069
		2	0.18787	0.1932	0.927	-0.3647	0.7404
		3	-0.09082	0.20434	0.998	-0.6753	0.4936
		4	-1.82084*	0.17381	0	-2.318	-1.3237
		6	.88011*	0.17298	0	0.3854	1.3749
	6	1	-0.19277	0.16	0.835	-0.6504	0.2649
		2	-.69224*	0.17298	0.001	-1.187	-0.1975
		3	-.97092*	0.18534	0	-1.501	-0.4408
		4	-2.70095*	0.15102	0	-3.1329	-2.269
		5	-.88011*	0.17298	0	-1.3749	-0.3854
*. The mean difference is significant at the 0.05 level.							

Table 4.14

OHS				
Tukey HSD[a,b]				
Cluster Number of Case	N	Subset for alpha = 0.05		
		1	2	3
5	73	1.7108		
6	121	1.8411		
3	59		2.1827	
4	118		2.1827	
1	95		2.2585	
2	73			5.446
Sig.		0.875	0.987	1
Means for groups in homogeneous subsets are displayed.				
a. Uses Harmonic Mean Sample Size = 83.785.				
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.				

(Source: primary data)

Table 4.15

EHS				
Tukey HSD[a,b]				
Cluster Number of Case	**N**	**Subset for alpha = 0.05**		
		1	**2**	**3**
5	73	1.474		
1	95		4.0505	
3	59		4.2203	
2	73			4.9534
6	121			5.0843
4	118			5.1322
Sig.		1	0.955	0.944
Means for groups in homogeneous subsets are displayed.				
a. Uses Harmonic Mean Sample Size = 83.785.				
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.				

(Source: primary data)

GHS					
Tukey HSD[a,b]					
Cluster Number of Case	**N**	**Subset for alpha = 0.05**			
		1	**2**	**3**	**4**
5	73	1.7886			
6	121	2.2031			
3	59		2.9613		
2	73			3.4266	
4	118			3.4492	
1	95				5.1278
Sig.		0.11	1	1	1
Means for groups in homogeneous subsets are displayed.					
a. Uses Harmonic Mean Sample Size = 83.785.					
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.					

OPS				
Tukey HSD[a,b]				
Cluster Number of Case	**N**	**Subset for alpha = 0.05**		
		1	**2**	**3**
6	121	2.1074		
1	95	2.1342		
4	118	2.2055		
5	73	2.3527		
2	73		2.7911	
3	59			5.4555
Sig.		0.24	1	1
Means for groups in homogeneous subsets are displayed.				
a. Uses Harmonic Mean Sample Size = 83.785.				
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.				

ORS					
Tukey HSD[a,b]					
Cluster Number of Case	**N**	**Subset for alpha = 0.05**			
		1	**2**	**3**	**4**
6	121	2.523			
1	95	2.7158	2.7158		
2	73		3.2153	3.2153	
5	73			3.4031	
3	59			3.4939	
4	118				5.224
Sig.		0.894	0.064	0.635	1
Means for groups in homogeneous subsets are displayed.					
a. Uses Harmonic Mean Sample Size = 83.785.					
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.					

OHS :

From above table researcher have conveyed that with respect to cluster 1 and cluster 2, 5 and 6 the value is less than 0.05 which means it is significant. For these values researcher can reject null hypothesis and accept alternative hypothesis. Whereas for cluster 3 and 4 the value is more than 0.05, which means it is not significant and for that researcher haveto accept null hypothesis and reject alternative hypothesis.

With respect to cluster 2 it is being easily interpreted that all values are less than 0.05, which means researcher can reject H0 and accept H1 for all these values.

With respect to cluster 3, it is being observed that value of cluster 2 and 5 are significant, it means researcher can accept here alternative hypothesis and accept alternative hypothesis. For cluster 1,4 and 6 the values are more than 0.05, so researcher have to accept null hypothesis and reject alternative hypothesis for the same.

With respect to cluster 4, it is being observed that cluster 2, 5 and 6 having values less than 0.05 which means they are significant. Researcher can accept alternative hypothesis for the same and reject null hypothesis. For clusters 1 and 3, researcher obtained values which are more than 0.05, so researcher have to accept null hypothesis and reject alternative hypothesis.

With respect to cluster 5, it is being conveyed by researcher that cluster 1,2,3 and 4 having significant value so for the same researcher will accept alternative hypothesis and reject null hypothesis. For cluster 6 the value is more than 0.05, so researcher have to accept null hypothesis and reject null hypothesis.

With respect to cluster 6, researcher have conveyed that for cluster 1 and 2 having significant value so null hypothesis will be rejected and alternative will be reject. Whereas,for cluster 3,4 and 5 as the value are not significant, researcher have to accept nullhypothesis and reject alternative hypothesis.

EHS :

With respect to cluster 1, researcher obtained value 0.00 for clusters 2,4,5 and 6, that is less than 0.05, hence it is significant. Researcher will accept alternative hypothesis and reject null hypothesis. For cluster 3,the value is more than 0.05, hence it is not significant, therefore researcher have to accept null hypothesis and reject alternative hypothesis for the same.

With respect to cluster 2, researcher obtained significant value for clusters 1,3 and 5, it means researcher will accept alternative hypothesis and reject null hypothesis. Whereas forclusters 4 and 6 values are not significant, therefore researcher have to accept null hypothesis and reject alternative hypothesis for the same.

With respect to cluster 3, all cluster like 2,4,5 and 6 having values less than 0.05, it means researcher can accept alternative hypothesis and reject null hypothesis. Only cluster 1 have value more than 0.05, it means researcher haven't obtained significant value for that cluster and forced to reject alternative hypothesis and accept null hypothesis.

With respect to cluster 4, cluster 1, 3 and 5 having significant values, it means researcher can reject null hypothesis and accept alternative hypothesis for the same. Whereas for cluster 2 and 6 researcher obtained values more than 0.05, so he forced to reject alternative hypothesis and accept null hypothesis.

With respect to cluster 5, researcher obtained significant value for all clusters. So here researcher can easily reject null hypothesis and accept alternative hypothesis for all clusters.

With respect to cluster 6, researcher obtained significant value for clusters 1,3 and 5. So researcher can easily accept alternative hypothesis for these clusters and reject null hypothesis. But for clusters 2 and 4, researcher haven't obtained significant value, therefore in that case researcher have to reject alternative hypothesis and accept nullhypothesis.

GHS :

With respect to cluster 1, researcher obtained significant values for all the remaining clusters. Here he can accept alternative hypothesis and reject null hypothesis for all these clusters.

With respect to cluster 2, except clusters 3 and 4, researcher obtained significant values and therefore he can accept alternative hypothesis and reject null hypothesis for these. But for clusters 3 and 4, researcher have to reject alternative hypothesis and accept nullhypothesis.

With respect to cluster 3, except cluster 2, researcher obtained significant value andtherefore he can accept alternative hypothesis and reject null hypothesis. But for cluster 2, researcher is forced to accept null hypothesis and reject alternative hypothesis.

With respect to cluster 4, except cluster 1 all clusters have significant values; it means researcher can accept alternative hypothesis for the same and reject null hypothesis. But for cluster 1, researcher is forced to accept null hypothesis and reject alternative hypothesis.

With respect to cluster 5, researcher obtained all values less than 0.05, it means all values obtained by researcher are significant. Therefore researcher will reject null hypothesis and accept alternative hypothesis for all these clusters with respect to cluster 5.

With respect to cluster 6, researcher obtained significant values for all clusters expect 5. So researcher will accept alternative hypothesis and reject null hypothesis for all clusters except cluster 5.

OPS:

With respect to cluster 1, researcher obtained significant values for cluster 2 and 3. And rest clusters 4, 5 and 6 researcher obtained insignificant values. So foe cluster 2 and 3 he will accept alternative hypothesis and reject null hypothesis but for clusters 4,5 and 6 researchers will accept null hypothesis and reject alternative hypothesis.

With respect to cluster 2, researcher obtained significant values for all the remaining clusters. Here he can accept alternative hypothesis and reject null hypothesis for all these clusters.

With respect to cluster 3, researcher obtained significant values for all the remaining clusters. Here he can accept alternative hypothesis and reject null hypothesis for all these clusters.

With respect to cluster 4, except cluster 2 and 3 all others having insignificant values. It means for cluster 2 and 3 researcher will have to accept alternative hypothesis and reject null hypothesis and for rest clusters researchers will do vice versa.

With respect to cluster 5, except cluster 2 and 3 all others having insignificant values. It means for cluster 2 and 3 researcher will have to accept alternative hypothesis and reject null hypothesis and for rest clusters researchers will do vice versa.

With respect to cluster 6, except cluster 2 and 3 all others having insignificant values. It means for cluster 2 and 3 researcher will have to accept alternative hypothesis and reject null hypothesis and for rest clusters researchers will do vice versa.

ORS :

With respect to cluster 1, researcher obtained significant values for cluster 3,4 and 5. For these three clusters researcher will accept alternative hypothesis and reject null hypothesis. Whereas for clusters 2 and 6 the values are insignificant. It means researcher have to accept null hypothesis and reject alternative hypothesis.

With respect to cluster 2, researcher obtained significant value for only cluster 4 and 6, it means for these two clusters researcher will accept alternative hypothesis and rejects null hypothesis. For remaining clusters, researchers obtained values more than 0.05, it means for that clusters researcher have to accept null hypothesis and reject alternative hypothesis.

With respect to cluster 3, except clusters 2 and 5, all other clusters are having significant values. It means researcher will accept alternative hypothesis for these clusters and rejects null hypothesis. Whereas for clusters 2 and 5 researcher have to accept null hypothesis and rejects alternative hypothesis.

With respect to cluster 4, all the values are less than 0.05, it means researcher here obtained significant values for all the clusters. Therefore, researcher will accept alternative hypothesis and reject null hypothesis for all clusters.

With respect to cluster 5, except cluster 2 and 3, all others are having significant values it means all are having values less than 0.05. For all these clusters researcher will accept alternative hypothesis and rejects null hypothesis. Whereas for clusters 2 and 3, researcher

obtained insignificant value which is more than 0.05, for these two clusters researcher will forced to accept null hypothesis and reject alternative hypothesis.

With respect to cluster 6, except cluster 1 for all other clusters researcher obtained significant value, which is, less than 0.05. For all these clusters researcher will accept alternative hypothesis and rejects null hypothesis. Whereas for cluster 1, researcher failed to accept, alternative hypothesis and he have to accept null hypothesis.

4.5 Reliability Analysis:

The categorical and demographic analysis deals with graphic tools and techniques, in our comprehensive questionnaires there are questions, which are related to the continuous variable where the researcher has tried to understand the scale of the respondents. The researcher has used a seven-point attitude on Likert scales where 7 represents strongly agree, 6 represents agree, 5 somewhat agrees, 4 = neutral, 3 = somewhat disagree, 2 = disagree and 1 = totally agree. disagree., Factors influencing employee readiness for change are identified with the help of pilot tests and various research articles. These factors are organizational or personal. Before starting data analysis, assessing the reliability and validity of the collected data is an important task at hand. The investigator has used Cronbach's alpha test to measure reliability. These tools internally derive the correlations of the various statements and measure the reliability for the particularvariable and the specific generated statements that are posed to the respondents. To interpret if for any given particular continuous variable, the value of Cronbach's alpha is less than 0.50, then such data is not reliable, any value for the continuous variable that is between more than 0.5 and less than 0.70 is acceptable. And if the Cronbach's alphavalue is greater than 0.7, it is desirable.

Table 4.16

Reliability Test Results		
Construct	**No. Of Items**	**Cronbach's Alpha(α)**
OHS	9	0.984
EHS	5	0.979
GHS	9	0.984
OPS	7	0.959
ORS	9	0.961

To further confirm the results, we have applied Cronbach's Alpha (α) for all theconstructs of all the individual factors. The analysis shows that if that particular construct is removed from the factor, what will be the impact on Cronbach's Alpha

(α) of that particular factor. If the value of Cronbach's Alpha (α) decreases withrespect to the original value, it means that the construct is appropriate and the respondent understands the framed statement for the constructs in the way that the researcher wanted and if the value of Cronbach's Alpha (α) increases from the original value, it means that the construction will be removed. The results are discussed here under:

OHS:

Table 4.17

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Basedon Standardized Items	N of Items
.984	.985	9

Table 4.18

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
(I-1) Organization conducts health check-up camps for workers periodically.	20.1	124.166	0.923	0.934	0.982
(I-2) Organization also conducts medical check-up for family separately	20.14	128.23	0.939	0.951	0.982
(I-3) Organization offer health insurance to its Employees	19.87	128.223	0.937	0.891	0.982
(I-4) Health Insurance Policy of the organization also covers the medical responsibilities of employee's family members.	20.07	131.112	0.917	0.873	0.983
(I-5) Medical store facility available within company premises.	19.94	123.746	0.953	0.938	0.981
(I-6) Prescribed medicines are available from medical store easily.	19.83	124.979	0.934	0.912	0.982
(I-7) STI and HIV/AIDS medicines are available in the company's Medical Store on regular basis.	19.87	123.698	0.929	0.901	0.982
(I-8) The Pathology Laboratory in the Organization is capable of advanced diagnostic tests for STI / HIV / AIDS related disease.	20.02	127.715	0.872	0.804	0.984
(I-9) HIV/AIDS and STI test facility provided to all workers in organization periodically.	19.96	124.592	0.952	0.93	0.981

Considering column number five of the above table, we can consider here that if the given statement and any of the statements are removed, it can affect the original valueof the Cronbach alpha which is 0.984. It indicates that if this statement is removed, the reliability of the factor will increase by a few points, but considering the minimal change in the reliability value and the overall impact of the construct on the factor, we have decided not to remove the construct.

EHS

Reliability Statistics	
Cronbach's Alpha	N of Items
.979	5

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(II-1) Awareness campaigns help workers to understand HIV/AIDS related disease.	17.61	51.926	0.913	0.978
(II-2) Education session helps in reducing the risk of HIV/AIDS among workers.	17.46	49.844	0.945	0.972
(II-3) Early diagnosis of S.T.I. & their treatment reduces the risk of HIV among workers.	17.09	46.848	0.948	0.972
(II-4) Frequently visit of health care workers (ASHA, LINK, AANGANWADI etc.) reduce the risk of STI & HIV/AIDS among employees.	17.18	49.35	0.947	0.972
(II-5) Government / NGOs Linkages with Organization help to improve HIV/AIDS related disease control among employees.	16.89	47.4	0.945	0.972

Considering column number five of the above table, we can consider here that if the given statement and any of the statements are removed, it may affect the original value of the Cronbach alpha which is 0.979. It indicates that if this statement is removed, the reliability of the factor will increase by a few points, but

considering the minimal change in the reliability value and the overall impact of the construct on the factor, we have decided not to remove the construct.

GHS:

Reliability Statistics	
Cronbach's Alpha	N of Items
.984	7

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(III-2) Prescribed medicines by Government doctors are provided by pharmacist in mobile van.	19.36	83.051	0.942	0.982
(III-3) Pathological spot testing done by medical mobile van periodically.	19.09	82.74	0.941	0.982
(III-4) Testing reports share with workers within the standard time limits.	19.1	82.945	0.946	0.982
(III-5) Counselor takes appropriate action related to treatment prescribed by doctor.	19.09	82.341	0.944	0.982
(III-6) Medicine of critical illness made available with mobile van.	19.09	81.811	0.943	0.982
(III-7) Prescribed treatment shows significant improvement in patient health.	18.96	79.203	0.941	0.982
(III-8) Proper facilities are offered by Integrated counseling and testing centre to patient suffering with HIV/AIDS.	19.04	80.935	0.937	0.982

Considering column number five of the above table, we can consider here that if the given statement and any of the statements are removed, it can affect the original valueof the Cronbach alpha which is 0.984. It indicates that if this statement is removed, the reliability of the factor will increase by a few points, but considering the minimal change in the reliability value and the overall impact of the construct on the factor, we have decided not to remove the construct.

OPS:

Reliability Statistics	
Cronbach's Alpha	N of Items
.959	8

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(IV-1) Organization offers Special relaxation in working hours for patients suffering from HIV/AIDS.	18.85	77.63	0.872	0.952
(IV-2) Additional transportation facility is provided to work for patient suffering from HIV/AIDS.	18.37	76.353	0.928	0.948
(IV-3) Health & hygiene is made available to employees of the organization.	18.41	79.455	0.845	0.954
(IV-4) Supervisor offers special privileges (relaxation) to HIV+ workers because of his/her health status.	18.45	75.746	0.884	0.95
(IV-5) Colleague behaves normally with HIV+ worker at work place.	18.36	76.157	0.901	0.95
(IV-6) Organization uses special performance appraisal format for HIV+ workers.	18.46	78.654	0.832	0.954
(V-9) Worker's tendency of open discussion with other co-workers suffering from STI helps in his/her recovery.	17.84	73.191	0.7	0.968
(IV-7) Special wages are offered to workers suffering from HIV/AIDS.	18.31	74.097	0.901	0.949

Considering column number five of the above table, we can consider here that if the given statement and any of the statements are removed, it can affect the original valueof the Cronbach alpha which is 0.959. It indicates that if this statement is removed, the reliability of the factor will increase by a few points, but considering the minimal change in the reliability value and the overall impact of the construct on the factor, we have decided not to remove the construct.

ORS:

Reliability Statistics	
Cronbach's Alpha	N of Items
.961	7

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(V-1) Organization offers family accommodation.	21.08	85.644	0.798	0.96
(V-2) Group accommodation offered by company for bachelor employees.	20.7	79.649	0.944	0.948
(V-3) Separate (individual) accommodation services are offered by company for bachelor employees.	20.91	81.02	0.9	0.952
(V-4) Company offers entertainment facilities to workers for refreshment during the week-ends.	20.86	79.784	0.924	0.95
(V-5) Sometimes for physical need workers tend to make sexual relation with non-spousal partners.	20.81	89.343	0.785	0.96
(V-6) Owing to personal lives issues such as loneliness, family problems, Workers involve themselves in the extramarital affairs.	20.51	88.979	0.909	0.953
(V-7) Workers having regular non-spousal sexual relations frequently change the partner.	20.77	88.118	0.815	0.958

Considering column number five of the above table, we can consider here that if the given statement and any of the statements are removed, it can affect the original value of the Cronbach alpha which is 0.961. It indicates that if this statement is removed, the reliability of the factor will increase by a few points, but considering the minimal change in the reliability value and the overall impact of the construct on the factor, we have decided not to remove the construct.

4.6 EXPLORATORY FACTOR ANALYSIS

According to Kinnear and Gray (2010) the purpose of exploratory factor analysis is to find the independent factors that explain the correlations. In this case, items are usually reduced to common interrelated and meaningful dimensions with a very small amount of information loss explain in as much as possible variance of original items (Fabrigar, 1999).According to Cooper and Schindler (2008) factor analysis is a technique used for

specific computational techniques. These factors, also called latent variables, aim to measure things that are usually hard to measure directly, such as attitudes and feelings. This is a way to explain the relationships among variables by combining them in to smaller number factors (Zikmund, 2003)

To identify the latent variables, factor analysis is the most effective statistical technique. According to Gilbert and Veloutsou (2006) this technique has been adopted by almost one sixth of the authors of journal articles over the past thirty years. Due to this reason, exploratory factor analysis was selected to study the employee readiness of bank employees. Appropriateness and suitability of the data is assessed by the Kaiser-Meyer-Olkin(KMO) and Bartlett‘s Test of Sphericity. Higher KMO value signifies higher correlation among the variables. According to Kaiser and Rice(1974), KMO value greater than 0.6 can be considered as adequate. KMO measures the sample adequacy criteria where in low correlation value of variables indicates that they are not fit to be member of any of the factor. Bartlett‘s Test of Sphericity tests the correlation among the variables (Hair, 2006). A statistically significant Bartlett‘s Test of Sphericity (Sig.<0.05) indicates that significant correlations exist among the variables.

The most common factor analysis technique to extract factor is Principle Component Analysis (Kinnear& Gray,2010; Cooper & Schindler, 2008). In this technique,correlations of different variables are referred to study the relationship between them and grouping them in to a small number of factors having common themes. The calculations will lead to factor scores which explain a maximum possible share of the variance, while factors obtained will be orthogonal and in terms of the number, will be equal to no more than the number of original variables. Mathematical technique for simplifying the interpretation of factors is called factor rotation (Zikmund, 2003). Varimax rotation was preferred since it minimized the correlation across factors and maximized within the factors. After rotation, factors remain uncorrelated (as opposite to oblique rotation, where factors are correlated after rotation). This helped to yield clear factors (Nunnally, 1978).

Variance is another important component of factor analysis. According to Hair (2006), variance is a value (the square of the standard deviation) that represents the total amount of dispersion of values for a single variable about its mean. When a variable is correlated with another variable, it shares variance with the other variable. Thus it is important to

understand how much a variable's variance is shared with the other variables. Hair (2006) defines communalities as the total amount of variance an original variables shares with all other variables included in analysis. Communalities values of the items greater than 0.5 is considered for further analysis. Communalities show which part of the variance of each variable is explained by a given number of factors.

For interpreting the factor interpretation, Hair (2006), suggests to refer to the factor loadings. Factor Loadings are the correlation of each variable and the factor. Loadings indicate the degree of correspondence between the variable and the factor, with higher loadings making the variable representative of the factor. Factor loading of ±0.30 to ±0.40 are minimally acceptable, values greater than ±0.50 are generally considered necessary for practical significance. Following table represents guidelines for identifying significant factor loadings based on sample size.

Table 4.19 Significant factor loadings based on sample size

Factor Loading	Sample size needed for significance level of 5%
0.3	350
0.35	250
0.4	200
0.45	150
0.5	120
0.55	100
0.6	85
0.65	70
0.7	60
0.75	50

(Source:Hair,2006)

Sometimes, one variable is having significant loading in several factors. Such variable is found to have more than one significant loading is termed as Cross-Loading. Such type of the variables should be eliminated from the analysis so as to simplify the factor structure (Hairetal.,2006). According to the Hair (2006), there is no specific rule in selecting the rotation method, therefore, the VARIMAX rotation method selected while performing the exploratory factor analysis. Principal Component Factor Analysis method is adopted for while performing the factor analysis. The objective for theselection of this method is to summarize most of the original information (variance) in a minimum number of factors for prediction purposes. With component analysis each

variable contributesavalueof1tothetotalEigenvalue.Thus,thefactorshaving Eigen values greater than 1are considered significant.

The quantitative data obtained was employed by an Exploratory Factor Analysis to evaluate health related care and support services rendered to industrial workers. The research proposes a set of factors which determines the industries to provide healthcare support services to workers who are affected by HIV. Thus the primary aim of the research is to obtain empirical evidences which can be interpreted to determine whether the hypothesis set for the research can be accepted or not accepted. The purpose of an exploratory study is to identify variables, discover relationships among the variables, and lay the ground work for future research which would more systematically and rigorously test the hypothesis (Kerlinger & Lee, 1999).

To understand the implication of the variables, the variables were tested through a survey study which included collecting primary data from industrial workers through a structured questionnaire. The objective was to understand how industries are providing health care services and also what are efforts are given by other stakeholders like government and NGOs. The emphasis of the early stages of item generation was to develop a set of items which measures each of the dimensions of institutions providing health related services. The statements were reviewed to make it understandable and accurate as required for the research objective.

Industrial readiness to provide healthcare services to industry workers affected with HIV is influenced by a host of factors, but considering all the factors for the purpose of present study is well beyond the scope and affordability of the researcher. One of the purposes of the research is to identify the factors influencing the industrial readiness to provide healthcare services. To evaluate industrial readiness to provide healthcare services to industry workers affected with HIV, forty one statements derived from the literature review are included in the questionnaire.

Sampling Adequacy:

With an objective to determine the suitability of data for the factor analysis, the Kaiser Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's Test of Sphericity are applied. The KMO measure of sampling adequacy is a statistic that indicates the proportion of variance in the variables that might be caused by the reduced factors. Kaiser (1974) recommends that a bare minimum of 0.5 is unacceptable and that values between 0.5 and 0.7 are adequate to proceeds further with the analysis (Hutcheson & Sofroniou, 1999). The high value of KMO (0.892) indicates that a factor analysis is quite useful for the data being used in this study. The KMO figures provide strong evidence for sampling adequacy for these data. Similarly, the significance value for Bartlett's test of Sphericity is 0.000 which indicates that there exist significant relationships among variables.

The output of KMO and Bartlett's tests supports the view that factor analysis is very much useful for the present data.

Table 4.20 KMO and Bartlett's Test Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.912**
Bartlett's Test of	Approx. Chi-Square	34999.693
	df	820
	Sig.	**.000**

(Source:PrimaryData)

The above table gives values of KMO is .912 which signifies that there is no error in 91.2% of the sample while for remaining 8.8 % sample there may be some kind of error.

Table represents correlation values of industrial readiness to provide health related services to industrial workers. Diagonal values of the all the factors depict in the second half of the table measure the sampling adequacy. As all the variables are having partial correlation values higher than the 0.5 and hence it can be interpreting that all the factors of employee readiness for change have practical and statistical significance and data is suitable for performing factor analysis.

Correlation Matrixa
Determinant=.001

The determinant of the Correlation Matrix is 0.001 that is higher than the 0.00001 and hence no multi Collinearity is observed in the data.

Communalities			
	Initial	**Extraction**	**Anti image**
(I-1) Organization conducts health check-up camps for workers periodically.	1	0.873	0.061
(I-2) Organization also conducts medical check-up for family separately	1	0.895	0.045
(I-3) Organization offer health insurance to its employees	1	0.9	0.099
(I-4) Health Insurance Policy of the organization also covers the medical responsibilities of employee's family members.	1	0.868	0.115
(I-5) Medical store facility available within company premises.	1	0.931	0.05
(I-6) Prescribed medicines are available from medical store easily.	1	0.901	0.012
(I-7) STI and HIV/AIDS medicines are available in the company's Medical Store on regular basis.	1	0.9	0.005
(I-8) The Pathology Laboratory in the Organization is capable of advanced diagnostic tests for STI / HIV / AIDS related disease.	1	0.807	0.035
(I-9) HIV/AIDS and STI test facility provided to all workers in organization periodically.	1	0.929	0.006
(I-10) Condoms are regularly available in company's medical store.	1	0.904	0.007
(I-11) Workers prefer to purchase condom from the company's medical store.	1	0.705	0.017
(II-1) Awareness campaigns help workers to understand HIV/AIDS related disease.	1	0.892	0.155
(II-2) Education session helps in reducing the risk of HIV/AIDS among workers.	1	0.93	0.089
(II-3) Early diagnosis of S.T.I. & their treatment reduces the risk of HIV among workers.	1	0.935	0.085
(II-4) Frequently visit of health care workers (ASHA, LINK, AANGANWADI etc.) reduce the risk of STI & HIV/AIDS among employees.	1	0.934	0.094
(II-5) Government / NGOs Linkages with Organization help to improve HIV/AIDS related disease control among employees.	1	0.932	0.094
(III-1) Government Doctors' visits the organization periodically.	1	0.687	0.279
(III-2) Prescribed medicines by Government doctors are provided by pharmacist in mobile van.	1	0.919	0.084

(III-3) Pathological spot testing done by medical mobile van periodically.	1	0.908	0.105
(III-4) Testing reports share with workers within the standard time limits.	1	0.92	0.091
(III-5) Counselor takes appropriate action related to treatment prescribed by doctor.	1	0.915	0.096
(III-6) Medicine of critical illness made available with mobile van.	1	0.916	0.089
(III-7) Prescribed treatment shows significant improvement in patient health.	1	0.908	0.078
(III-8) Proper facilities are offered by Integrated counseling and testing centre to patient suffering with HIV/AIDS.	1	0.897	0.094
(III-9) Proper Facilities are offered by Anti-Retroviral therapy (ART) centre located nearby your organization.	1	0.748	0.228
(IV-1) Organization offers Special relaxation in working hours for patients suffering from HIV/AIDS.	1	0.827	0.107
(IV-2) Additional transportation facility is provided to work for patient suffering from HIV/AIDS.	1	0.912	0.056
(IV-3) Health & hygiene is made available to employees of the organization.	1	0.787	0.175
(IV-4) Supervisor offers special privileges (relaxation) to HIV+ workers because of his/her health status.	1	0.851	0.129
(IV-5) Colleague behaves normally with HIV+ worker at work place.	1	0.862	0.161
(IV-6) Organization uses special performance appraisal format for HIV+ workers.	1	0.756	0.166
(V-9) Worker's tendency of open discussion with other co-workers suffering from STI helps in his/her recovery.	1	0.576	0.417
(IV-7) Special wages are offered to workers suffering from HIV/AIDS.	1	0.858	0.105
(V-1) Organization offers family accommodation.	1	0.703	0.275
(V-2) Group accommodation offered by company for bachelor employees.	1	0.91	0.028
(V-3) Separate (individual) accommodation services are offered by company for bachelor employees.	1	0.834	0.106
(V-4) Company offers entertainment facilities to workers for refreshment during the week-ends.	1	0.863	0.058
(V-5) Sometimes for physical need workers tend to make sexual relation with non-spousal partners.	1	0.714	0.174
(V-6) Owing to personal lives issues such as loneliness, family problems, Workers involve themselves in the extramarital affairs.	1	0.883	0.116
(V-7) Workers having regular non-spousal sexual relations frequently change the partner.	1	0.789	0.174
(V-8) Workers prefer using precautions (condoms) while making sexual relation with no-regular partner.	1	0.625	0.23
Extraction Method: Principal Component Analysis.			

As shown in the table, we can see that there are two things, one is common and one is anti-image. Both are given with the reference of 41 factors.

The commonalities between variables must be greater than 0.30. In our research, all values are above 0.30, which means that the data is more significant and there is less chance of variations in the factor. The Anti-image value must be less than 0.60. It is obtained from the diagonal values of the anti-image table indicated above. The researcher obtained the value that almost coincides with our threshold, which is less than 0.60. It means that all of our factors are correctly correlated with each other**.**

Table 4.21 **Total Variance Explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.066	26.991	26.991	11.066	26.991	26.991	9.603	23.422	23.422
2	7.232	17.64	44.631	7.232	17.64	44.631	7.828	19.093	42.515
3	6.389	15.583	60.214	6.389	15.583	60.214	6.435	15.695	58.21
4	5.848	14.263	74.478	5.848	14.263	74.478	6.316	15.404	73.614
5	4.267	10.408	84.886	4.267	10.408	84.886	4.621	11.272	84.886
6	0.675	1.647	86.533						
7	0.526	1.283	87.816						
8	0.44	1.072	88.888						
9	0.425	1.038	89.926						
10	0.382	0.932	90.857						
11	0.352	0.859	91.716						
12	0.295	0.719	92.435						
13	0.26	0.633	93.068						
14	0.237	0.577	93.645						
15	0.222	0.541	94.187						
16	0.209	0.51	94.697						
17	0.182	0.444	95.141						
18	0.156	0.38	95.521						
19	0.146	0.355	95.876						
20	0.135	0.329	96.204						
21	0.131	0.32	96.524						
22	0.125	0.305	96.829						
23	0.115	0.28	97.109						
24	0.106	0.259	97.368						
25	0.104	0.254	97.622						
26	0.102	0.248	97.87						
27	0.097	0.238	98.108						
28	0.084	0.204	98.312						
29	0.079	0.193	98.505						
30	0.075	0.184	98.689						
31	0.072	0.175	98.865						
32	0.065	0.159	99.024						
33	0.063	0.154	99.178						
34	0.058	0.142	99.32						
35	0.056	0.137	99.456						
36	0.05	0.123	99.579						
37	0.049	0.12	99.699						
38	0.044	0.107	99.806						
39	0.039	0.095	99.9						
40	0.023	0.055	99.956						
41	0.018	0.044	100						

Extraction Method: Principal Component Analysis.

All the factors in the table explained 84.886 percent of the variance. The total variance explained (84.886 percent) by these components, which is greater than 50% as recommended by Nunnally & Bernstein (1994) and almost equal to the 60%threshold commonly used in social sciences. (Hair et al., 2006). 5-factor solutions were

obtained using principal component analysis and Varimax rotations whenever possible. The reasoning for including a variable in a factor was based on factor loadings greater than ± 0.4. Ideally, the researcher should retain elements that are clearly and strongly loaded into a component / factor (Matsunaga, Masaki, 2010). Therefore, a variable that is loaded by more than one factor must be eliminated if the cross load is greater than .40 (Schonrock-Adema et al., 2009).

The Eigenvalues must be more than one of which we can only say that there is no variance. In this case, the Eigenvalues of the four factors is more than one, so we can say that the factors are standardized.

As seen in the previous table, factor 1 represents 23.422% of variability, factor 2 represents 42.515% of variability, factor 3 represents 58.210% of variability, factor 4 represents 73.614% of variability and factor 5 represents 84.886% of variability. It means that the total variations of 84.886% can be explained in all the variables.

Table 4.22

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
(OHS-5)	0.961				
(OHS-9)	0.96				
(OHS-10)	0.948				
(OHS-6)	0.945				
(OHS-7)	0.942				
(OHS-2)	0.939				
(OHS-3)	0.936				
(OHS-1)	0.928				
(OHS-4)	0.925				
(OHS-8)	0.888				
(OHS-11)	0.809				
GHS-2		0.955			
GHS-6		0.952			
GHS-5		0.949			
GHS-4		0.948			
GHS-7		0.944			
GHS-3		0.942			
GHS-8		0.939			
GHS-9		0.847			
GHS-1		0.824			
OPS-2			0.954		
OPS-5			0.928		
OPS-7			0.926		
OPS-4			0.922		
OPS-1			0.907		
OPS-3			0.885		
OPS-6			0.868		
OPS-9			0.753		

ORS-2				0.953	
ORS-6				0.938	
ORS-4				0.928	
ORS-3				0.911	
ORS-7				0.887	
ORS-5				0.843	
ORS-1				0.838	
ORS-8				0.787	
EHS-3					0.96
EHS-2					0.958
EHS-4					0.958
EHS-5					0.956
EHS-1					0.934
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.[a]					
a. Rotation converged in 5 iterations.					

The rotated component matrix table represents the strength of the relationship between the element and the factor and the membership of the element under a factor. Here, the membership of the element to the factor is determined by identifying the highest load in a factor. Load values range from 0 to 1. A value close to 1 indicates the highest load factor. Another important thing is that when determining the membership of the factor, thenegative sign of the factor is ignored. Generally, a factor loading greater than 0.5 is acceptable, but according to Hair (2006), for a sample size of 200, a factor loading of 0.40 is acceptable. 539 industrial workers were taken as respondents and therefore the load factor is 0.52, which is acceptable.

Factor Naming: Once the factors extracted than the next step is to interpret and name the factors. Factor naming is done based on the membership of various items in various factors as follows:

Factor1: Organizational healthcare support:

This factor contains the items which is responsible for organizational healthcare support services provided to industrial workers who are suffering from diseases like HIV/AIDS. Organization conducts health check-up compels for workers periodically having factor loading of .928, Organization also conducts medical check-up for family having factor loading of .939, Organization offer health insurance to its employees have factor loading of .936, Health insurance policy ofthe organization also covers the medical responsibilities of employee's family members having factor loading of .925, Medical store facility available within company premises having factor loading of .961, Prescribed medicine available from medical stores easily having factor loading of .945, STI and HIV/AIDS

medicines available in the company's medical store on regular basis have factor loading of .942, The pathology laboratory in the organization is capable of advanced diagnostic tests for all related disease having factor loading of .888, HIV/AIDS and STI test facility provided to all workers in organization periodically having factor loading of .960, Condoms are regularly available in company's medical store having factor loading of .948 and workers prefer to purchase condom from the company's medical store having factor loading of .809.

Factor2: External Healthcare support:

This factor contains the items which show external organizations or institutes which provides healthcare support services to industrial workers apart from organizations. Awareness campaign help workers to understand HIV/ AIDS related disease having factor loading of .934, Education session helps in reducing the risk of HIV/AIDS among workers having factor loading of .958, Early diagnosis of STI and their treatment reduces the risk of HIV among workers having factor loading of .960, Frequently visitof healthcare workers (ASHA, ANGANWADI, etc) reduce the risk of STI/ HIV/ AIDS among workers having factor loading of .958, Government/NGO linkages with the organization helps to improve HIV/AIDS related disease control among employees having factor loading of .956.

Factor3: Government-Aided healthcare support:

These items comprises of statements where government is helping and supporting to industries and industrial workers to provide health related services with special reference to disease like HIV/AIDS. Government doctor's visits the organization periodicallyhaving factor loading of .824, Prescribed medicines by government doctors are provided by pharmacist in mobile van having factor loading of .942, Testing reports share with workers within standard time limits having factor loading of .948, Counselling takes appropriate action related to treatment prescribed by doctor having factor loading of .949,Medicine of critical illness made available with mobile van having factor loading of .952,Prescribed treatment shows significant improvement in patient health having factor loading of .952, Proper facilities are offered by integrated counselling and testing centre topatient suffering with HIV/ AIDS having factor loading .939, proper facilities are offeredby Anti Retroviral Therapy centre located nearby your organization having facto loading of .847.

Factor: 4 Organizational Policy Support:

This factor is a present's organizations policy towards industrial workers who are suffering from disease like HIV/AIDS and it includes extra facilities apart from healthcareto same workers. Organization offers special relaxations in working hours for patients suffering from HIV/ AIDS having factor loading of .907, Additional transportation facilityis provided to work for patient suffering from HIV/AIDS having factor loading of .954, Health and hygiene is made available to employees of the organization having factor loading of .885, Supervisor offers special privileges to HIV workers because of his/her health issues having factor loading of .922, Colleagues behave normally with HIV workerat work place having factor loading of .928, Organization use special performance appraisal format for HIV workers having factor loading of .868, Special wages are offeredto workers suffering from HIV/AIDS having .926.

Factor-5 Organizational recreational support:

These items comprises of organizational recreational support services like family accommodation, entertainment facilities, precautions to be taken by industrial workers and their family members while dealing with such patients. Organizations offers family accommodations having factor loading of .838, Group accommodation offered by company for bachelor employees having factor loading of .958, Separate accommodation services are offered by company for bachelor employees having factor loading of .911, Company offers entertainment facilities to workers for refreshment during the weekends having factor loading of .928, Sometimes for physical need workers tend to make sexual relation with non-spousal partners having factor loading of .843, Owing to personal lives issues such as loneliness, family problems, workers involve themselves in the extramarital affairs having factor loading of .938, Workers having regular non-spousal sexual relations frequently change the partner having factor loading of .887, Workers prefer using precautions while making sexual relations with non regular partner having factor loading of .787 and worker's tendency of open discussion with other co-workers suffering from STI helps in is/her recovery having factor loading of .753.

4.7 Confirmatory Factor Analysis (CFA):

The Confirmatory Factor Analysis process determines whether the hypothetical structure provides a good fit to the data, or in other words, whether there is a relationship between the observed variables and their underlying latent or unobserved constructs (Child, 1990). The CFA would also verify that all elements are correctly aligned with the correct facets within the overall construction being measured. The exploratory factor analysis extracts the factors from the set of variables and provides the factor structure. The CFA is used to test the extent to which the factor structure derived from the EFA represents the actual data. According to Hair (2006), the CFA is used to provide a confirmatory test of the measurement theory. A measurement theory specifies how the measured variables logically and systematically represent the constructs involved in a theoretical model (Brown, 2014).

When using CFA, many different fit statistics are used to determine the model fit for the data. There are several indices that are used to evaluate the fit of the model. The first is the chi-square test. The root mean square error of approximation (RMSEA) is related to the model residuals. RMSEA values range from zero to one with a smaller RMSEA value indicating a better fit of the model. A good model fit is typically indicated by an RMSEA value of 0.06 or less (Hu & Bentler, 1999), but a value of 0.08 or less is often considered acceptable (Browne & Cudeck, 1993).

The Comparative Fit Index (CFI) is an incremental fit index, which assesses the general improvement of a proposed model over an independence model where the observed variables are not correlated. CFI values range from zero to one and a larger value indicates a better fit of the model. The acceptable fit of the model is indicated by a CFI value of 0.90 or more (Hu and Bentler, 1999). The normalized fit index (NFI) is another common indicator to measure the fit of the model. For this indicator, higher values specify a better fit of the model and a value higher than 0.90 is considered acceptable (Hu and Bentler, 1999).

Hair (2006) describes goodness of fit as another indicator that produces fit statistics. A GFI value greater than 0.90 is considered good. The next important indicator is the Adjusted Goodness of Fit Index (AGFI), which takes into account the different degrees of complexity of the model. AGFI values are typically lower than GFI values in proportion to model fit. An AGFI value greater than 0.90 is considered good. The Tucker

Lewis Index (TLI) is conceptually similar to the NFI, but varies in the sense that it is actually a comparison of the 175 chi-square values formed for the specified model, which to some extent takes into account the complexity of the model. model. Typically, the model is considered good if it has TLI values greater than 0.90. The incremental fit indexassesses how well the estimated model fits relative to some baseline model in which all observed variables are assumed to be uncorrelated. IFI value above 0.90 is considered good and the last indicator is RFI which is known as relative adjustment index, whose value higher than 0.90 is also considered a good fit for the model (Bollen, 1986).

Validity of the scale:

According to Zikmundand Babin (2013) validity is the accuracy of a measure or the extent to which a score truthfully represents a concept. In other words, Validity is concerned with the test being capable of testing what it was designed for, which is not as simple as it seems (Hairetal., 2006). There are four different types of validity that assess the accuracy of an instrument: Content Validity, Construct Validity, Convergent Validity and Discriminant Validity.

Construct Validity: This is one of them important validity. Construct validity is the assessment of the degree to which an operationalization correctly measures it targeted variables. Further authors added that‖without assessing construct validity one cannot estimate and correct for confounding influences of random error and method variance, and the results of the theory testing may be ambiguous.‖ Hair(2006) stated that Construct validity provides confidence that the item measures taken from a sample represents the actual true score that exists in the population.

Reliability: Reliability is also an indicator of Convergent Validity. Coefficient alpha remains a commonly applied estimate although it may understate reliability. Composite Reliability (CR) is computed from the squared sum off factor loadings (λi) for each construct and the sum of the error variance terms for a construct (i).The rule of thumb for reliability estimate is that 0.7 or higher suggests good reliability. Reliability between 0.6 and 0.7 may be acceptable, provided that other indicator of a model's construct validity are good (Hair etal., 2006).

Objective: To evaluate health related care and support services rendered to industrial workers with special reference to HIV

Based on the prior research, a confirmatory factor analysis was conducted to access uni dimensionality, reliability and validity of the factors derived in the previous section. The researcher uses five criteria (factors) namely organizational healthcare support, external healthcare support, government healthcare support, organizational policy support and organizational recreational support for evaluating healthcare services provided by organizations to industrial workers with special reference to HIV/AIDS. The research employs two aspects to measure the fit of the proposed model. One, being the goodness of fit (GF) indices and other measuring the reliability and validity of the proposed model.

CFA was performed on the measurement model comprising of five dimension identified as organizational healthcare support (OHS), external healthcare support (EHS), government healthcare support(GHS), organizational policy support(OPS) and organizational recreational support(ORS). These factors were measured with the help of Forty one indicators which were derived from EFA analysis.

Table 4.23 Model Fit Indexes for Measurement Model

Model Fit Index:	Measurement Model	Recommended Values*
Ratio of Chi-square to degrees of freedom (CMIN/DF)	2.252	3.00 or below
Goodness-of-fit index (GFI)	0.926	0.900 or above
Adjusted GFI (AGFI)	0.905	0.900 or above
Normed fit index (NFI)	0.889	0.900 or above
Tucker-Lewis Index (TLI)	0.925	0.900 or above
Incremental Fit Index (IFI)	0.935	0.900 or above
Relative Fit Index (RFI)	0.872	0.900 or above
Comparative Fit Index(CFI)	0.935	0.900 or above
Root Mean Square Error of Approximation(RMSEA)	0.051	0.070 or below

***Recommended values as suggested by Anderson and Gerbing (1988) and Hair etal.**

(Source: Primary Data)

The fit statistics shown in Table 6.56 determine the fit data for the model. The Chi-square relationship to degrees of freedom whose value is greater than 0.05 shows little difference between the expected and observed covariance matrices, which is an indicator of good fit. The next indicator is the goodness of fit index (GFI) and the adjusted GFI (AGFI). GFI is greater than 0.9 and AGFI is greater than 0.9, indicating a good fit of the model. The Tucker-Lewis index (TLI) and the incremental fit index (IFI) are greater than

0.9, which means that the model fits the data. The Comparative Fit Index (CFI) is an incremental fit index, which assesses the general improvement of a proposed model and, in the previous model, the CFI value is higher than 0.90, which shows a good fit of the model . The last indicator is the root mean square error of approximation (RMSEA) which is related to the residuals in the model. A good model fit is typically indicated by an RMSEA value of 0.06 or less and the RMSEA value of the data is below theacceptable range and therefore the model can be interpreted to fit the data (Hair et al. ., 2006).

CMIN :

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	76	1040	302	0	3.444
Saturated model	378	0	0		
Independence model	27	25270	351	0	71.995

In the above table, NPAR stands for Number of Parameters, and CMIN is the minimum discrepancy and represents the discrepancy between the unrestricted sample covariance matrix S and the restricted covariance matrix. Df means degrees of freedom and P is the probability value.

- Chi-square ($\chi 2$) =1039.997
- Degrees of freedom = 302
- Probability level =.000

In SEM, a relatively small chi-square value supports the proposed theoretical model that is being tested. In this model, the value is 1039.997 and it is small compared to the value of the independence model (25270.105). Therefore, the value is good and the measurement model had an acceptable model fit.

In a CFA, the Chi-square goodness-of-fit statistic is used to assess the fit between the theoretical specification and the empirical data. The chi-square statistic is a general indicator of how much the indicated covariances deviate from the sample covariances. The Chi-square statistic is highly sensitive to sample sizes (that is, the probability of rejection of the model increases as the sample size increases). The chi-square statistic is a general

indicator of how much the indicated covariances deviate from the sample covariances. The Chi-square statistic is especially affected by sample sizes (that is, the probability ofrejection of the model increases with increasing sample size, even if the model isminimally false). The null hypothesis of SEM is that the observed sample and thecovariance calculated by SEM are equal. When comparing the two matrices, the chi-squarevalue increases when differences (residuals) are discovered. The statistical probability thatthe observed sample and the covariance matrices calculated by SEM are equal is examinedusing the chi-square test. The typical p-value associated with parametric statistical tests isprobability. The chi square likelihood ratio, or generalized likelihood ratio, is another namefor this chi square. The SEM estimation method will focus on generating parameter values with the least amount of variance between the sample covariance matrix (S) and the SEMestimated covariance matrix. The size of the covariance matrix, which is determined by thenumber of indicators, determines the degrees of freedom in SEM.

Although chi square appears to be a decent fit, it is also important to examine the chi square value divided by df (Wheaton, Muthen, Alwin, & Summers, 1977) as the chi squarestatistic is very sensitive to sample sizes (i.e. ,, the possibility of rejection of the model increases with increasing sample size, even if the model is minimally incorrect) and therefore chi-square (2) divided by degrees of freedom is recommended as a metric of fit superior (Bentler and Bonnett, 1980). It is recommended that this metric does not exceed five for well-fitting models (Bentler, 1989).

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	0.097	0.909	0.949	0.702
Saturated model	0	1		
Independence model	1.052	0.166	0.101	0.154

Root Mean Square Residual (RMR):

The average residual value generated by completing the variance-covariance matrix for the hypothetical model with the variance-covariance matrix of the sample data is called the residual mean square root (S). As a result, the RMR is equal to the square root of the mean

of the standardized residuals. Lower RMR levels indicate a better fit, while higher RMR levels indicate a worse fit. The recommended RMR value is <0.05.

- Here value of RMR is 0.09 that indicates the good fit.

GFI (Goodness of Fit Index):

The goodness of fit index (GFI) was the first standardized fit index (Joreskog and Sorbom, 1981). It is analogous to a squared multiple correlation (R2) except that the GFI is a kind of proportion of explained variance matrix (Tanaka, 1987). Therefore, GFI = 1.0 indicates a perfect fit of the model, GFI> .90 may indicate a good fit, and values close to zero indicate a very poor fit. However, the GFI values can fall outside the range of 0 to 1.0. Values greater than 1.0 can be found with newly identified models or with over identified models with near perfect fit; Negative values are more likely to occur when the sample sizeis small or when the model fit is extremely poor.

- Here the value of GFI is 0.909 which suggests excellent fit.

AGFI (Adjusted Goodness of Fit Index):

The adjusted goodness-of-fit index (AGFI; Joreskog & Sorbom, 1981) is another index that was originally related to AMOS. Adjusts the GFI value based on the complexity of the model; for more complicated models, the reduction is greater. The main difference between AGFI and GFI is that AGFI represents the number of degrees of freedom in the model. GFI and AGFI are absolutely indiscriminate.

The parsimony goodness-of-fit index (PGFI; Mulaik et al., 1989) corrects the GFI value for a factor that reflects the complexity of the model, but is sensitive to the size of the model. AGFI = 1.0 indicates a perfect fit of the model, AGFI> .90 can indicate a good fit and values close to zero indicate a very poor fit. However, the GFI values can fall outside the range of 0 to 1.0.

Here the value of AGFI is 0.949, which suggests excellent fit.

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	0.959	0.952	0.97	0.966	0.97
Saturated model	1		1		1
Independence model	0	0	0	0	0

Normed Fit Index (NFI):

Bentler and Bonnet proposed the NFI as one of the first indices of incremental adjustment (1980). It is the difference between the Chi square value of the fitted model and the Chi square value of the null model divided by the chi square value of the null model. It has a range of zeros to one. Perfect fit is indicated by a normalized fit index of one.

- Here the value of NFI is 0.959, which is nearer to 1, suggests that excellent fit.

Relative Fit Index (RFI):

The relative fit index (RFI; Bollen, 1986) is a derivative of the NFI. RFI coefficient values vary from zero to one, with values close to one suggesting a higher fit (Hu and Bentler, 1999).

- Here the value of RFI is 0.952, which is nearer to 1, suggests that excellent fit.

Comparative Fit Index (CFI):

The CFI is a better version of the NFI, which is an incremental adjustment index. The CFI is Normatized, with values ranging from 0 to 1, with higher values suggesting a better match. The CFI is one of the most widely used indices due to its many favorable qualities, including its relative, but not total, insensitivity to model complexity. CFI values greater than 0.90 are typically associated with a model that fits. But Hu and Bentler (1999) suggested a revised cutoff value close to 0.95.

- Here the value of CFI is 0.970, which is nearer to 1, suggests that excellent fit.

Tucker Lewis Index (TLI):

The Tucker Lewis index is similar to the NFI in concept, but differs in that it compares the normed chi-square values for the null and specified models, which takes into account the complexity of the model to some extent. Hu and Bentler (1999) found that models with a strong fit had values close to one, and a model with a higher value predicted a better fit than one with a lower value.

- Here the value of TLI is 0.966, which suggests that excellent fit.

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	0.067	0.063	0.072	0
Independence model	0.363	0.359	0.367	0

The mean square error approximation (RMSEA) was first proposed by Steiger and Lind (1980). It is one of the most used measures that attempt to correct the tendency of the chi-square test statistic to reject models with a large sample or a large number of observed variables (Kenny, 2014). Therefore, it better represents how well a model fits a population, not just the sample used for estimation. Lower RMSEA values indicate a better fit. Previous research suggests values of <0.05 (Browne and Cudeck, 1993), Hu and Bentler (1999) have suggested that a value of <0.06 indicates a good fit.

Here value of RMSEA is 0.067 which indicates the good fit.

SCALE			**Estimate**	**S.E.**	**C.R.**	**P**	**Label**
OHS7	<---	F2	0.955	0.017	56.704	***	
OHS 6	<---	F2	0.907	0.015	59.591	***	
OHS 4	<---	F2	1				
OHS 3	<---	F2	0.847	0.013	64.365	***	
OHS 2	<---	F2	0.867	0.012	69.899	***	
OHS 1	<---	F2	0.951	0.014	70.365	***	
EHS1	<---	F3	1				
EHS 2	<---	F3	1.052	0.017	60.242	***	
EHS 3	<---	F3	1.022	0.024	42.042	***	
EHS 4	<---	F3	0.944	0.027	35.259	***	
EHS 5	<---	F3	1.137	0.033	34.556	***	
GHS2	<---	F4	0.872	0.017	50.875	***	
GHS 3	<---	F4	0.874	0.017	50.29	***	
GHS 4	<---	F4	0.859	0.017	49.515	***	
GHS 5	<---	F4	0.888	0.017	51.755	***	
GHS 6	<---	F4	0.899	0.019	47.923	***	
GHS 7	<---	F4	1				
OPS6	<---	F5	1.35	0.05	26.884	***	
OPS 5	<---	F5	1.519	0.048	31.783	***	
OPS 4	<---	F5	1.106	0.037	29.627	***	
OPS 3	<---	F5	1.153	0.041	27.936	***	
OPS 2	<---	F5	1.052	0.019	55.241	***	
OPS 1	<---	F5	1				
ORS 1	<---	F6	1				
ORS 2	<---	F6	1.113	0.019	58.852	***	
ORS 3	<---	F6	1.161	0.023	51.454	***	
ORS 4	<---	F6	0.693	0.022	31.765	***	

From above table it is easily interpreted by researcher that all the values are significant it means there is proper correlation between all the factors and variables.

Table 4.24

Composite Reliability and Cronbach's Alpha for dimensions of Evaluation of Health Related Services to Industrial Workers					
Construct	**Item**	**Factor loading**	**Composite reliability**	**AVE**	**Cronbach's Alpha**
Organizational Healthcare Support (OHS)	OHS-1	0.819	0.981	0.4	0.984
	OHS-2	0.836			
	OHS-3	0.858			
	OHS-4	0.819			
		0.842			
	OHS-5	0.842			
	OHS-6	0.828			
	OHS-7	0.838			
	OHS-8	0.805			
	OHS-9	0.832			
	OHS-10	0.824			
	OHS-11	0.79			
External Healthcare Support (EHS)	EHS-1	0.865	0.81	0.56	0.979
	EHS-2	0.892			
	EHS-3	0.896			
	EHS-4	0.887			
	EHS-5	0.884			
Government – Aided Healthcare Support (GHS)	GHS-1	0.51	0.61	0.4	0.984
	GHS-2	0.57			
	GHS-3	0.608			
	GHS-4	0.615			
	GHS-5	0.597			
	GHS-6	0.582			
	GHS-7	0.595			
	GHS-8	0.587			
	GHS-9	0.579			
Organizational Policy Support (OPS)	OPS-1	0.624	0.82	0.6	0.959
	OPS-2	0.645			
	OPS-3	0.604			
	OPS-4	0.645			

	OPS-5	0.635			
	OPS-6	0.585			
	OPS-7	0.634			
Organizational Recreational Support (ORS)	ORS-1	0.79	0.76	0.4	0.961
	ORS-2	0.898			
	ORS-3	0.864			
	ORS-4	0.877			
	ORS-5				
	ORS-1				
	ORS-5	0.808			
	ORS—1				
	ORS-6	0.898			
	ORS-7	0.851			

Item Loadings of all the five factors are 0.5 or higher signifies that these factors converge on a common point on LatentVariable–Employee readiness for change. T-Value also known as Critical Ration of all the observed variables is higherthan1.96 ata significant level of 0.05 confirms the convergent validity. Composite Reliabilities is another indicator of convergent validity. Composite reliability of all the observed variables is higher than 0.6 indicated good reliability of the factor structure. Composite reliability above the 0.70 threshold and an extracted variance above the 0.50 threshold are recommended by Hair et al. (2006). Last component of convergent validity is Average Variance Extracted (AVE). Average Variance Extracted (AVE) is higher than 0.5 but we can accept 0.4 because Fornel land Larcker (1981) said that if AVE is less than 0.5, but composite reliability is higher than0.6, the convergent validity of the construct is still adequate.

Discriminant Validity:

Discriminant Validity is the extent to which a construct is truly distinct from the other construct. Average AVE of the two construct must exceed the square of their correlation to satisfy the Discriminant Validity Test (Hairetal.,2006). Values depicted in the above table for all the constructs, satisfy the condition and hence it can be concluded that Discriminant validity of the factor structure is confirmed. According to Hair(2006),

nomological validity is tested by examining the correlation between the construct in the measurement model. The correlation values shows that constructs are positively related to each other and support the nomological validity of the model.

The results of confirmatory factor analysis, reliability and validity tests confirmed the five dimension structure with forty one indicators- OPS(11), EHS(9), GHS(9), OPS(7), ORS(9).

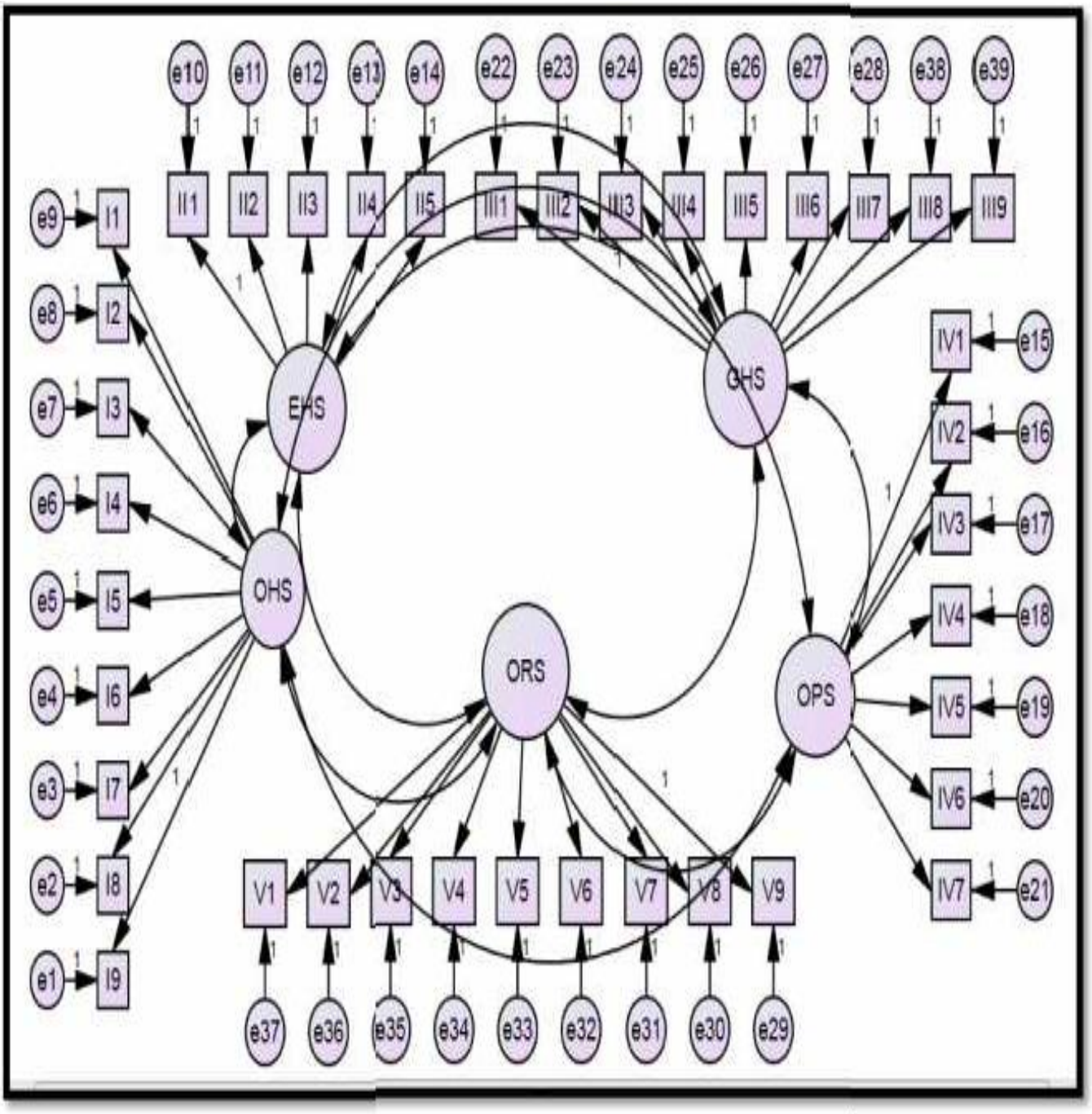


Table 4.25 Model Fit Results for Various Constructs		
Model Fit Index:	**Measurement Model**	**Recommended Values***
Goodness-of-fit index (GFI)	0.909	0.900 or above
Adjusted GFI (AGFI)	0.949	0.900 or above
Normed fit index (NFI)	0.959	0.900 or above
Tucker-Lewis Index (TLI)	0.966	0.900 or above
Incremental Fit Index (IFI)	0.97	0.900 or above
Relative Fit Index (RFI)	0.952	0.900 or above
Comparative Fit Index(CFI)	0.903	0.900 or above
Root Mean Square Error of Approximation(RMSEA)	0.067	0.070 or below
***Recommended values as suggested by Anderson and Gerbing (1988) and Hair etal. (2010)**		

(Source: Primary Data)

The goodness of fit index (GFI) obtained is 0.909 compared to the recommended value above 0.90, the adjusted goodness of fit index (AGFI) is 0.949 compared to the recommended value above 0.90 as well. The Normalized Fit Index (NFI), Comparative Fit Index (CFI), and Tucker Lewis Index (TLI) are 0.959, 0.966, and 0.970 respectively versus the recommended level above 0.90.

RMSEA is 0.067 and is well below the recommended limit of 0.07. This can be interpreted in the sense that the model explains the correlation within an average error of 0.006 (Hu and Bentler, 1990). Therefore, the model shows an acceptable overall fit. The model is an over identified model.

Confirmatory factor analysis showed an acceptable and excellent overall fit of the model, and therefore the theorized model fit well with the observed data. It can be concluded that the hypothetical five-factor CFA model fits the sample data very well.

	CR	**AVE**	**MSV**	**MaxR(H)**	**OHS**	**EHS**	**OPS**	**GHS**	**ORS**
OHS	0.991	0.927	0.013	0.992	**0.963**				
EHS	0.966	0.849	0.003	0.974	0.005	**0.922**			
OPS	0.951	0.738	0.432	0.97	0.115**	-0.056	**0.859**		
GHS	0.979	0.837	0.432	0.984	0.099*	0.009	0.657***	**0.915**	
ORS	0.795	0.729	0.225	0.954	0.111*	0.052	0.232***	0.475***	**0.645**

From above table we can find the data of composite reliability, Average Variance extracted and Maximum share variance. The threshold value for AVE should be greater than 0.5, for composite reliability it should be more than 0.7. The values of CR should

be greater than AVE. Convergent validity refers to how closely the new scale is related to other variables and other measures of the same construct. Not only should the construct correlate with related variables but it should *not* correlate with dissimilar, unrelated ones.

From above table it is easily interpreted that convergent validity of all the factors that is OHS, EHS, OPS, GHS and ORS is more than 0.7 and the values are very closely related with each other.

4.8 CLUSTER ANALYSIS:

Researcher want to classify the respondent amongst the different segment with respect to factors are creating impact on healthcare services provided to industrial workers with special reference to HIV/AIDS. The clustering respondent into different part is the mandatory requirement. And the cluster and statistical tools called cluster analysis is the obvious choice of tools. Therefore researcher is determined to apply the cluster analysisand specifically to understand the number of clusters he apply the tool call the hierarchal clusters. The total number of clusters that classify respondent is not sufficient enough therefore researcher apply k-means cluster to understand the different groups their mindsets, their behaviour is give them uniqueness which is significantly different than the others.

Researcher begins with the hierarchal clusters to understand the various individual groups, the hierarchal clusters with the help of tools called dendogram proximity matrix. Researcher is able to understand the total number of independent groups having similar psychological behaviour. The proximity matrix provides us linkages with respect to statement that differentiate uniqueness amongst the group. The dendrogram clearly indicate that there are six set of different groups having similar approach with respect to healthcare services to industrial workers provided by industries. The proximity matrix also indicates the clear classification of group respect to overall responses given by respondents. The proximity matrix as well as dendogram indicates that there are three unique clusters with almost equal to similar size in terms of numbers.

To understand exact number of the respondent in each groups, the fundamental on which these groups are significantly different in terms of their thought process, what is the exact intensity or level of each groups, these answers will provided by the K-means cluster. The K-means cluster provides us the initial responses of average value of the respondent. The difference amongst the cluster is also deriving with the distance between the clusters value

which is unique and significantly different. In the last, researcher also contributes the exact set of respondent in each cluster that differentiate and given their unique identity.

DISTANCE BETWEEN CLUSTERS:

Distances between Final Cluster Centres						
Cluster	1	2	3	4	5	6
1		11.941	11.507	8.772	11.569	8.861
2	11.941		13.356	12.249	15.422	12.67
3	11.507	13.356		10.707	11.419	10.384
4	8.772	12.249	10.707		10.875	8.347
5	11.569	15.422	11.419	10.875		8.615
6	8.861	12.67	10.384	8.347	8.615	

In above table we can easily interpret that there is considerable difference between various clusters. The highest cluster is between two and five that is 15.422 and lowest difference is between clusters five and six that is 8.615. Rest all clusters have difference between these highest and lowest range.

NUMBER OF CASES IN EACH CLUSTER:

Number of Cases in each Cluster		
Cluster	1	95
	2	73
	3	59
	4	118
	5	73
	6	121
Valid		539
Missing		0

From above table, it is interpreted that among total 539 respondents, highest respondents are from cluster four with 118 respondents and lowest respondents are present in cluster three that is 59. Rest all cluster respondents are ranging within these two ranges.

INITIAL CLUSTER

Initial Cluster Centres						
	Cluster					
	1	2	3	4	5	6
(OHS-1)	4	7	7	1	1	1
(OHS-2)	4	6	6	1	1	1
(OHS-3)	3	6	6	2	1	1
(OHS-4)	3	6	6	2	1	1
(OHS-5)	4	7	7	2	1	1
(OHS-6)	3	7	7	2	1	1
(OHS-7)	4	6	6	3	1	1
(OHS-8)	3	5	5	2	1	1

(OHS-9)	4	7	7	3	1	1
(OHS-10)	3	7	7	2	1	1
(OHS-11)	4	5	5	3	1	1
(EHS-1)	1	6	2	6	1	5
(EHS-2)	2	6	2	6	1	6
(EHS-3)	2	7	1	7	1	7
(EHS-4)	1	6	1	6	1	5
(EHS-5)	1	7	2	7	1	6
(GHS-1)	4	1	2	6	1	1
(GHS-2)	5	2	2	6	1	1
(GHS-3)	6	2	3	6	1	1
(GHS-4)	5	3	3	6	1	1
(GHS-5)	6	2	2	6	1	1
(GHS-6)	5	3	3	6	1	1
(GHS-7)	6	2	3	6	1	1
(GHS-8)	5	3	4	7	1	1
(GHS-9)	5	2	3	3	1	1
(OPS-1)	2	2	5	2	1	5
(OPS-2)	2	2	5	2	2	6
(OPS-3)	1	3	4	2	2	6
(OPS-4)	1	2	5	3	2	6
(OPS-5)	2	3	6	2	1	6
(OPS-6)	1	2	5	2	2	7
(OPS-7)	2	1	7	2	2	6
(OPS-8)	1	1	7	2	2	7
(ORS-1)	2	2	5	6	6	1
(ORS-2)	2	1	4	7	7	1
(ORS-3)	1	1	4	7	7	2
(ORS-4)	2	1	3	7	7	1
(ORS-5)	2	3	4	5	5	2
(ORS-6)	2	2	5	6	6	2
(ORS-7)	1	2	3	5	5	1
(ORS-8)	2	2	4	4	4	1

Iteration History[a]

Iteration	Change in Cluster Centres					
	1	2	3	4	5	6
1	8.128	7.126	7.678	7.849	8.026	9.168
2	0.975	1.69	2.025	0.912	0.52	0.874
3	0.64	0.635	1.787	0.509	0.512	0.879
4	0.764	0.274	1.375	0.373	0.861	1.085
5	0.844	0.242	1.629	0.643	1.276	1.18
6	0.852	0.242	1.346	0.296	0.615	0.392
7	0.389	0.341	1.223	0.308	0.496	0.34
8	0.197	0.193	0.685	0.203	0.263	0.243
9	0.181	0.414	0.614	0.058	0.088	0.191
10	0.078	0.247	0.53	0.096	0.14	0.087
11	0.109	0.148	0.19	0	0.153	0
12	0	0.139	0.305	0	0.163	0
13	0	0.287	0.492	0	0.147	0
14	0	0	0	0	0	0

a. Convergence achieved due to no or small change in cluster centres. The maximum absolute coordinate change for any centre is .000. The current iteration is 14. The minimum distance between initial centres is 16.941.

The purpose of cluster analysis is classified the respondents amongst the various clusters, these clusters are internally homogeneous with respect to psychographic aspects while externally unique and having different intensity with respect to impact of respondents thinking about healthcare services provided to industrial workers with special reference to HIV/AIDS . Here researcher wants to understand that what are the different statements are responsible for distinguished the different clusters. The variations among the cluster determine on the basis of F-statistics in the initial looks Anova table indicate the significance value for all 41 statements are responsible for create impact in healthcare services provided by industries to healthcare workers are significantly different amongstthe all six clusters. Because for all 41 statements the significance value is 0.00 which is less than 0.05 indicate that these particular statements differentiate in terms of behaviour ofrespondents in all the three clusters. Researcher wants to understand the intensity of the variation therefore the F-statistics tool is the obvious choice. Higher value of F ratio indicate higher variations amongst the clusters with respect to particular statement and in similar manner lower value of F indicate the variation is significant but even the marginal variation indicate with respect to particular statement. We have considered the statements ranging between 170 and above as higher variation, the statements ranging between 66 to 169 as moderate value and statements ranging less than 65 as lower variation.

FINAL CLUSTER ANALYSIS :

Table 4.26

Final Cluster Centers								
	Cluster						**F**	**Sig.**
	1	**2**	**3**	**4**	**5**	**6**		
(OHS-1) #	2	6	2	2	1	2	194.428	0.000
(OHS-2) #	2	5	2	2	2	2	249.993	0.000
(OHS-3) #	3	5	2	2	2	2	173.869	0.000
(OHS-4)$	2	5	2	2	2	2	116.046	0.000
(OHS-5) #	2	6	2	2	2	2	177.176	0.000
(OHS-6) $	2	6	2	2	2	2	155.241	0.000
(OHS-7) #	2	6	2	2	2	2	228.164	0.000
(OHS-8) #	2	5	2	2	2	2	201.318	0.000
(OHS-9) #	2	6	2	2	2	2	221.714	0.000
(OHS-10) #	2	6	2	2	2	2	173.656	0.000
(OHS-11) $	3	5	3	3	2	2	110.190	0.000

(EHS-1) $	4	5	4	5	1	5	75.328	0.000
(EHS-2)$	4	5	4	5	1	5	72.464	0.000
(EHS-3) $	4	5	4	5	1	5	77.488	0.000
(EHS-4) $	4	5	4	5	1	5	103.005	0.000
(EHS-5)$	4	5	5	6	2	6	90.678	0.000
(GHS-1) $	4	3	3	3	2	2	63.099	0.000
(GHS-2) $	5	3	3	3	2	2	104.292	0.000
(GHS-3) $	5	4	3	3	2	2	88.827	0.000
(GHS-4) $	5	3	3	3	2	2	91.515	0.000
(GHS-5) $	5	3	3	3	2	2	101.474	0.000
(GHS-6) $	5	3	3	3	2	2	96.716	0.000
(GHS-7)$	6	4	3	4	2	2	102.188	0.000
(GHS-8) $	5	3	3	4	2	2	94.856	0.000
(GHS-9) *	5	3	3	3	2	2	62.964	0.000
(OPS-1) $	2	2	5	2	2	2	165.514	0.000
(OPS-2) #	2	3	6	2	2	2	258.411	0.000
(OPS-3) $	2	3	5	2	2	2	109.237	0.000
(OPS-4) $	2	3	6	2	2	2	193.314	0.000
(OPS-5)$	2	3	5	2	2	2	140.551	0.000
(OPS-6) $	2	3	5	2	2	2	103.167	0.000
(OPS-7) *	2	3	6	3	3	3	37.573	0.000
(OPS-8) #	2	3	6	2	2	2	185.994	0.000
(ORS-1) $	3	3	3	5	3	2	38.908	0.000
(ORS-2) *	3	3	3	6	3	2	63.644	0.000
(ORS-3) $	2	3	3	6	3	2	79.886	0.000
(ORS-4) $	2	3	3	6	3	2	71.026	0.000
(ORS-5) $	3	3	4	5	3	3	58.584	0.000
(ORS-6) *	3	4	4	5	4	3	50.541	0.000
(ORS-7) *	3	3	4	5	4	3	41.702	0.000
(ORS-8) *	3	3	4	5	4	3	24.882	0.000
(ORS-9) *	3	3	4	5	4	3	24.882	0.000

From the above table we can easily interpret that following statements OHS – 1,2,5,7,8,9,10, OPS-2,8 having higher F-values which indicates that there is larger variation among clusters in these statements, Here the highest F value is 258.411 and it ranges to 173.656.

Statements like ORS – 1,5,6,7,8 , OPS-7, GHS-9 having lower F-value which means there us lower variation among clusters among these statements.

Here the least value is 24.882 which ranges to 62.964.

Rest of all statements are ranging between F values are in between 63.644 and 165.514, which shows moderate variations among the clusters.

LARGER VARIATION AMONG THE CLUSTERS :

Statement Number	Statement
OHS-1	Organization conducts health check-up camps for workers periodically.
OHS-2	Organization also conducts medical check- up for family separately.
OHS-3	Organization offer health insurance to its employees.
OHS-5	Medical store facility available within company premises.
OHS-7	STI and HIV/AIDS medicines are available in the company's Medical Store on regular basis.
OHS-8	The Pathology Laboratory in the Organization is capable of advanced diagnostic tests for STI / HIV / AIDS related disease.
OHS-9	HIV/AIDS and STI test facility provided to all workers in organization periodically.
OHS-10	Condoms are regularly available in company's medical store.
OPS-2	Additional transportation facility is provided to work for patient suffering from HIV/AIDS
ORS-1	Organization offers family accommodation.

In above table we can interpret that OPS-2 have highest F-value among all the clusters which means there is no major variation among all six clusters except cluster 2 and 3, all other cluster have same value of 2 which means the level of agreement is more in this statement. This also interpret that organization conducts medical checkups for familyseparately.

Respondents also agree for other statements like organizations conducts health checkups camps for workers on timely basis, they also offer health insurance to workers, and medical store facility is also available on regular basis within premises. Apart from regular medicines, special medicines for HIV/AIDS are also available for company's pharmacy. Organizations have also made arrangements for pathology laboratory in premises for diagnosis of sexually transmitted disease like HIV. Organizations providing testing facilities on regular basis to workers at premises only.

Respondents are also affirmative about precautionary measures available at company's pharmacy like condom to avoid spread of such diseases. Additional transportation facilities

are provided to patients suffering from HIV/AIDS disease. Separate arrangements are available for worker's family accommodation.

LOWER VARIATION AMONG THE CLUSTERS:

Statement Number	Statement
ORS-2	Group accommodation offered by company for bachelor employees
ORS-6	Owing to personal lives issues such as loneliness, family problems, Workers involve themselves in the extramarital affairs
ORS-7	Workers having regular non- spousal sexual relations frequently change the partner
ORS-8	Workers prefer using precautions (condoms) while making sexual relation with no-regular partner.
ORS-9	Worker's tendency of open discussion with other co-workers suffering from STI helps in his/her recovery.
OPS-7	Special wages are offered to workers suffering from HIV/AIDS.
GHS-9	Proper Facilities are offered by Anti- Retroviral therapy (ART) centre located nearby your organization.

From above table it is clear that respondents from all clusters are not thinking in similar way about statement ORS-2 which is about group accommodation to all employees. Respondents are not thinking in same direction about precautionary measures like condom while having sex with strange partners. Respondents are having various opinions about open discussion of matters like HIV/AIDS with co-workers. Special wages and proper facilities offered by ART centres located nearby are also not available to industrial workersfrom organizations.

Respondents having various opinions about loneliness they suffer while working with organization and in order to get away from loneliness they are forced to have sexual relationships with non-regular partners which increases the chances of spreading the diseases like AIDS/HIV among them.

MODERATE/MEDIUM VARIATION AMONG THE CLUSTERS:

Statement Number	Statement
OHS-4	Health Insurance Policy of the organization also covers the medical responsibilities of employee's family members
OHS-6	Prescribed medicines are available from medical store easily
OHS-11	Workers prefer to purchase condom from the company's medical store.

EHS-1	Awareness campaigns help workers to understand HIV/AIDS related disease.
EHS-2	Education session helps in reducing the risk of HIV/AIDS among workers.
EHS-3	Early diagnosis of S.T.I. & their treatment reduces the risk of HIV among workers.
EHS-4	Frequently visit to healthcare workers (ASHA, LINK, AANGANWADI etc.) reduce the risk of STI & HIV/AIDS among employees
EHS-5	Government/NGOs Linkages with Organization help to improve HIV/AIDS related disease control among employees
GHS-1	Government Doctors' visits the organization periodically.
GHS-2	Prescribed medicines by Government doctors are provided by pharmacist in mobile van
GHS-3	Pathological spot testing done by medical mobile van periodically
GHS-4	Testing reports share with workers within the standard time limits.
GHS-5	Counsellor takes appropriate action related to treatment prescribed by doctor.
GHS-6	Medicine of critical illness made available with mobile van
GHS-7	Prescribed treatment shows significant improvement in patient health.
GHS-8	Proper facilities are offered by Integrated counselling and testing centre to patient suffering with HIV/AIDS
OPS-1	Organization offers Special relaxation in working hours for patients suffering from HIV/AIDS
OPS-3	Health & hygiene is made available to employees of the organization
OPS-4	Supervisor offers special privileges (relaxation) to HIV+ workers because of his/her health status
OPS-5	Colleague behave normally with HIV+ worker at workplace
OPS-6	Organization uses special performance appraisal format for HIV+ workers
ORS-3	Separate (individual) accommodation services are offered by company for bachelor employees
ORS-4	Company offers entertainment facilities to workers for refreshment during the week-ends
ORS-5	Sometimes for physical need workers tend to make sexual relation with non-spousal partners

From above table it is been interpreted that behaviour of respondents among all these clusters are having moderate variation within them regarding matters like separate accommodation services offered to bachelors. Respondents having mixed opinions about entertainment facilities offered to workers for refreshment during weekends. There are mixed response about organizations using separate appraisal formats for workers suffering from STD like HIV/AIDS and organizations providing flexible working hours to workers suffering from HIV.

Respondents also have mixed reactions about education sessions about disease like HIV/AIDS. No facilities for early diagnosis about these diseases are available which can reduces the risk of spreading HIV among employees. Frequently visits of healthcareworkers among healthcare workers are also not happening on regular basis. Government linked NGO's and visits of Government doctors to organization for regular check up of workers are moderately responded by workers.

Prescribed medicine by government doctors which is supposed to be provided by pharmacist in mobile van and prescribed treatment which shows significant improvementin health of patient is strongly supported by some respondents while some others have denied about getting such facilities. On the spot testing and testing reports within prescribed limits available to industrial workers and medicines availability at mobile van isalso strongly accepted by some respondents.

Proper facilities offered by integrated counselling and testing centre to workers infected by HIV/AIDS and health and hygiene is made available. The supervisors and colleaguebehaves in normal way with HIV infected workers and supervisors are giving relaxations to HIV workers.

Hence the behaviour of respondents moderately affected about health related facilities provided to industrial workers by industries to workers infected with disease like HIV/AIDS.

CLUSTER PROFILES

GENDER of Worker					
		Male		Female	
		Frequency	Percent	Frequency	Percent
Cluster	1	100	19.20%	4	23.50%
	2	70	13.40%	7	41.20%
	3	95	18.20%	0	0.00%
	4	32	6.10%	1	5.90%
	5	86	16.50%	4	23.50%
	6	139	26.60%	1	5.90%
	Combined	522	100.00%	17	100.00%

From above table it is understood that out of total six clusters highest number of male are from cluster 6 which is 139 and it consists of 26.6% and lowest number of male are from cluster 4 which is 32 and consist of 6.1%. Whereas highest number of female are from clustering 2 which is 7 and lowest number is from cluster 3 which is 0.

Type of Family Worker Lives in at Workplace							
		Joint		Nuclear		Alone	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Cluster	1	2	1.20%	0	0.00%	102	31.70%
	2	24	14.00%	20	44.40%	33	10.20%
	3	85	49.40%	7	15.60%	3	0.90%
	4	1	0.60%	1	2.20%	31	9.60%
	5	30	17.40%	5	11.10%	55	17.10%

	6	30	17.40%	12	26.70%	98	30.40%
	Combined	172	100.00%	45	100.00%	322	100.00%

Marital Status of Worker							
		Married		Unmarried		Divorced	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Cluster	1	45	14.20%	49	25.00%	10	37.00%
	2	73	23.10%	2	1.00%	2	7.40%
	3	56	17.70%	39	19.90%	0	0.00%
	4	5	1.60%	28	14.30%	0	0.00%
	5	23	7.30%	65	33.20%	2	7.40%
	6	114	36.10%	13	6.60%	13	48.10%
	Combined	316	100.00%	196	100.00%	27	100.00%

From above table it is interpreted that highest number of respondents from married category is cluster 6 which is 114 and from unmarried category it is from cluster 5 which is65, whereas from divorced category highest number is from cluster 1 which is 10. The lowest respondents from married category is cluster 4, which is only 5, from unmarried category, it is from cluster 2 which is 2.

Table 4.8.12 Age Group											
		16-21		**22-27**		**28-37**		**38-45**		**46-52**	
		Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**	**Frequency**	**%**	**Frequency**	**%**
Cluster	1	0	0.00%	0	0.00%	104	39.50 %	0	0.00%	0	0.00%
	2	0	0.00%	0	0.00%	65	24.70 %	0	0.00%	12	100.00 %
	3	1	2.90%	0	0.00%	94	35.70 %	0	0.00%	0	0.00%
	4	33	97.10 %	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	5	0	0.00%	90	100.00 %	0	0.00%	0	0.00%	0	0.00%
	6	0	0.00%	0	0.00%	0	0.00%	140	100.00 %	0	0.00%
	Combined	34	100.00 %	90	100.00 %	263	100.00 %	140	100.00 %	12	100.00 %

ANOVA TEST

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
OHS	Between Groups	754.9	5	150.98	264.31	0
	Within Groups	304.46	533	0.571		
	Total	1059.4	538			
EHS	Between Groups	776.55	5	155.31	95.725	0
	Within Groups	864.77	533	1.622		
	Total	1641.3	538			
GHS	Between Groups	633.03	5	126.61	114.92	0
	Within Groups	587.18	533	1.102		
	Total	1220.2	538			
OPS	Between Groups	556.18	5	111.24	213.38	0
	Within Groups	277.85	533	0.521		
	Total	834.03	538			
ORS	Between Groups	530.66	5	106.13	77.899	0
	Within Groups	726.18	533	1.362		
	Total	1256.8	538			

Ho : There is no significance difference amongst clusters with respect to various factors evaluating health related services provided by Industries to workers suffering from HIV/AIDS

H1 : There is no significance difference amongst clusters with respect to various factors evaluating health related services provided by Industries to workers suffering from HIV/AIDS

From above Anova table we can easily interpret that significance value for all five factors that is Organizational healthcare support, External healthcare support, government-aided healthcare support, organizational policy support and organizational recreational support isless than 0.05, it means we will accept H1 and reject null hypothesis for all the factors

From the Anova table researcher concluded that each of all six clusters having significancevalue less than 0.05 it means here null hypothesis is rejected and alternative hypothesis is accepted which means there is significant difference amongst all the clusters.

In above table we can see that F value for OHS and OPS are more it means there is larger variation amongst all six clusters and F value of ORS and EHS is less it means there is lower variation amongst all the clusters that is A, B and C. The variable GHS shows moderate variations.

****

CHAPTER - 5

Finding and Discussions

The purpose of this chapter is to report and present the findings of the study. The findings discussed in this chapter are in the context to their search objectives established for the study. The findings are drawn based on the statistical analysis performed in the previous chapter of data analysis for the study. After the careful statistical analysis of the opinions received from the industrial workers from Gujarat, there search has received some interesting facts and highlights.

CHAPTER-5

Findings and Discussions

The Primary Objective of this research was to study the factors influencing to the health care support services in the industries.

To achieve this primary objective other secondary objectives have been defined toachieve this primary objective, which includes understanding and studying the behaviour of workers who are working in GIDC of five cities that is Ankleshwar, Bharuch, Surat, Dahej and Vadodara. Researcher identified five important factors in order to understand the impact of workers who are affected from HIV and working in industries of Gujarat, They are – Overall Health Support(OHS),, External Healthcare Support (EHS), Government Aided Healthcare support (GHS), Organizational Policy Support (OPS) and Organizational Recreational Support (ORS).

Researcher is using various Tests and tools in order to build co-relation between these five variables and thus researcher achieved its objectives. The following chapter will discuss about finding researcher got from various tools and tests.

5.1 Findings from the Analysis through Cross Tabulation:

In their search study of analysing the influence of factors affecting workingconditions for workers in Gujarat with special reference to HIV, there searcherhave considered to study various demographic factors as individual factors whichinfluence the working conditions of industrial workers working in variousindustries in Gujarat. The researcher has considered the demographic factors likeage, gender, education, designation, annual income etc. To understand theassociation between the demographic factors, we have done cross tabulations andthe findings areas under.

Marital Status* Gender* Type of family:

The researcher has analysed the cross tabulation of marital status, gender and typeof family of respondents**.** Out of total respondents that is 539 , maximum number of married male are 177 living alone and minimum number of married male are 33 which lives in nuclear family. Maximum females who are married is 4 and lives in nuclear family while minimum number of married females are 0 in alone category.

Maximum numbers of unmarried male are 45 lives alone and minimum male unmarried are 6 lives in nuclear family. Maximum female unmarried are 4 which lives alone and minimum female unmarried are 2 which lives in nuclear family, Maximum number of divorced male are 25 which are not living with any family and if we discuss about maximum female divorced that it is 2, in alone category. Minimum number for both the gender is 0.

Age group * Monthly Income:

Maximum numbers of workers are from income category 15000-19999 Rs per month which is 182. Highest numbers of respondents are from age group 28-37 years which is 264. If we discuss about lowest number of respondents in terms of income that it is income range of 0000-4999 Rs per month, which are only 2. Minimum respondents are from age group 46-52 years, which is only 12.

Establishment year * No. of employees:

Maximum number of workers are from category of 11-25 years old company

category which is 301. If we discuss about size wise establishment of companies than highest number of workers are from 50-99 workers categories which is 231.

Monthly income* city of employment:

Maximum number of workers are 147 from Vadodara city and within income range of 5000-9999 Rs per month. If we take into consideration individual data than number is 182 for income range of 15000-19999 Rs per month.

Cross tab of cluster - :

Marital Status of Worker * Cluster Number of Case * Sex of Worker Researcher have undertaken cluster analysis and in which he have done crosstabulation between marital status and gender of respondents. Here married malewas maximum in cluster 6 which is 79, unmarried male was high in cluster 6which is 42 and also in category of divorced male the number was high in cluster6 which is 6.

If we discuss about total respondents married than it is highest in cluster 4 whichis 80, unmarried respondents are maximum in cluster 5 which is 44 and divorced respondents was again maximum in cluster 4 which is 7.

5.2 Findings from factors identified by respondents with respect to working conditions of industrial workers with special reference to HIV/ AIDS:

Here researcher in order to achieve his main objective identified five differentvariables which are as follows:

i. **Organizational Healthcare support**
ii. **External Healthcare support**
iii. **Government Aided Healthcare support**
iv. **Organizational Policy support**
v. **Organizational Recreational support.**

The first factor having highest number of statements and contributing as veryimportant variables as it highlights the condition of workers by organizational

healthcare support services. It includes all the important aspects, whichorganizations are taking or must, undertook in order to treat or take care ofindustrial workers suffering from disease like HIV.

The second factor having 5 statements and it highlights about external healthcare support which is provided by organizational to its workers. Here the focus is on awareness campaigns and education sessions about the disease that is HIV.

The third factor highlights about government aided services to such workers and here researcher have taken nine statements. Apart from organization and external factors, government is also supporting industries and industrial workers to fight against disease like HIV. Here focus is on visits of government doctors, pathological support, medicinal and pharmacy support, etc are highlighted.

The fourth factor is focusing on organizational policy support in which researchers have selected seven statements to highlight the importance. In this variable researcher have highlighted about policy support provided by organization like special relaxation in working hours, additional transportation facility, and behaviour of colleagues with HIV worker, special wages to workers suffering from HIV, etc is taken into consideration.

The fifth factor is all about recreational support given by organization. In this factor researcher, highlighted matters like how organizations are supporting the family of workers affected with HIV, separate accommodation facility, entertainment facility provided to workers, etc. Researcher with the help of nine statements explains this factor.

5.3 Findings from the One-Way ANOVA Analysis - Cluster:

Researcher have undertaken cluster analysis and the results are havingsignificance value less than 0.05 that means researcher have to reject nullhypothesis and accept alternative hypothesis.

The significance difference between the respondents for overall health support service is highest as compared to other factors. It means workers are having

various opinions regarding organizations providing various services to workers with respect to HIV. The behaviour of industries in providing services is difference from industry to industry.

The second factor where there is significance difference amongst respondents is organizational policy support, where respondents have variation among cluster. The variation is due to various supports provided by organizations regarding healthcare support services.

After those factors like Government aided services and external healthcare support are also having variation amongst respondents' behaviour. The reason for this variation is both are external and not in control of organizations. Industries don't have direct control over services given by government as it is part to be played by health officers recruited by government. External healthcare support includes awareness campaign, healthcare workers involvement, NGO's involvement in such matters, etc. The respondents are also thinking in different way for such matters.

Finally the factor of Organizational Recreational support having very less difference among the respondents as they think similar in matters like family accommodation, group accommodation, special care of workers and his family, etc.

5.4 Findings from the Reliability Analysis:

Researcher have undertook reliability test in SPSS software and derived the value of Cronbach alpha, which is more than 0.90 it means it, is acceptable and very good. The researcher which undertook research statements gave him better result from respondents.

There are total nine statements for OHS, the Cronbach alpha is 0.984 and if we remove any statement, it will reduce to 0.980. It means the data is reliable for that factor.

The Cronbach alpha for EHS is 0.979 and if we remove any statements out of given five statements used by researcher than it will drop down to 0.972 it meansit is again reliable for research.

The Cronbach alpha for GHS is 0.984 and if we remove any of the statementsfrom given nine statements than it will reduce to 0.982 which will not make any major change in value.

The Cronbach alpha for OPS is 0.959 and if researcher will remove any of the statement from given seven statements than the value can come down to 0.947 which means it is reliable.

The Cronbach alpha for ORS is 0.961 and if researcher will remove any of the statements given than it can reduce to 0.948 so here we can interpret that all statements are important and perfectly used by researcher in order to take review of respondents.

5.5 Findings from the Exploratory factor analysis:

With the help of exploratory factor analysis, total five factors have been identified.

Factor1 identifies as OHS comprises of eleven items. These eleven items highlights about support and services which are expected from organizations with special reference to HIV. Mainly it includes facilities like health check up conducted by organizations, medical check up conducted by organizations, health insurance policy for workers, coverage of health insurance policy of family of workers,medical store facilities, medicines availability at store, etc.

Factor 2 identifies as EHS comprises of five items. These five items highlightsmatter regarding awareness campaign, educational campaign, and early diagnosis treatment, frequent visit by health workers and government or NGO role to improveHIV related diseases.

Factor 3 identifies as GHS which comprises of nine statements. It highlights all the major support given by government to industrial workers apart from support provided to workers

by organizations and industries. Here the statements like government doctor visit, on the spot pathological support, testing support, medicine of critical illness available in mobile van, counselling regarding disease and diagnosis of the same.

Factor 4 identifies as OPS, which comprises of seven statements. It highlights allthe policy support provided by organizations with respect to workers suffering fromHIV. The main matters, which involved in these factors, are organizations offers special relaxation in working hours, additional transportation facilities, health and hygiene facilities to workers, special privileges by supervisor to workers suffering from HIV, special wages to workers suffering from HIV.

Factor 5 identifies as ORS, which comprises of nine statements. This factor highlights all the recreational facilities provided by organizations. It includes familyaccommodations offered by company for bachelor employees, separate accommodation services to single workers, entertainment facilities to workers during weekend, etc.

5.6 Key findings from Confirmatory factor analysis:

Confirmatory factor analysis identifies confirmatory measurement model fit consists of organizational healthcare support, external healthcare support, government aided healthcare support, organizational policy support and organizational recreational support. These five variables was tested through confirmatory structure equation modelling which employed a maximum likelihood estimation procedure. The measurement model had all fit values for CMIN, GFI, NFI, RFI, CFI, RMR and RMESA. All are under control and fall between theranges of threshold values given.

The confirmatory factor analysis showed an acceptable & excellent overall modelfit and hence, the theorized model fit well with the observed data**.** It can be concluded that the hypothesized five factor CFA model fits the sample data very well.

5.7 Key findings from Cluster analysis:

In order to understand the proper behaviour of respondents researcher have distributed data in six clusters. The cluster analysis is important in order to understand the similar behaviour of respondents. Researcher have done clusteranalysis and through that he came

to know that for statements like organizations conducts health check-up for workers, check-up facilities for family separately, health insurance facilities for workers, medical store facility for workers, pathology facility for advanced diagnostic tests, provides condoms on regular basis to curb unsafe sexual connections, additional transportation facilities, etc are having larger variations among them. The respondents are not thinking in same way for the statements mentioned. They are thinking differently from organization to organization.

Researcher also identified the statements like group accommodations offered by company to bachelors; workers involved themselves in extra marital affairs, workers having regular extra marital affairs, workers tendency of open discussion about STI with co-workers, special wages to workers suffering from HIV, proper facilities offered by Anti-Retroviral therapy, etc are statements where allrespondents having lower variation among clusters it means they all are lineal in this matter. Respondents are thinking in similar way for these statements.

The statements like Health Insurance Policy of the organization also covers the medical responsibilities of employee's family members, Prescribed medicines areavailable from medical store easily, Workers prefer to purchase condom from the company's medical store., Awareness campaigns help workers to understand HIV/AIDS related disease., Education session helps in reducing the risk of HIV/AIDS among workers, Early diagnosis of S.T.I. & their treatment reduces the risk of HIV among workers., Frequently visit of healthcare workers (ASHA, LINK, AANGANWADI etc.) reduce the risk of STI & HIV/ AIDS among employees, Government / NGOs Linkages with Organization help to improve HIV/AIDS related disease control among employees, Government Doctors' visits the organization periodically., Prescribed medicines by Government doctors are provided by pharmacist in mobile van, Pathological spot testing done by medical mobile van periodically, Testing reports share with workers within the standardtime limits., Counsellor takes appropriate action related to treatment prescribed by doctor., Medicine of critical illness made available with mobile van, Prescribed treatments haws significant improvement in patient health., Proper facilities are offered by Integrated counselling and testing center to patient suffering with HIV/AIDS, Organization offers Special relaxation in working hours for patients suffering from HIV/AIDS, Health & hygiene is

made available to employees of the organization, Supervisor offers special privileges (relaxation) to HIV workers because of his/her health status, etc having moderate variation among themselves it means respondents are thinking either similar or in opposite way for these statements.

****

CHAPTER – 6

Conclusion, Major Contributions and Scope for Further Research

---

The chapter discusses key findings derived from the primary analysis. This chapter also gives conclusion of the Theis, managerial implications and future research scope for the present study.

CHAPTER- 6

Conclusions, Major Contributions and Scope for Further Research

6.1 Conclusions

Organizational support services to HIV affected workers is studied by different authors since years in India and abroad also. But the factors which included in this thesis like organizational policy support and organizational recreational support was not studied in previous studies. All the factors are studied separately but co-relation between all these factors is being done by researcherin this thesis only. Researcher attempted to bridge the gap between various factors by studying impact of each factors separately and building co-relation between each factors. For the purpose of research, industries located at GIDC from five cities (Ankleshwar, Bharuch, Surat, Dahej and Vadodara) were selected. Firstly, various factors were extracted for all the industries data by exploratory factor analysis and an empirical model of factors co-relating organizational healthcare facilities to workers affected with HIV was developed, based on it Confirmatory Factor Analysis was used to validate the model.

Data was collected from the 539 workers hypothesized relation was established between factors responsible for organizational healthcare support services. The result of the analysis stipulates that all five factors are contributing in their own way to the research. In the chapter of findings major contributing factors and its impact on organizational health support services provided to workers suffering from HIV were discussed. Demographics of the employees were also taken in to the consideration for the purpose of study. How demographic variables have impacted its factors were discussed. There is not worthy disparityamong various age groups, income group, gender, marital status, industry age,

GIDC location of Gujarat. Over all workers of all the five cities were identified into high and low level of readiness groups. This chapter includes implication of the study, limitation of the study and recommended directions for future research.

- There is significance difference in services provided by various organizations to HIV affected industrial workers. It is due to new situations, trends, and government support.
- Under the program of employer Led Model (ELM) The role played by the employers and employers' association in mitigating the risk of HIV/AIDS among its the workers in India has been commendable in the past, however more employers need to join the stride in India's voice against AIDS.
- For migrating workers various NGOs are working in India. The major role of these organizations are to take care about all the facilities are being provided to workers who are migrating from other states.
- Such migration can become very dangerous sometimes as if any worker is infected by HIV than he can largely infect other workers also from same disease and the level of infection can increase within the state.
- Such workers are get assurance of proper healthcare facilities by theseNGOs and they take proper care of these workers as they are provided with fund.
- Khushi clinics are responsible for providing proper healthcare facilities to truckers who are traveling across various states. Truckers are very vulnerable as they are staying away from home for long days and they have unsafe sexual relationships with roadside prostitutes.
- Link worker scheme also increasing the availability and use of condoms among high-risk workers and other vulnerable males and females.
- Link worker scheme increasing the availability and use of condoms among high-risk workers and other vulnerable males and females.
- NGO’s are the eyes and ears of heath department of any state for successful implementation of any program local partners are required and NGO’s are working in micro rural/Industrial area/special economic zone/rural/urban. It has been suggested to program directors of NGO to work in coordination with industrial house and government.

6.2 Recommendations:

Researcher have gone through in-depth analysis of his research and through the research factors are identified which are helpful to policymakers for providing proper materials with respect to policy making of health related issues of migrant workers with respect to HIV/AIDS. Few recommendations which are suggested by researcher with respect to research carried out by him are as follows:

6.2.1 Recommendation for proving health facilities to Migrant industrial Workers

- It is very important for industries dealing with migrant workers as they are vulnerable to disease like HIV/ AIDS. They are migrating from intercity or interstate which makes them more infected with various chronic diseases. Researcher identified the factors like overall health support which highlights which area to be more focused while dealing with migrant workers.
- Government aided support is also one of the most important factor because government is spending huge amount in project related to HIV for migrant workers with alignment to NGO's. Industries must be aware about such projects and have to cope up with government and NGO in order to provide best health care facilities to migrant workers.
- Researcher have undertook cluster analysis so that workers are divided in clusters and hence perfect idea is being obtained about behavior of migrant workers when they are availed with proper healthcare facilities when they are infected by such diseases. This also impacts their work efficiency and health environment.
- The person affecting by such disease not only him but also people surrounded by him are affected. Researcher also highlighted the issues when they are treated well and also their family is not being suffered. It is the lookout of employers where workers are giving his contribution as employees.
- Researcher also focused on various demographic factors like married, single and divorced. Person from any category have their own needs. In such situation it is the responsibility of employers who should provide them with all necessary resources to fulfill their needs safely. Also the use of various tools which make them safe from chronic disease like condoms should be taught to workers.

6.2.2 Recommendation for implementing Migrant health monitoring system (MHMS) at pan India and international level.

i. Migrant's Health Monitoring System (MHMS)

- In Gujarat migrant population is very high; they are living in a group, with family, or alone. These groups are vulnerable and at high risk of HIV/STI disease and other health-related issues also. During the survey, the researcher came to know that they are living far away from their family and due to loneliness and peer pressure they go at high risk. They are doing unprotected sex resulted easily infected with HIV/AIDS. The matter is not closed here they are working as a carrier of HIV/AIDS and transfer HIV to his spouse, so they work as a bridge population and one of the reasons for dissemination of any disease including HIV. Therefore, it is very much important to cover these populations through health care providers.
- The researcher strongly recommends preparing a tracking system for these migrants with a unique identification number (UID) in their hometown as well as workplace. This target group should submit their health report every month. At the same time, they aware of his health to avoid any infections.
- The researcher itself working in the field of public health and project implementation and during the discussion with public health officials of the Government sector they share their concern to induct a system by that he can overcome the problem of infiltration of the system.

  Infiltration means there is a gap in approval guidelines and while implementing the program the beneficiary/the clerks in system/the contractors/the employee of government system who is implementing the program at ground zero befool senior officials and malpractices adopt resulting one can get the desired result.

  For filling this infiltration and gaps here researched a proposed **Web-based tracking system for government officials and beneficiaries** for migrantmonitoring at the workplace as well as their hometown.

ii. Process for registration and tracking health meter of migrant

Step-1: Registration of Migrant from the first services taken by Government /Private health facility centre

Step-2: Link of AADDAR Card or PAN Card during registration and generate Unique Identification number to a beneficiary.

Step-3: Maintain Follow-up visit record as per the workplace intervention policy.

Step-4: In case of missed appointment follow-up call should be given by the service provider.

Step-5: In case the patient not reachable conduct a home visit to verify the details and providing services at their doorstep.

Step-6: Counselling of patient or his family to continue the treatment as per protocol.

Step-7: Monthly reporting of data as per prescribed format (Annexure-1) with all the stakeholders (Government/Private/NGO's/CBO's etc.)

Step-8: Review at the program in the presence of all the partners quarterly and share the report (Annexure-2) with all the partners for follow-up and action taken.

iii. Recommended format for reporting (Annexure-1) for registration of patient

Location Name	**District Hospital Fatehpur**
Location code	UP04
Patient ID	IND-UP04-0060-02
Consent Treatment	Yes
Intake Date	29-04-2021
Patient Name	CHOTU SINGH
Gender	Male
Date of Birth	20-11-1977
Age in Year	43 Years
Urban/Rural	Rural
Clinic State	Gujarat
Clinic District	Vadodara
Patient State	Uttar Pradesh
Patient District	Fatehpur
Sub District Name	Bindki
Village Name	Amauli
Address	Amauli,Fatehpur
Landmark	Near Primary School
Pin Code	212631
Primary Guardian Name	REKHA DEVI
ID Type	AADHAR

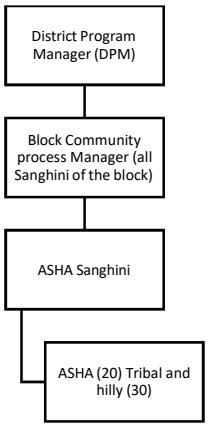
ID No	44444333322
Referral Information	ASHA Worker
Last Treatment Date	20-12-2020
Case status (Open/Close	Open

Follow up of Patient. Annexure-2

Patient ID	IND-HR01-0009-02
Name	Hari
Location Name	Haryana
location Code	HR02
Registration Date	28-08-2020
Follow-up Date	3/5/2021
Contact Type	Telephone
Contact Outcome	Visited clinic for Treatment
Next Visit Date	30-05-2021
Remarks	

6.2.3 Recommendations for follow-up patient health during pandemics like COVID-19 and lockdown-like situation and maintain Patient Health meter card-PHMC at village level by ASHA or ASHA Sangini.

The reporting structure of ASHA at the block level



- During the phase of research, the researcher comes to know that in the current health infrastructure there is no tool available in the hand of the health department to inhibit community spread and virus-like COVID-19.There is a massive failure they have seen during last year when Lockdown imposed on the general population due to pandemic and all the commercial/social activities completely stop resulting there is a huge loss faced by GDP of India. People lose their job even they are not

able to move one place to another, all school was closed resulting loss of one academic year and so many things affected because of the pandemic. The Researcher strongly recommends preparing a separate department for pandemic management like COVID-19.Which should have a staff of research, Doctor, Nursing, etc who can manage all the influencing factors that directly or indirectly hit the society.

- The researcher strongly recommends using the existing health infrastructure of the health system of India with the support of private partners working in the field of health and non-government organizations. To initiate this process researcher strongly recommend forming a Block health committee by conduct a meeting of district health authorities and health workers representative of NGO's and private partners and allocate an area of work.
- The private partners working in the field and NGOs working on the different types of disease like HIV/AIDS/Tuberculosis, leprosy/clubfoot, etc. hence researchers recommend preparing a network or channel for sharing health scorecard and status of the patient during the pandemic and lockdown like situations. Here researcher's sole objective is to track the patient and provide health-related care and support service to the patient.

6.2.4 Recommendation for adopting Process for maintaining of PHMC at Block level

Step 1: Telecommunication with Health workers at village level

- Awareness about disease
- Identification – details of how to identify the patient (share images of disease standard image)
- Refer to community health care center and connect with private partners for treatment if available in concern block
- Reporting and follow up of patients

Step 2: Collection of patient data from block-level (Channels used for collecting data)

- Through the Block level contacts with BPMU (block-level program Management unit).

- Through the District level program Management unit
- Through the NGO partners

Step 3: Review and action taken

- Collect all the data and review it at the district level
- Prepare a micro plan to cover the patient
- Assign patient wise responsibilities to the organization for follow up and treatment

Reporting format for Health worker

District	Block	CHC	Name of Disease	Name of Health worker and Organization	Phone Number of Health worker	What's App number	Number of patients reported	Remark

Patient Identification Format

District	Block	CHC	ASHA Sangini	Name of ASHA	ASHA Phone Number	Name of Guardian	Phone number of Guardian	Name of Patient	Age of Patient	Village Name

6.2.5 Recommendation for ensuring availability of condom in rural as well as an urban area in walking distance of 10 minutes and re-launch condom social marketing program pan India through social marketing organizations

The researcher comes to know during his field visit and interactions with industrial workers, shop owners, human resource managers of industries to discuss about the usage of a condom. The reply and output were very interesting. Industrial workers werevery much interested and using condoms during sex but sales from a medical store or other shops that were selling condoms were very less. It has been observed by the record that industrial workers or the general population that they avoid purchasing

condoms from nearby shops of their home or workplace though they want to use a condom for a safe sexual relationship. Hence researcher suggested running an awareness campaign for correct & consistent use of a condom. It will protect against HIV/AIDS & Sexually transmitted infections.

Hence researchers recommend ensuring the availability of condoms at traditional outlets (medical stores) and non-traditional outlets (pan and Kirana shops) pan India. Though this is a tough task but it is necessary to save the general population from sexually transmitted disease and HIV/AIDS too. The government of India was earlier running a nationwide program on the condom social marketing program through social marketing organizations, but it was completely stopped from the couple fora couple of years. Researcher suggests restarting the program and monitor at the central level sothat stigma and discrimination related to condom can be removed.

At the same time the awareness campaign also helps to increase the availability and accessibility of condoms, the researcher recommended running a mobile health van having a facility for a proper facility of health check-ups and HIV/AIDS test kits. State health should circulate a village-wise plan to district and taluka health authorities and it should be properly monitored, every stakeholder should have the proper information for date & schedule so that maximum benefit can be gain through this activity

iv. Process for implement for Communication and sales-related activities to ensure availability and accessibility of Condom

- Identify districts pan India where HIV prevalence and fertility rate is high
- Identify state-wise social marketing organizations to run the program because only 8-9 social marketing organizations are capable to run the program.
- Formation of State-specific condom promotion coordination committee with following members
- State representation of SMO's
- State representative of condom promotion from state health
- Project director of State AIDS control society
- Principal secretary health of the state
- Float the request for proposal centrally.
- Ask district/state-specific program implementation plan (PIP) with a specific

number to open condom outlets with secondary sales from SMO

- A separate communication campaign plan should be asked by SMO
- Ensured monitoring of the project by involving the district health network.
- Monthly review of the program at state and national level.

Information, Education &Communication (IEC) activity plan under Condom social marketing program

v. Following is a tabular presentation of the kind of activities to be carried out in each of the states. It also contains the number of these activities in each state as well as the nature of these activities.

Information Education and communication activities		**No. of Activities for 12 months**			**Nature of Activity**
		Gujarat			
OUTREACH ACTIVITIES	Community meetings				Urban
	Gram Panchayat meetings				Rural
	SHG/CBO meetings				Rural/Semi-urban
	Youth meetings				Rural/Urban
	Pieces of training				Semi-urban
	Door to door activity				Rural/Semi-Urban
	Poster exhibition				Rural/Semi-urban
	Audio Visual Van	--	3 days per month	3 days per month	Rural/Semi-Urban
MID MEDIA ACTIVITIES	Market town activity (street plays, puppet shows, musical programs)				Semi-urban and link villages
	Slogan writing on walls				Rural
	Painting NTOs with messages				Rural/Semi-Urban
SALES RELATED ACTIVITIES	Retailer meetings				Semi-urban
	Displays				Rural
	Van tours				Rural
	Hoarding and glow sign for outlets				Urban/Semi-Urban

vi. A description of each of the above-mentioned activities explaining its

objective, target group, and key components is stated as follows:

A. Outreach activities

Community Meetings: Meetings will be organized with married men and women in the reproductive age group and adolescents detailing the anatomy and physiology of the human reproductive system, pubertal changes during adolescence, use of contraceptive methods, and STI/HIV/AIDS prevention. Inter-personal communication techniques such as group discussions using visual aids and poster exhibitions will be used along with condom demonstrations to explain correct and consistent use of condoms for HIV/AIDS and STI prevention as well as family planning. Some of the participants will be asked to give a reverse demonstration of condom use.

Gram Panchayat Meetings: Gram Panchayat serve as gatekeepers and influencers for the village community. Meetings with them, as well as the rural community, will be organized in villages to highlight the use of condoms for family planning and HIV prevention. Field officers will organize these meetings in collaboration with the Gram Panchayat.

The field officers will organize these meetings, either Community or Gram Panchayat in their assigned areas.

SHGs/CBOs Meetings: Capacity building workshops will be conducted with like- minded CBOs and SHGs to refresh their knowledge on concepts of reproductive health and contraception. Lectures, in conjunction with the use of visual aids such as flip charts, posters, and body mapping exercises, will be used to communicate messages.

Youth Meetings: Similar meetings will be organized with the youth using various tool such as flip charts, posters, and lectures followed by discussions. Key messages delivered would be the use of condoms for the prevention of HIV/AIDS and unwanted pregnancy. Condom demonstration and reverse demonstration will be done to show the correct use of condoms.

Pieces of training: Block-level health functionaries such as Aaganwadi workers,ANMs, multi-purpose health workers, army, Para-military forces, will be provided trainingon correct and consistent use of condoms for HIV/AIDS prevention and birth spacing. Thiswill help train community leaders who would in turn carry the message to the community.

Door to Door Activity: Interaction with women in the reproductive age group will be ensured through the door to door activities. A survey will be carried out to find out the number of women in the reproductive age group in a locality, family size, and use of contraceptive methods. Based on the individual's situation, counselling on the use of condoms for HIV/AIDS prevention as well as birth spacing will be undertaken.

Poster Exhibitions: Posters will be put up exhibiting critical messages on HIV/AIDS, STI, contraceptive methods, and family planning, at project sites. The objective of these exhibitions would be to generate a discussion amongst the participants on the messages exhibited. Condom demonstration and reverse demonstration will also be followed toexplain the use of condoms.

Audio Visual Van: The objective of a van activity would be to penetrate into the interiors of remote villages and carry out educational activities with them on the use of condoms for HIV/AIDS prevention and birth spacing. Vans will be decorated colourfully with the DKT logo and key messages on HIV/AIDS and family planning. With the use of visual aids and communication materials, communities will be sensitized. Documentaries will be screened and jingles on relevant themes will be played. Ready stock of condoms will be carried in the van and supplied to the users on the spot.

B. MID MEDIA ACTIVITIES

Market Town Activity: Weekly markets are a routine affair wherein people from nearby areas gather for the sale and purchase of necessities. This serves as an ideal locationto reach out to a large group at one location. Herein, a variety of activities can be undertaken. These include – street plays/puppet shows/musical programs on relevant themes, and condom demonstrations. Further, a stall with an umbrella to display communication materials would be put up. Professional groups will be hired to put onstreet plays on a variety of pertinent themes.

Such activity can also be held at prominent public places such as bus stands, railway stations, and market places.

Slogan writing on walls: Painting of walls with key messages on family planning and HIV/AIDS and use of condoms will serve as a visual aid in disseminating information.

Painting Non - traditional outlets (NTO's) with messages: Painting NTOs with key messages on family planning and HIV/AIDS and the use of condoms will serve as a visual aid in disseminating information.

C. SALES RELATED ACTIVITIES

Retailer Meetings: Retailers are important stakeholders in the sale of condoms. Meetings with them will be organized to sensitize them on the importance of promoting condoms and to empower them to provide correct information on HIV/AIDS through the correct use of condoms. This will also help encourage retailers to stock and sell more condoms, particularly DKT India brands.

Displays: Retail outlets will be used to exhibit a display of POS material as well as DKT's brands of condoms. This will help improve condom visibility and enhance condom normalization. Special schemes will be carried out with the retailers who take part in the displays.

Van tours: Field sales personnel will carry ready stock of condoms into the interiors to ensure deep penetration and will book stock with retailers and also display POS material at the outlets. This will ensure the regular availability of condoms in small villages.

Hoarding and glow sign for outlets: Condom visibility at retail stores will be enhanced by putting up hoardings and glow signs at the outlets.

Key tools and methods used

The key tools employed during the abovementioned activities would be:

- Flip charts, posters
- Stickers, danglers, key chains, dispensers
- Brochures, banners
- Dildos
- Body mapping
- Street plays, magic shows, puppet shows, musical programs, audio-visual aid
- Lectures and interactive discussion.

Expected Outputs: The following outputs are expected to be achieved in the targeted districts in the states

- Achieving secondary sales targets assigned for each project state
- Opening new condom outlets thereby achieving the target for outlets stocking condoms as specified for each project state
- Ensuring visibility of condoms
- Disseminating information on prevention of HIV/AIDS and unwanted pregnancy through correct condom use

Monitoring Plan

Sales Monitoring: As part of its regular sales operations following aspects of the sales process will be tracked:

- Number of outlets covered
- Secondary sales at each outlet
- Number of new outlets opened

Each field employee will fill in a Daily Field Report (DFR) containing details of the retailer and POB. These details will be recorded and maintained at the respective state offices.

Activity Monitoring: Regular reports on the number and type of activities conducted and the number of people reached out to in each activity will be prepared. Another source of monitoring activities would be the number of IEC/POS material distributed during the activities. Reports will be generated for each activity.

Impact Monitoring: Based on regular monitoring, the progressive growth in sales of condoms and new outlets opened will be documented in the prescribed format.

Recommended format for documenting sales and outlets

	Output									
State	High prevalence					High fertility				
	sales	outlets	districts	avg sales	avg outlets	sales	outlets	districts	avg sales	avg outlets
Gujarat										
Uttar Pradesh										
Bihar										
Total						-	-	-		

6.2.6 Recommendation for using CSR Funds and induct Employer Support Health Service (ESHS) in Industry

- The researcher observed that there is no coordination between local health authorities, NGOs, and health workers with a corporate house even an industrial house does not allow to enter any outside person in his industry. They do not want any interference in his activities. They think that CSR funds are raised by his profit hence they will spend according to him. The researcher suggested issuing specific guidelines by state health authorities based on discussion with local health authorities &other stakeholders for useful and meaningful use of CSR funds. Government should properly conduct a need assessment (health specific) of that area and suggest corporate houses spend CSR funds accordingly.

Expectation from Employer

The industry with health facilities

- Treatment for the patient as per need
- Provide complete health coverage of his family
- Provide HIV/AIDS and other health-related care and support services to employees.
- IEC services through peer outreach

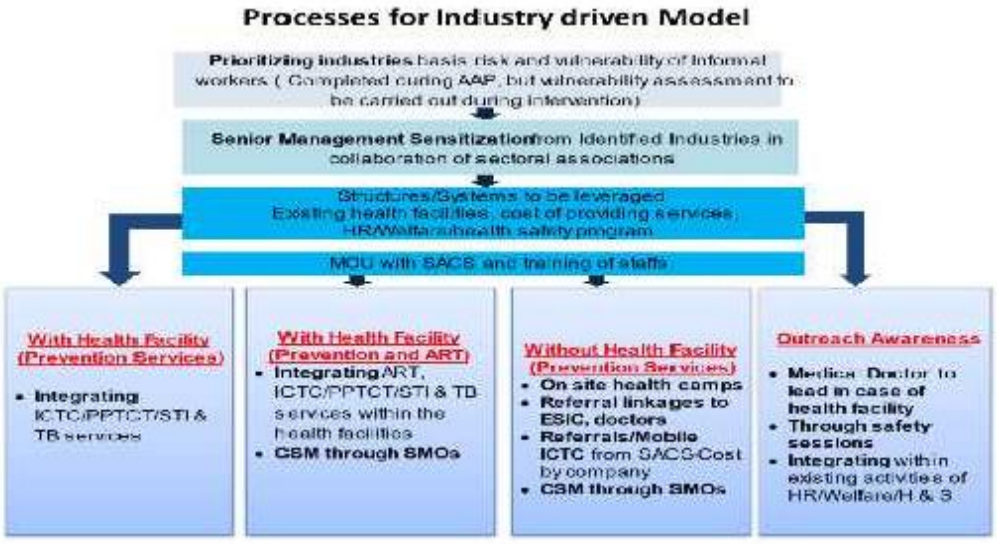
Industry without a health facility

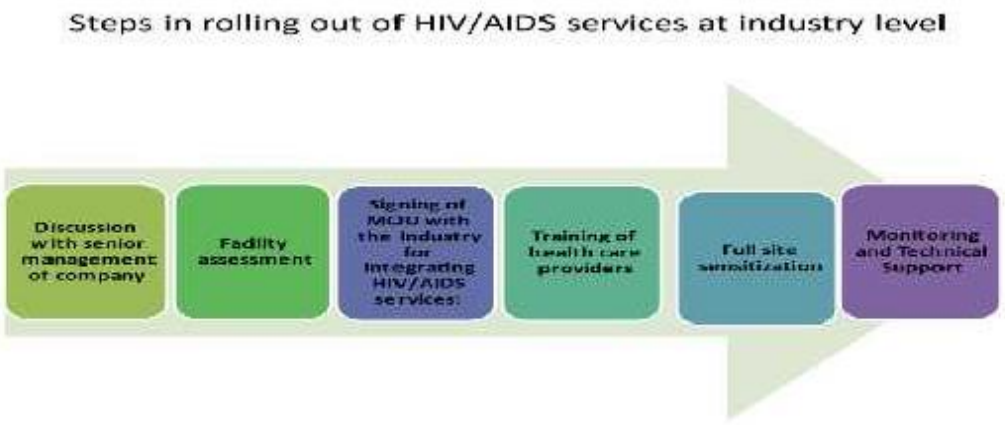
- Periodic Health camps
- Linkages with mobile/facility-based health centers
- Linkages with community health center
- IEC services through peer outreach

Process for implement Employer support health system (ESHS)

6.2.7 Recommendation for Implementing HIV/AIDS-related care and support services in Industries

The researcher also recommend simple menting HIV/AIDS-related in industries also in coordination with State AIDS control societies. For this, they need to implement the model as per the health facility facilities available in the workplace. Here researcher suggested the following models for industries-





6.2.8 Recommend launching an app having information of all the programs and schemes running by the government of India and services offered under the program

- During an interview with the respondent, the researcher comes to know that some of the people get benefited through the program and some of them not but they don't have an exact number that what type of health benefit they are getting and what type of support is required by the general population or industrial population. This one can easily capture if they prepare a line list of services. One can easily tell us about the health care facility he is getting in his area and what is required, the researcher suggests taking it on one server and prepare a database to strengthen services as per the need of that area.
- Government should launch an app for reporting of their health care workers for appropriate reporting. One should know about program status and the number of

beneficiaries at any point in time. At the same time, one should have enough information to plan of next activity for improving healthcare services & HIV/AIDS-related services.

6.2.9 There are clinics/hospitals run by the organization for their staff either at a workplace or them tie-ups with the private hospitals. The sole focus of this centre is to provide healthcare services to his workers and his family members. Butduring the survey researcher come to know that they are not fully equipped with all the health-related services, they are not linked at all with government agencies & employees of the company could not get complete health security/solutions from these centres. Hence researcher recommends linking all the centres with nearby government hospitals, community/primary health care centres so that one can get the benefit of those schemes also which are running by the government. If it is discussed in the context of HIV/AIDS-related services, it's hardly available in the OHC centre of an organization. They do not have even a Testing kit for HIV,any medicines available for HIV Patients. If someone is found positive, they are notable to work in an organization because they are not giving any special facility or relaxation at the workplace.

6.3 Managerial Implications:

- There are more than seventeen wings of health departments & more than 30 programs runs under the leadership of national health mission, but it has been observed that there is lack of coordination between these departments and their staff. All these departments run various healthcare schemes with the support of his staff & other stakeholders but due to lack of sharing knowledge and activities conducted at ground level general population are not getting benefitted of these schemes.
- As far as concern with HIV/AIDS related services offered by Gujarat state AIDS control society to migrant workforce is very effective but it was running through NGO partners of Gujarat in various district of Gujarat where migrant & industrial population is very high. They are providing all the services like monthly health camps, free medical supplies, and distribution of free condoms.
- But again, they are covering only few districts and population in clusters they are unable to provide services to all the industrial population of Gujarat. To provide

these services they need support on existing health infrastructure of Gujarat that includes network of ASHA and AAGANWADI workers, Link workers, staff deputed in Community health care centres, primary health care centres, sub centres & delivery points.

- Government should launch an app for reporting of their health care workers for appropriate reporting. One should know about program status and number of beneficiaries at any point of time. At the same time, we should have enough information to plan of next activity for improving healthcare services & HIV/AIDS related services.
- During interview with respondent researcher come to know that some of the people get benefited through program and some of them not but we don't have exact number that what type of health benefit they are getting and what type of support is required by general population or industrial population. This we can easily capture if we prepare line list of services. One can easily tell us abouthealth care facility he is getting in his area and what is required, we should take it on one server and prepare database to strengthen services as per need of that area.

6.4 Limitation of the Study:

Although the research work has yielded several contributions to the body of learning from the insightful of academic frame work and authorities several constraints need to be shared. The following dialogue aims to highlight the limitations along with recommendations to conquer:

- The researcher works on certain clusters and collects samples from a few GIDC of Gujarat, there are several other GIDC's in Gujarat, there is a need to collect samples from these other GIDC also. This will help to make out the point of view at a broader level and other parts of Gujarat.
- Sometimes it happened that the migrant workforce is not willing to reply or not in relax mood to reply and they hide the fact, which may impact the output of the survey.
- As the researcher belongs to Ahmedabad, Gujarat and it was not possible to cover entire Gujarat due to limited resources hence it has been suggested to conduct a survey in entire Gujarat and collect responses from each GIDC of Gujarat.

- Some of the industrial houses did not allow a researcher to survey his house because they were not willing to allow to conduct a survey hence it has been suggested to survey such type of industries.
- Due to the constraint of money and limited resources of manpower researchers reach out only to a limited area hence it has been suggested to conduct it at a broad level with sufficient manpower in micro rural and rural areas also.
- Some of the informal workforce which involve in sexual activities could not share correct information and try to hide the facts hence it has been suggested to hire professional outreach worker who is working in the field of HIV/AIDS and covering migrant population, sex workers should depute to conduct the survey.
- Respondents may is not competent to fill out the whole questionnaire due to some reasons and bias in certain cases.
- Sometimes researcher feels that support of industrial health and safety department, Gujarat state AIDS control society, Gujarat migrant cell, Local health administration, support of local NGO's working in the world of HIV/AIDS and the migrant worker is very much required to conduct this study, so it has been suggested to involve a representative from this department is required to conduct unbiased and correct information.

6.5 Scope for Further Research:

Considering the limitations and outlining an extension of research directions, the research work highlights certain future research:

- As simplification was one of the short comings of the study, therefore a similar study can be conducted in another geographic area of the country. Future studies should repeat the proposed model and perform further research to study the assemble in a wider geographical location.
- The researcher suggests conducting a study not only with industrial workers but their family members also so that the current status of healthcare services offered by the system can be evaluated.
- Still, there is a lot of stigmas, myths, and conceptions associated with HIV/AIDS hence it has been suggested to involve local stakeholders to conduct the study to evaluate and coming out bubbles concern with HIV/AIDS, which helps us to

remove the stigma associated with the subject.

- The researcher also suggested initiating a study by the Industrial health and safetydepartment at the national level to evaluate the exact status of general and HIV/AIDS-related health care services offered by industries to their workers
- The researcher also suggested conducting a specific study on migrant workers only in association with Migrant cells and NHM at the national level,so that one can evaluate services offered by the government and services availed by migrants at their source and destination.
- This study can provide a small picture of healthcare services offered and availed by the unorganized industrial worker, but migration is very high in Gujarat hence this type of study should conduct in other states also for improving gaps between services offered and availed by these groups.
- There is no standard tool available to identify the health meter of these groups hence one can plan research to develop standard guidelines as well as a tool to evaluate health care services offered by industries and evaluation on a periodical basis.
- HIV/AIDS prevention and cure is still a challenge for society in a rural area because sources are limited with government hence one should try to develop a model and doing study to provide HIV/AIDS-related service at door-to-door level.

****

References

- Aherne, M., & Pereira, J. (2008). Learning and development dimensions of a pan-Canadianprimary health care capacity-building project. Leadership in Health Services.
- Ancker, S., & Rechel, B. (2015). HIV/AIDS policy-making in Kyrgyzstan: a stakeholder analysis. Health policy and planning, 30(1), 8-18.
- Bharat, S., Ramakrishna, J., Heylen, E., & Ekstrand, M. (2014). Gender-based attitudes, HIV misconceptions and feelings towards marginalized groups are associated with stigmatization in Mumbai, India. Journal of biosocial science, 46(6), 717.
- Bhat,, J., & Yadav, P. (2017). Economic informal sector and the perspective of informal workers in India. Arts and Social Sciences Journal, 8(1), 1-9.
- Bora, R. (2014). Migrant informal workers: A study of Delhi and Satellite Towns. Modern Economy, 5(05), 562.
- Brown, T. A. (2014). Confirmatory factor analysis for applied research. Newyork: GuilfordPublications.
- Camlin, C., Kwena, Z., Dworkin, S., Cohen, C., & Bukusi, E. (2014). She mixes her business": HIV transmission and acquisition risks among female migrants in western Kenya. Social science & medicine, 102, 146-156.
- Campbell, , C., Scott,, K., Nhamo, M., Nyamukapa, C., Madanhire, C., Skvodal, M., & Gregson , S. (2013). Social capital and HIV competent communities: the role of community groups in managing HIV/AIDS in rural Zimbabwe. AIDS care, S114-S122.
- Casey, M., Payne, W., & Eime, R. (2012). Organisational readiness and capacity building strategies of sporting organisations to promote health. Sport management review, 15(1), 109-124.
- Chambre, S. (1997). Civil society, differential resources, and organizational development: HIV/AIDS organizations in New York City, 1982-1992. Nonprofit and Voluntary Sector Quarterly, 26(4), 466-488.
- Chambreé, S. (1995). Creating new nonprofit organizations as response to social change: HIV/AIDS organizations in New York City. Review of Policy Research, 14(1-2), 117-126.
- Dieleman,, M., Biemba, G., Mphuka, S., & Sichinga-Sic. (2007). 'We are also dying like any other people, we are also people': perceptions of the impact of HIV/AIDS on health workers in two distri.
- Ellis, L. L. (2007). The impact of HIV/AIDS on selected business sectors in South Africa. .
- Studies in Economics and Econometrics, 31(1), 29-52.
- Fabrigar, L. R. (1999). Evaluating the use of exploratory factor analysis in psychological research. Psychological methods, 272.

REFERENCES

- Fisher, E., Coufal, M., & Parada, H. (2014). Peer support in health care and prevention: cultural, organizational, and dissemination issues. Annual review of public health, 35, 363-383.
- Fraser-Hurt, N., MacLeod, W., Kufa-Chakezha, T., Phokojoe, M., Carmona, S., Puren, A., & Gorgens, M. (2016). Fast-tracking of the HIV response: do the metros lead the way to reaching 90-90-90 in South Africa?. Journal of AIDS and Clinical Research,
- .
- Galvão, J. (2005). Brazil and access to HIV/AIDS drugs: a question of human rights and public health. . American journal of public health, 95(7), 1110-1116.
- Gillard,, A., Witt, P., & Watts, C. (2010). Gillard, A., Witt, P. A., & Watts, C. E. (2010). An examination of staff-level stakeholders and organizational culture at a camp for youth with HIV/AIDS. Journal of Park and Recreation Administration, 28(3).
- Gosselink, C., & Myllykangas, S. (2007). The leisure experiences of older US women living with HIV/AIDS. Health Care for Women International, 28(1), 3-20.
- Haddad, L., & Gillespie, S. (2001). Effective food and nutrition policy responses to HIV/AIDS: what we know and what we need to know. Journal of International Development. The Journal of the Development Studies Association, 13(4), 487- 511.
- Kaufman, J. (2012). China's evolving AIDS policy: the influence of global norms and transnational non-governmental organizations. Contemporary Politics, 18(2), 225-238.
- Kenny, D. A. (2014). The performance of RMSEA in models with small degrees of freedom. Sociological Methods & Resarch.
- Mahal, A., & Rao, B. (2005). HIV/AIDS epidemic in India: An economic perspective.
- Indian Journal of Medical Research, 121(4), 582.
- Malhotra, & Das. (2009). Marketing Research - An Applied Orientation. Pearson Education Inc.
- Malhotra, N. K., & Briks, D. (2006). Marketing Research: An applied approach, 3rd Edition,. Prentice Hall.
- Misra, P., & Mohd, S. (2014). Urban informal sector and migrants. International Journal of Business and Administration Research Review, 2(4), 72-79.
- Mohapatra, K. K. (2012). Women workers in informal sector in India: understanding the occupational vulnerability. . International Journal of Humanities and Social Science, 2(21), 197-207.
- Mukherjee, P., Paul, G., & Pathan, J. (2009). Migrant workers in informal sector: A probe into working conditions. The Adecco-TISS Labour Market Research Initiative (ALTMRI). Discussion Paper Series. Discussion Paper, (9).
- Oo, S. (2018). HIV/AIDS-related Knowledge, Attitudes, Behavior and HIV testing status among Young People in Myanmar. (Doctoral dissertation, UCLA).
- Parahoo. (2006). Nursing Research: Principles, Process and Issues. Basingstoke,

Hampshire: Palagrave Macamillan.

- Parasuraman , A., Berry, L. L., & Zeithaml, V. A. (1991). Perceived Service quality as a Customer Based performance measure: An empirical examination of organizational barriers using an extended service quality model.
- Polit, D. F., Hungler, B. P., & Beck, C. T. (2001). Essential of Nursing Research: Methods,Appraisal and Utilization. Philadelphia: Lippincott.
- Rajabiun, S., Mallinson, R., McCoy, K., Coleman, S., Drainoni, M., Rebholz, C., & Holbert, T. (2007). Getting me back on track": the role of outreach interventions in engaging and retaining people living with HIV/AIDS in medical care. AIDS patient.
- Rajak, D. (2010). 'HIV/AIDS is our business': the moral economy of treatment in a transnational mining company. Journal of the Royal Anthropological Institute, 16(3), 551-571.
- Rau, B. (2006). The politics of civil society in confronting HIV/AIDS. International Affairs, 82(2), 285-295.
- Rhodes, T., & Simic, M. (2005). Transition and the HIV risk environment. Bm, 331(7510),220-223.
- Saunders, Thornhill, & Lweis. (2009). Research Methods for Business Students, 5th edition. Prentice Hall.
- Tanaka, J. (1987). "How big is big enough?": Sample size and goodness of fit in structural equation models with latent variables. Child Development, 134-146.
- UNAIDs, U. &. (2011). Global HIV/AIDS response: epidemic update and health sector progress towards universal access: progress report 2011. Global HIV/AIDS response: epidemic update and health sector progress towards universal ac.
- Unger , J., De Paepe, P., & Green, A. (2003). A code of best practice for disease control programmes to avoid damaging health care services in developing countries. The International journal of health planning and management, 18(S1), S27-S39.
- Unger, J. P. (2003). A code of best practice for disease control programmes to avoid damaging health care services in developing countries. . The International journal of health planning and management, 18(S1), S27-S39.
- Weaver, N., Wray, R., Zellin, , S., Gautam, , K., & Jupka, K. (2012). Advancing organizational health literacy in health care organizations serving high-needs populations: a case study. Journal of health communication, 17(sup3), 55-66.
- Wong, F., Campsmith, M., Nakamura, G., Crepaz, N., & Begley. (2004). HIV testing and awareness of care-related services among a group of HIV-positive Asian Americansand Pacific Islanders in the United States: findings from a supplemental HIV/. HIV testing and awareness of care-related services among a group of HIV-positiveAsian Americans and Pacific Islanders in the United States: findings from a supplemental HIV/, Vol 16. N0 5.

[INTENTIONALLY LEFT BLANK]

List of Publications

- Srivastava, S., & Patel, R. K. (2017). A study on prevention of mother to child transmission (PMTCT): ending pediatric HIV and keeping adolescent and young migrant woman workforce HIV negative. International Journal of Organizational Behaviour & Management Perspectives. 6 (2), 1-7.

- Srivastava, S., & Patel, R. K. (2019). A study on identification and treatment of Clubfoot patients among Rural and Marginal population of Uttar Pradesh. Journal of Emerging Technologies and Innovative Research (JETIR). 6 (2), 56-86.

[INTENTIONALLY LEFT BLANK]

QUESTIONNAIRE FOR EVALUATING HEALTH RELATED CARE AND SUPPORT SERVICES RENDERED TO THE INDUSTRIAL WORKERS OF GUJARAT

Contact information – (Industrial worker):

1) Name: [_____]

2) Gender: ( ) Male ( ) Female ( ) T.G. (LGBT)

3) Age: [_____] Years (Approx.)

4) Salary: [_____] Per Month (Rs./-)

5) Marital Status: ( ) Married ( ) Unmarried ( ) Divorced ( ) Widow

6) Family Status (at work location): ( ) Joint Family ( ) Nuclear Family ( ) Alone ( ) Other

7) Home Town (Native Place): [_____]

Information about industry:

8) Company Name: _____

9) City Name: _____

10) GIDC Name: _____

11) No. of Employees in Company (Approx.) _____

12) Year of Company Establishment (Approx.): _____

13)	Health facility status in your organization (tick anyone):	
A)	Organization without any Health/Medical Facilities.	( )
B)	Organization having Tie-Ups with Nearby Clinic/Hospital.	( )
C)	Organization with doctor on call for medical facilities.	( )
D)	Organization with appointment of regular doctor with clinical/hospital facilities.	( )

Sr.	Section I: Statement	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Agree Completely
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
I.1:	Organization conducts health check-up camps for workers periodically.							
I.2:	Organization also conducts medical check-up for family separately.							
I.3:	Organization offer health insurance to its employees.							
I.4:	Health Insurance Policy of the organization also covers the medical responsibilities of employee's family members.							
I.5:	Medical store facility available within company premises.							
I.6:	Prescribed medicines are available from medical store easily.							
I.7:	STI and HIV/AIDS medicines are available in the company's Medical Store on regular basis.							
I.8:	The Pathology Laboratory in the Organization is capable of advanced diagnostic tests for STI / HIV / AIDS related disease.							
I.9:	HIV/AIDS and STI test facility provided to all workers in organization periodically.							
I.10:	Condoms are regularly available in company's medical store.							
I.11:	Workers prefer to purchase condom from the company's medical store.							

Sr.	Section II: Statement	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Agree Completely
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
II.1:	Awareness campaigns help workers to understand HIV/AIDS related disease.							
II.2:	Education session helps in reducing the risk of HIV/AIDS among workers.							
II.3:	Early diagnosis of S.T.I. & their treatment reduces the risk of HIV among workers.							
II.4:	Frequently visit of health care workers (ASHA, LINK, AANGANWADI etc.) reduce the risk of STI & HIV/AIDS among employees.							
II.5:	Government / NGOs Linkages with Organization help to improve HIV/AIDS related disease control among employees.							

Sr.	Section III: Statement	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Agree Completely
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
III.1:	Government Doctors' visits the organization periodically.							
III.2:	Prescribed medicines by Government doctors are provided by pharmacist in mobile van.							
III.3:	Pathological spot testing done by medical mobile van periodically.							
III.4:	Testing reports share with workers within the standard time limits.							
III.5:	Counsellor takes appropriate action related to treatment prescribed by doctor.							
III.6:	Medicine of critical illness made available with mobile van.							
III.7:	Prescribed treatment shows significant improvement in patient health.							
III.8:	Proper facilities are offered by Integrated counselling and testing centre to patient suffering with HIV/AIDS.							
III.9:	Proper Facilities are offered by Anti-Retroviral therapy (ART) centre located nearby your organization.							

Sr.	Section IV: Statement	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Agree Completely
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
IV.1:	Organization offers Special relaxation in working hours for patients suffering from HIV/AIDS.							
IV.2:	Additional transportation facility is provided to work for patient suffering from HIV/AIDS.							
IV.3:	Health & hygiene is made available to employees of the organization.							
IV.4:	Supervisor offers special privileges (relaxation) to HIV+ workers because of his/her health status.							
IV.5:	Colleague behave normally with HIV+ worker at work place.							
IV.6:	Organization uses special performance appraisal format for HIV+ workers.							
IV.7:	Special wages are offered to workers suffering from HIV/AIDS.							

Sr.	Section V: Statement	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Agree Completely
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
V.1:	Organization offers family accommodation.							
V.2:	Group accommodation offered by company for bachelor employees.							
V.3:	Separate (individual) accommodation services are offered by company for bachelor employees.							
V.4:	Company offers entertainment facilities to workers for refreshment during the week-ends.							
V.5:	Sometimes for physical need workers tend to make sexual relation with non-spousal partners.							
V.6:	Owing to personal lives issues such as loneliness, family problems, Workers involve themselves in the extramarital affairs.							
V.7:	Workers having regular non-spousal sexual relations frequently change the partner.							
V.8:	Workers prefer using precautions (condoms) while making sexual relation with no-regular partner.							
V.9:	Worker's tendency of open discussion with other co-workers suffering from STI helps in his/her recovery.							

********** Thank You **********

ગુજરાતના ઔદ્યોગીક કામદારોને પ્રદાન કરેલ આરોગ્ય સભાળ અને સપોર્ટ સેવાઓના મુલ્યાકન માટેની પ્રશ્નાવલી.

સપર્ક માહીતી : (ઔદ્યોગીક કામદાર) :

1) નામ : (_____)

2) જાતિ : ( ) પુરૂષ ( ) સ્ત્રી ( ) અન્ય **(LGBT)**

3) ઉમર : (_____) વર્ષ (આશરે)

4) પગાર : (_____) દર મહીને (રૂા./–)

5) વૈવાહિક દરજજો : ( ) પરણીત ( ) અપરણીત ( ) છુટાછેડા ( ) વિધુર/વિધવા

6) કૌટુબીક વિગત : (કામના સ્થળે) ( ) સયુકત કુટુબ ( ) વિભકત કુટુબ ( ) એકલા ( ) અન્ય

7) વતન : (જન્મ સ્થળ) (_____)

ઉદ્યોગ (ઈન્ડસ્ટ્રીઝ) ની માહિતી :–

8) કપનીનુ નામ : _____

9) શહેરનુ નામ : _____

10) જીઆઈડીસી નુ નામ : _____

11) કપનીમા કામ કરતા કામદારોની સખ્યા. (અદાજીત) _____

12) કપની ચાલુ થયાના વર્ષ (અદાજીત) : _____

13)	**તમારી સસ્થામા આરોગ્ય સબધી સુવિધાઓનુ માળખુ (કોઈપણ એકમા ટીક કરો) :**	
A)	સસ્થામા કોઈપણ જાતની આરોગ્ય / તબીબી સુવિધાઓ નથી.	**( )**
B)	નજીકના દવાખાના / હોસ્પીટલ સાથે સસ્થાનુ સકલન છે.	**( )**
C)	ડોકટરને તબીબી સુવિધા માટે સસ્થામા બોલાવવામા આવે છે.	**( )**
D)	દવાખાના / હોસ્પીટલની સુવિધા સાથે સસ્થાએ ડોકટરની નિમણૂક કરેલ છે.	**( )**

અનુ.	વિભાગ – I : વર્ણન.	સંપૂર્ણ રીતે અસહમત	કદાચિત અસહમત	થોડા અંશે અસહમત	તટસ્થ	થોડા અંશે સહમત	કદાચિત સહમત	સંપૂર્ણ રીતે સહમત
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
I.1:	સસ્થા સમયાતરે સ્વાસ્થ્ય તપાસ કેમ્પ રાખે છે.							
I.2:	સગઠન ધ્વારા પરીવાર માટે પણ અલગથી સ્વાસ્થ્ય તપાસ કેમ્પ યોજાય છે.							
I.3:	સસ્થા તેના કામદારોને સ્વાસ્થ્ય વીમો આપે છે.							
I.4:	સસ્થાની આરોગ્ય વીમા પોલીસીમા કર્મચારીના પરીવારના સભ્યોને પણ આવરી લેવામા આવે છે.							
I.5:	કપનીની જગ્યામા દવાની દુકાન ઉપલબ્ધ છે.							
I.6:	ડોકટર ધ્વારા સુચવાયેલી દવાઓ સહેલાયથી દવાની દુકાનેથી મળી જાય છ.							
I.7:	એસટીઆઈ અને એચઆઈવી/એઈડસની દવાઓ કપનીની દવાની દુકાને નિયમીત રીતે ઉપલબ્ધ છે.							
I.8:	સસ્થાની પેથોલોજી લેબોરેટરી એસટીઆઈ / એચઆઈવી / એઈડસ જેવી બીમારીઓ માટેના આધુનિક પરિક્ષણો માટે સક્ષમ છે.							
I.9:	સસ્થાના તમામ કર્મચારીઓ માટે સમયાતરે એચઆઈવી/એઈડસ અને એસટીઆઈ પરીક્ષણની સુવિધા આપવામા આવે છે.							
I.10:	કપનીના મેડીકલ સ્ટોરમા કોન્ડોમ નિયમીતપણે ઉપલબ્ધ હોય છે.							
I.11:	કામદારો કપનીના મેડીકલ સ્ટોરમાથી કોન્ડોમ ખરીદવાનુ પસદ કરે છે.							

અનુ.	વિભાગ – II : વર્ણન.	સંપૂર્ણ રીતે અસહમત	કદાચિત અસહમત	થોડા અંશે અસહમત	તટસ્થ	થોડા અંશે સહમત	કદાચિત સહમત	સંપૂર્ણ રીતે સહમત
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
II.1:	જાગૃતિ ઝુબેશ કામદારોને એચઆઈવી સબધીત રોગો સમજવા માટે મદદરૂપ બને છે.							
II.2:	શૈક્ષણિક સશન કામદારોમા એચઆઈવી/ એઈડસના જોખમોને ઘટાડવામા મદદ કરે છે.							
II.3:	એસટીઆઈ નુ વહેલુ નિદાન અને તેની સારવાર કામદારોમા એચ.આઈ.વી.નુ જોખમ ઘટાડે છે. .							
II.4:	આરોગ્ય સભાળ કાર્યકરોની (આશા, લીક, આગણવાડી વગેરે) વારવાર મુલાકાત કર્મચારીઓમા એસટીઆઈ અને એચઆઈવી/ એઈડસના જોખમને ઘટાડે છે.							
II.5:	સસ્થાનુ સરકાર અને સસ્થાઓ સાથેનુ જોડાણ કામદારોમા એચઆઈવી/એઈડસ સબધિત રોગના નિયત્રણ કરવા માટે મદદ કરે છે.							

અનુ.	વિભાગ – III : વર્ણન.	સંપૂર્ણ રીતે અસહમત	દૃઢપણે અસહમત	થોડા અંશે અસહમત	તટસ્થ	થોડા અંશે સહમત	દૃઢપણે સહમત	સંપૂર્ણ રીતે સહમત
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
III.1:	સરકારી ડોકટર્સ સમયાતરે સસ્થાની મુલાકાત લે છે.							
III.2:	સરકારી ડોકટર્સ નિયત દવાઓ મોબાઈલ વાન માથી ફાર્માસીસ્ટ ધ્વારા આપે છે.							
III.3:	મેડીકલ મોબાઈલ વાન ધ્વારા સમયાતરે પેથોલોજીકલ સ્પોટ ટેસ્ટીગ કરવામા આવે છે.							
III.4:	પ્રમાણભુત સમયમર્યાદામા તપાસ રીપોર્ટ કામદારો સમક્ષ રજૂ કરવામા આવે છે.							
III.5:	ડોકટરની સલાહ મુજબ કાઉન્સેલર સારવાર સબધી યોગ્ય પગલા લે છે.							
III.6:	ગભીર બીમારીઓની દવાઓ મોબાઈલવાન સાથે ઉપલબ્ધ હોય છે.							
III.7:	યોગ્ય સારવાર દર્દીના સ્વાસ્થ્યમા નોધપાત્ર સુધારો દર્શાવે છે.							
III.8:	એચઆઈવી/એઈડ્સથી પીડાતા દર્દીને સકલિત પરામર્શ અને પરિક્ષણ કેન્દ્ર ધ્વારા યોગ્ય સુવિધાઓ આપવામા આવે છે.							
III.9:	તમારી સસ્થાની નજીક એન્ટી રેટ્રોવાઈરલ થેરાપી **(ART)** કેન્દ્ર આવેલ છે.							

અનુ.	વિભાગ – **IV** : વર્ણન.	સંપૂર્ણ રીતે અસહમત	દૃઢપણે અસહમત	થોડા અંશે અસહમત	તટસ્થ	થોડા અંશે સહમત	દૃઢપણે સહમત	સંપૂર્ણ રીતે સહમત
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
IV.1:	સસ્થા એચઆઈવી/એઈડ્સથી પીડાતા દર્દીઓ માટે કામના કલાકોમા ખાસ છુટછાટ આપે છે.							
IV.2:	એચઆઈવી/એઈડ્સથી પીડાતા દર્દીઓને કામ કરવા માટે વધારાની પરીવહન સુવિધા પુરી પાડવામા આવે છે.							
IV.3:	સસ્થાના કર્મચારીઓને આરોગ્ય અને સ્વચ્છતા પુરી પાડવામા આવે છે.							
IV.4:	એચઆઈવી+ કામદારોને તેની આરોગ્યની સ્થિતિને ધ્યાનમા રાખીને સુપરવાઈઝરો ધ્વારા ખાસ વિશેષાધિકારો (છુટછાટ) આપે છે.							
IV.5:	સહકાર્યકર કામના સ્થળે એચઆઈવી+ કાર્યકર સાથે સામાન્ય રીતે વર્તે છે.							
IV.6:	સસ્થા એચઆઈવી+ કર્મચારીઓ માટે ખાસ પરફોર્મન્સ મુલ્યાકન ફોર્મેટ ઉપયોગ કરે છે.							
IV.7:	એચઆઈવી/એઈડ્સથી પીડાતા કામદારોને વિશેષ વેતન આપવામા આવે છે.							

અનુ.	વિભાગ – V : વર્ણન.	સંપૂર્ણ રીતે અસહમત	કંઇપણ અસહમત	થોડા અંશે અસહમત	તટસ્થ	થોડા અંશે સહમત	કંઇપણ સહમત	સંપૂર્ણપણે સહમત
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
V.1:	સસ્થા કુટુબ આવાસની સુવિધા આપે છે.							
V.2:	બેચલર (એકલા) કર્મચારીઓ માટે કપની ધ્વારા ગ્રુપ આવાસ સુવિધા આપવામા આવે છે.							
V.3:	કપની ધ્વારા બેચલર કર્મચારીઓ માટે અલગ (વ્યકિતગત) આવાસની સુવિધા આપવામા આવે છે.							
V.4:	કપની ધ્વારા કામદારોને અઠવાડીયાના અતમા રીફેશમેન્ટ માટે મનોરજન સુવિધા આપે છે.							
V.5:	કેટલીકવાર શારિરીક જરૂરીયાત માટે કામદારો લગ્ન બાહય જાતિય સબધો બાધે છે.							
V.6:	વ્યકિતગત જીવનના મુદાઓ જેવા કે, એકલતા, કૌટુબીક સમસ્યાઓના કારણે કામદારો અનૈતિક સબધો તરફ જોડાય છે.							
V.7:	નિયમીત અનૈતિક જાતિય સબધો ધરાવતા કામદારો વારવાર જીવનસાથી બદલતા હોય છે.							
V.8:	કોઈ નિયમીત ભાગીદાર સાથે જાતિય સબધ બાધતી વખતે કામદારો સાવચેતીઓ (કોન્ડોમ) નો ઉપયોગ કરવાનુ પસદ કરે છે.							
V.9:	એસ ટી આઈ થી પીડાતા અન્ય સહકાર્યકરો સાથે ખુલ્લી ચર્ચા કરવાથી કામદારોના વલણ તેની / તેણીને પુનઃ પ્રાપ્તીમા મદદ કરે છે.							

********** આ ભા ૨ **********

PEZZOTTAITE JOURNALS

Volume 6, Number 2, April – June' 2017
ISSN (Print): 2279-0950, (Online): 2279-0969
SJIF (2015): 6.486, SJIF (2016): 7.185
H5-Index: 1, H5-Median: 1, H-Citations: 1

A STUDY ON PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT): ENDING PEDIATRIC HIV AND KEEPING ADOLESCENT AND YOUNG MIGRANT WOMAN WORKFORCE HIV NEGATIVE

Shirish Srivastava[1] Dr. Ritesh K. Patel[2]

ABSTRACT

The informal sector plays an important part of the Indian economy. More than 90 per cent of workforce and about 50 per cent of the national productivity are generated by this informal economy. The informal economy in India employs about 86 per cent of the country's work force. It has been observed that due to family responsibilities, other social stigma, and gender discriminations, Indian females are unable to take care of themselves. They are not getting equal rights in comparison to male and if we discuss in context of HIV/AIDS and sexually transmitted infection (STI), the problem becomes very actuate. Currently this community is facing triple problems, first-social stigma, second - family pressures and third most important women itself do not want to share her problems related to sexually transmitted infection and HIV/AIDS. When somebody want to talk about HIV/AIDS, Condom, STI, integrated counselling and testing centre , they don't reply even they show shyness and try to hide their problem related to this subject. This study helps to find solutions for prevention of mother to child transmission of HIV and also support to end paediatric HIV and keeping adolescent and young migrant woman workforce HIV negative. This informal industrial workforce due to poor literacy level don't know about the subject hence researcher would like to involve other stakeholders like corporate social responsibility manager of industries, Government organization, state AIDS control organization, social marketing organization for condom promotion and other institutes working over this subject. The researcher selected Naroda Industrial area of Ahmedabad and selected 100 female migrant workforce and based on their response conclusions and recommendations were drawn. This study will provide a path by that we can design a common minimum program to provide health related services including HIV/AIDS and STI to unorganized female workforce. We can depute various industrial development corporation, Social marketing organizations (SMOG), State AIDS Control Society (SACS), Non-government organizations (NGO). Gujarat Industrial Development Organization (GIDC) etc. to perform their role in the current infrastructure of health. Moreover, we can ensure availability and run awareness program for this group. In India, females are working in almost every informal sectors like agriculture, housemaid, mansion, industries, etc., but majority of them are not getting benefit of Insurance and other basic health facility even they are not getting proper medication and pressurised to work in unhygienic conditions. Hence, in the present research the researchers would like to explore some innovative ideas for improving the health status of female migrant industrial workers.

KEYWORDS

Female Informal Migrant Workforce, Sexually Transmitted Infection, Industrial Labour, Unorganised Sector, Social Stigma and Discrimination etc.

INTRODUCTION

Majority of workforce in India is from informal and unorganised sector. Between 2004-05 and 2011-12, total employment in the country emblem from 457.9 million to 472.4 million. At the same time employment in the organized, non-agricultural sector, defined to include all units with 10 or more workers if using power and 20 or more workers if not using power, rose from 28.8 million to 47.7 million; whereas, employment in the unorganized sector increased from 185.4 million to 209.6 million. That is organized sector employment tended at 6.3 per cent and 10.1 per cent respectively of total employment in 2004-05 and 2011-12. In absolute terms there were more who joined the unorganized sector's workforce than the number who joined the organised sector between the two years. When researcher discuss about females migrant workers a inequality part comes in picture where female are working as much as male but they are suffering more than male migrants. It has observed that they are working in workplace as well as bearing household responsibility.

An important aspect of quality of employment in India is the majority of the informal sector. The size of the organized sector, characterized by higher earnings and job security is small, it accounted for less than 6% of the total employment in 2004-05. Around two-thirds of the total organized sector employment is in the public sector. Over the years, organized sector employment has developed more slowly than the total employment, stunning the faster growth of employment in the unorganized sector. As a result, there has been increasing in-formalization of employment over the years.

[1]Scholar, Department of Management Studies, Gujarat Technological University, Gujarat, India, srvstv_shirish@yahoo.com
[2] Assistant Professor, Centre for Governance Systems, Gujarat Technological University, Gujarat, India, profriteshkpatel@gmail.com

HIV/AIDS and Sexually transmitted infection (STI) is one of the highly malignant disease, which effect now a day to informal female migrant. This group in unaware about disease and secondly they are not ready to share to anyone about this part.

The researcher would like to keenly work over this subject, present study aims to find out the solution to provide HIV/AIDS, and STI related services to female migrant workers in coordination with CSR division of organizations, GIDC associations, State AIDS Control Society and other Non-government organizations, which are working over this subject.

LITERATURE REVIEW

The informal economy in India appoints about 86 per cent of the country's work force and 91 per cent of its women workers (Report of the Committee on Unorganised Sector Statistics, National Statistical Commission, GOI, February 2012), many of these women workers are primary earners for their families. Their earnings are very much important for utter survival.

Women workers of Low income, mainly in the informal sector form is one of the most vulnerable groups in the Indian economy. The main reasons for their vulnerability are: (a) lack of regular employment (b) low monetary status (c) poor family background (d) lack of control over earnings (e) misbalancing in paid work with care for children and homework (f) poor access to institutional tribute, training and information.

A high majority of people in the developing nations are below poverty line. They are behind to fulfil their basic needs of life such health, education, housing, food, security, employment, justice and equality. Issues of sustainable livelihood, social and political participation of the vulnerable groups exists as the major problem in the developing nations. People who is from vulnerable groups are unable to attain and use their rights (Chatterjee and Sheoran, 2007). Vulnerable groups are insolvent as compared to others mainly on account of their reduced access to medical services and the underlying determinants of health such as safe and potable drinking water, nutrition, housing, sanitation etc. (Chatterjee and Sheoran, 2007).

Inter-district and inter-state short term migrant workers are yet another less fortunate group in labour market working for a subsistence living. In the state like Bihar, Orissa, Uttar Pradesh, Rajasthan, and Madhya Pradesh incidence of migration is high. Moreover, most of the studies also indicated that over the years incidence of such migration has increased giving significant rise to urban unorganised economy. A study by Kundu, Amitabh (2009) notes that "all these are leading to rapid growth in urban population in several countries, most of the migrants being absorbed within informal economy".

Indian economy has mass of informal and unorganised sector both in terms of number of workers and enterprises. This segment of economy has natural vulnerabilities, and the study of unorganised sector based on reliable data is important for informed decision making and addressing the problems faced .In various type of industries there is no precise information about the total number of female migrants in India. The women workers in the informal sector work as piece rate workers, self-employed workers, paid workers in informal enterprises, unpaid workers in family business, casual workers without fixed employers, sub-contract workers limited to formal enterprises.

Vulnerability Due To Migration

Inter-district and inter-state short term migrant workers are yet another less advantaged group in labour market working for a subsistence living. This population is at high risk for malignant diseases and faces reduced access to health services. In India, 14.4 million people migrated within the country for work purposes either to cities or areas with higher expected monetary gains during the 2001 census period. It has observed that huge number of migrants also work in the urban informal manufacturing construction, services or transport sectors and are employed as casual labourers, head loaders, rickshaw pullers and hawkers. The rapid change of residence due to casual nature of work dismisses them from the preventive care and the working conditions in the informal work arrangements in the city expel them from access to adequate curative care (Chatterjee and Sheoran, 2007). Women and child migrants are the most vulnerable. In the case of internal migration in India, women and children mostly migrate as concomitant migrants with the main decision to migrate being taken by the male of the household. As associated migrants, they suffer greater vulnerability due to reduced economic choices and lack of social support in the new area of destination. In the case of semi-skilled, low-skilled or unskilled women migrants, this can translate into their entry into the low paying, unorganized sector with high exposure to exploitation and abuse.

Women workers in informal sector within the class of workers treated as inferiors, determined by organizational factors to their social status and economically productive levels to which they belong to. In India, women workers in informal sector experience structural discrimination that impact their health and access to healthcare. In India, early marriage and childbearing affects women's health adversely. About 28 per cent of girls in India get married below the legal age and experience pregnancy. These have serious consequences on the health of women.

NEED FOR THE STUDY

This study will strengthen the female informal migrant workforce for providing HIV related services in their workplace in coordination with different stakeholders i.e. CSR division of organization, Various Government agencies working for HIV/AIDS, GIDC associations etc. The researcher also sensitize existing health infrastructure and health care provider over this matter by finding of study. Moreover, It has been also observed that informal female workforce are not fully catered with all the services provided by national AIDS control program, so to cover this population and provide all the services related to HIV/AIDS and STI, this study will definitely provide solution to reach out target population.

OBJECTIVES OF THE STUDY

The broad objective of the study is to ensure socio economic security, health security and better living status for these migrant female workers. The researcher would like to highlight the problems faced by these workers related with HIV/AIDS and STI. The researcher would like to explore the grass root level problem faced by these female migrant workers like hesitation to share about their sexual life to surveyor, multiple partner discloser (polygamy), sexuality, knowledge about condom, accessibility of condom, usage of condom, etc.

RESEARCH METHODOLOGY

The researcher has employed non-probability based convenience sampling method for collecting samples from the targeted population. A structured questionnaire with close-ended and open-ended questions were used for collecting data in the field. Looking at the nature of samples researcher has conducted personal one to one interview with samples and the data was filled appropriately in the questionnaire by the researcher himself. Initially the questionnaire was developed in English but in order to remove language barrier, it was converted to Gujarati Language for the easy understanding of questions for the respondents as most of them were undereducated or illiterate. The researcher personally with the help of local NGOs' councilor and program manager interviewed 100 female migrant workers wit he help of structured questionnaire. Out of which finally 80 questionnaires were used for the data analysis as 20 were discarded due to incomplete information.

DATA ANALYSIS

Profile of Respondents

Table-1: Age (Number of Years)

	Frequency	Percent	Valid Percent	Cumulative Percent
22 Years	2	2.5	2.5	2.5
30 Years	16	20.0	20.0	22.5
23 Years	22	27.5	27.5	50.0
25 Years	15	18.8	18.8	68.8
20 Years	13	16.3	16.3	85.0
33 Years	10	12.5	12.5	97.5
29 Years	2	2.5	2.5	100.0
Total	80	100.0	100.0	

Sources: Authors Compilation

Table-2: Income Slab (Personal Monthly Income in INR)

	Frequency	Percent	Valid Percent	Cumulative Percent
6000	17	21.3	21.3	21.3
7000	26	32.5	32.5	53.8
8000	22	27.5	27.5	81.3
9000	9	11.3	11.3	92.5
10000	6	7.5	7.5	100.0
Total	80	100.0	100.0	

Sources: Authors Compilation

Volume 6, Number 2, April – June' 2017
ISSN (Print): 2279-0950, (Online): 2279-0969
SJIF (2015): 6.486, SJIF (2016): 7.185
H5-Index: 1, H5-Median: 1, H-Citations: 1

Table-3: Literacy Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Illiterate	17	21.3	21.3	21.3
Up to Class 5	39	48.8	48.8	70.0
Class 6 to 10	6	7.5	7.5	77.5
Class 11 to 12	18	22.5	22.5	100.0
Total	80	100.0	100.0	

Sources: Authors Compilation

Table-4: Marital Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Unmarried	11	13.8	13.8	13.8
Married	69	86.3	86.3	100.0
Total	80	100.0	100.0	

Sources: Authors Compilation

Table-5: Number of Kids

	Frequency	Percent	Valid Percent	Cumulative Percent
Zero	30	37.5	37.5	37.5
One	10	12.5	12.5	50.0
Two	27	33.8	33.8	83.8
Three	13	16.3	16.3	100.0
Total	80	100.0	100.0	

Sources: Authors Compilation

Table-6: Home Town (Native Place)

	Frequency	Percent	Valid Percent	Cumulative Percent
Ahmedabad	17	21.3	21.3	21.3
Nadiad	4	5.0	5.0	26.3
Kadi	6	7.5	7.5	33.8
Anand	2	2.5	2.5	36.3
Rajkot	2	2.5	2.5	38.8
Gandhinagar	12	15.0	15.0	53.8
Gonda,U.P.	2	2.5	2.5	56.3
Bahraich,U.P.	2	2.5	2.5	58.8
Dahod	2	2.5	2.5	61.3
Mahesana	6	7.5	7.5	68.8
Banaskantha	2	2.5	2.5	71.3
Sabarkantha	10	12.5	12.5	83.8
Surendranagar	7	8.8	8.8	92.5
Bharuch	2	2.5	2.5	95.0
Vadodara	4	5.0	5.0	100.0
Total	80	100.0	100.0	

Sources: Authors Compilation

Volume 6, Number 2, April – June' 2017
ISSN (Print): 2279-0950, (Online): 2279-0969
SJIF (2015): 6.486, SJIF (2016): 7.185
H5-Index: 1, H5-Median: 1, H-Citations: 1

Table-7: Awareness about HIV/AIDS * Regular use of Condom Cross tabulation

			Regular use of Condom			Total
			Regular use of Condom	No Use of condom	NA	
Awareness about HIV/AIDS	Aware	Count	12	18	2	32
		% within Awareness about HIV/AIDS	37.5%	56.3%	6.3%	100.0%
	Not Aware	Count	2	23	23	48
		% within Awareness about HIV/AIDS	4.2%	47.9%	47.9%	100.0%
Total		Count	14	41	25	80
		% within Awareness about HIV/AIDS	17.5%	51.3%	31.3%	100.0%

Sources: Authors Compilation

Table-8: Chi-Square Tests

	Value	d.f.	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.117	2	.000
Likelihood Ratio	26.033	2	.000
Linear-by-Linear Association	22.760	1	.000
N of Valid Cases	80		

Sources: Authors Compilation

Table-9: Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.538	.000
	Cramer's V	.538	.000
	Contingency Coefficient	.473	.000
N of Valid Cases		80	

Sources: Authors Compilation

The Chi-square test revealed the significant association between the educational background of the female migrant workers and awareness of HIV/AIDS. From the Chi-square test output table we see that a significance level of 0.00(Pearson's) has been achieved. Thus we conclude that 95% confidence level, educational background of female migrant industrial workers and awareness of Hiv/Aids are associated significantly each other and there is a strong level of association between the two variables.

Table-10: Comparison between Awareness of Condom and Usage of Condom

Aware about Condom			Regular use of Condom			Total
			Regular use of Condom	No use of Condom	NA	
	Aware	Count	14	35	0	49
		% within Aware about Condom	28.6%	71.4%	0.0%	100.0%
	Unaware	Count	0	6	25	31
		% within Aware about Condom	0.0%	19.4%	80.6%	100.0%
Total		Count	14	41	25	80
		% within Aware about Condom	17.5%	51.3%	31.3%	100.0%

Sources: Authors Compilation

Table-11: Chi-Square Tests

	Value	d.f.	Asymp. Sig. (2-sided)
Pearson Chi-Square	58.420	2	.000
Likelihood Ratio	72.681	2	.000
Linear-by-Linear Association	47.729	1	.000
N of Valid Cases	80		

Sources: Authors Compilation

Table-12: Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.855	.000
	Cramer's V	.855	.000
	Contingency Coefficient	.650	.000
N of Valid Cases		80	80

Sources: Authors Compilation

Here Chi-square test revealed the significant association between awareness of condom and usage of condom by female migrant workers. From the Chi-square test output table we see that the significance level of 0.00(Pearson's) has been achieved. This means the Chi-square test is showing a significant association between the above two variables.

It shows that although having information about condom, female migrant workers are not using condom. This is the alarming situation as they are on high risk of HIV.

MAJOR FINDINGS

The researcher has observed that from the total sample size only 48% of female migrant workforce was aware about HIV/AIDS and rest 52% doesn't know about HIV. It has been observed that the female migrant worker who were illiterate, the awareness regarding HIV was only 11.76% and even after all the efforts put in by government regarding awareness activities the awareness in literate female migrant workers was still at 33.33% only. As condom is the only way of safe and secure sex and when we check this parameter with married women again awareness level about condom was at 68.12%. Hence, it is observed that the remaining 31.88% female migrant, who are still not aware about condom are still on the risk of HIV and STI. Hence, they are required to be trained about the benefits of correct and consistent usage of condom. One more vital outcome of the study was that only 55.56% literate migrant women know about mode of transmission of HIV and in illiterate community awareness level was only 15.09% this also puts this group in high-risk zone. These workers were not aware that their husband could transmit HIV to them. Awareness of integrated counselling and testing centre (ICTC) with three children was 23.08% % while the lady having one child the awareness level was only 20%. Although ladies who were aware about ICTC centre only 28.57% visited to ICTC centre with their husband for HIV testing

RECOMMENDATIONS

In line with above findings researchers recommends to conduct educational program on general health for female migrants and HIV/AIDS should be integrated part of topic. The researchers also suggest to improve awareness of HIV/AIDS in workplace, for this organization's corporate social responsibility division or human resource department should collaborate with local NGO, Community based organization (CBO) and other health workers like ASHA worker, Link workers etc. It has been also suggested to prepare HIV/AIDS work place policy manual in coordination with national / state agencies and it should be part of training manual of the organization. For example, when we ask about question of science with art student he will unable to reply or give incorrect answer, vice a versa same thing happen with science student when we ask about art stream questions to them. Hence, how can we expect the correct information of HIV/AIDS from illiterate / undereducated female migrant workers? Additionally, government should launch some innovative programs like mobile van having facility of video / audio show, general health check-up, etc. at labours colony as per availability of female migrants at their residence. Moreover, some voluntary educators should give primary education on health during weekdays to female migrants. The researcher recommends to launch specific program for female migrants for the education for sex and sexuality, condom promotion, sexually transmitted infections, etc. Extensive campaign for awareness of HIV and condom promotion should run by government so that usage of condom should increase for prevention of HIV/AIDS. Ensure availability of condom at workplace by installing condom vending machine and developing more number of free as well as paid condom outlets with in the walking distance of 10 minutes. Ensure to increase the number of clinic footfall by using better information, education and communication tools. The researchers also recommend drafting an

industrial policy for prevention of HIV/AIDS in concern with Labor welfare and industrial health and safety department to Ending Pediatric HIV and Keeping Adolescent and Young Migrant Woman Workforce HIV Negative.

LIMITATIONS AND SCOPE FOR FUTURE STUDY

Looking at the current findings of the study, it's very much clear that some innovative steps must be taken by government / policy makers to prevent transmission of HIV from mother to child to keep adolescent and young migrant woman workforce HIV Negative in Ahmedabad.

The researchers study was focused only on Naroda, GIDC of Ahmedabad due to limitations of financial and other resources. However, researchers recommends conducting similar type of studies in other .district like Surat, Rajkot, Bharuch, and Vadodara, Valsad, etc. where migration is very high and pattern is also very different. As long as Gujarat is concerned, there is high industrial growth, due to which female migrants are coming from different states like Orissa, Uttar Pradesh, Bihar, Madhya Pradesh, Kerala, etc., for earning their bread and butter and they live alone in workplace, these female migrant often make relationship with multiple partners for various economic and emotional motives. Furthermore, due to unawareness of HIV / AIDS they are infected by either HIV or STI and play the role of carrier to spread HIV to others, so we need to focus over this group and provide HIV related services by using the existing health infrastructure.

REFERENCES

1. A Statistical Picture: Employment Sector, *International Labour Organization*, Geneva, 2002.
2. Annual Report. 'People on Employment', GOI, Ministry of Labour and Employment, 1 July 2010.
3. Kundu, Amitabh. (2009). 'Urbanisation and Migration: An Analysis of Trend, Pattern and Policies in Asia, Human Development'. Research Paper 2009/16, United Nations Development Programme, NewYork.
4. Committee Report. 'Unorganised Sector Statistics', National Statistical Commission, GOI, and February 2012.

****

PEZZOTTAITE JOURNALS

TRANSFORMING EDUCATION FOR SOCIAL CHANGE & BUSINESS EXCELLENCE

A Series of Indexed and Refereed International Journals

Ref: CER/2017/IJOBMP/V6N2-08

June 28, 2017

Dear ***Shirish Srivastava, and Dr. Ritesh K. Patel***
[Dr. / Mrs. /Mr. / Ms.]

CERTIFICATE OF PUBLICATION

'**Pezzottaitè Journals**' has successfully brought out issues for **April - June' 2017**, in both formats i.e. 'Online' & 'Print' simultaneously.

Your submission titled "***A STUDY ON PREVENTION OF MOTHER TO CHILD TRANSMISSION: ENDING PEDIATRIC HIV AND KEEPING ADOLESCENT AND YOUNG MIGRANT WOMAN WORKFORCE HIV NEGATIVE***." got published in "***International Journal of Organizational Behaviour and Management Perspectives***" - An Indexed and Refereed Quarterly Journal, ISSN (Print): 2279-0950, ISSN (Online): 2279-0969, Volume: 6, Number: 2 (April to June, 2017), ***pp. 3161-3167.***

The submission is also available as 'Online' at www.pezzottaitejournals.net. User Name & Password to access your paper is: **ijobmpv6n2.** Please do not share online login details with anyone else.

SJImpact Factor of 'International Journal of Organizational Behaviour and Management Perspectives' - SJIF for (2012): 2.9, SJIF for (2013): 5.071, SJIF for (2014): 5.97, SJIF for (2015): 6.486, SJIF for (2016): 7.185

Index: H5-Index: 1, H5-Median: 1, H-Citations: 1

UGC Recommended List Journal Number: 47661

Print copy of journal is enclosed herewith this letter for your records. We are grateful to you for your valuable contribution. We firmly believe that your contribution will definitely cater to the need of academia and industry simultaneously. We look forward to have cherished association with you and your colleagues in near future; and do welcome your comments and suggestions.

We are also looking for any opportunity to get associated with you for publishing papers / articles submitted by participants in upcoming conference / seminar at your institution or nearby.

Kindly keep contributing your work in our journals on emails: callandinvitations@gmail.com or callandinvitations@pezzottaitejournals.net; and recommend us to your friends and colleagues for publications in our future issues.

Thanks and Regards

For PEZZOTTAITE JOURNALS

(Dr. Jain)

(Editor-In-Chief)

PEZZOTTAITE JOURNALS
TRANSFORMING EDUCATION FOR
SOCIAL CHANGE & BUSINESS EXCELLENCE

Registered Office: 24, Saraswati Lane, Bohri, Near Modern Dewan Beverages, Jammu Tawi, Jammu & Kashmir - 180002, India.
Mobile: (+91) 09419216270 / 71 www.pezzottaitejournals.net **Email:** contactus@pezzottaitejournals.net

A study on identification and treatment of Clubfoot patients among Rural and Marginal population of Uttar Pradesh

Mr. Shirish Srivastava
PHD Scholar, Department of Management Studies, Gujarat Technological University (GTU), Ahmedabad

Dr. Ritesh K. Patel
Assistant Professor,
Centre for Governance Systems (CGS),
Gujarat Technological University (GTU), Ahmedabad.

Abstract

Clubfoot is a congenital birth condition in which the foot (or both feet) of the child is turned inward. Approximately 1,50,000-2,00,000 children are born with clubfoot each year and 80-90% of these children are born in middle- and low-income countries that have inadequate access to treatment for the birth condition and healthcare in general. In India, the incidence rate is 1.2 per 1000 live births (source- CIA factbook) and around 35,000 children are born with clubfoot each year. The success rate of treatment depends upon the age at which child reaches the clinic, the earlier it is the more is the success rate. If the treatment starts right after birth, the success rate is expected to be at 95%. The research mainly focusses upon the major influencers/motivators, hindrances, access to treatment of clubfoot and healthcare facilities. Since the treatment runs for around 5 years, the dropout is quite often observed during the treatment and patients do not complete the full course due to various reasons which were highlighted during the research such as distance of the health facility, opportunity cost of lost wages etc.

Introduction

Clubfoot is a deformity in which an infant's foot is turned inward, often so severely that the bottom of the foot faces sideways or even upward. Approximately one infant in every 1,000 live births will have **clubfoot**, making it one of the more common congenital (present at birth) foot deformities. The condition is immediately visible at birth but can also be detected before birth by ultrasound Clubfoot is mainly idiopathic which means the cause of it remains unknown, genetic factors are believed to play a major role i.e. it can be passed down from mother or father to the child or if someone in the immediate family have this birth defect, chances are more that other family member also have this congenital birth defect. Gender also plays a major role and males are twice as likely as females to be born with clubfoot. Environmental factors may play a role. Research has found a link between the incidence of clubfoot and maternal age, as well as whether the mother smokes cigarettes, and if she has diabetes.

Uttar Pradesh is the most populous state of the second most populous country in the world and an average of 7000 children are born with clubfoot in the state of Uttar Pradesh. Majority of them belong to the rural areas where there is inadequate access to proper healthcare. Estimates are that 20% of the children born with

clubfoot receives treatment. The most suitable method of treatment is considered to be Ponseti method which is majorly non-surgical apart from a minor tenotomy procedure. Ponseti method tries to manipulate the position of the foot with the help of serial casting and after that through continuous use of foot braces.

The research have tried to find out the key influencers and motivators to the children's parents and the major hindrances in receiving the continuous treatment for clubfoot.

Need for the study

Children who are challenged physically are at a disadvantage in social and economic terms, in low- and middle-income countries. Educational and employment opportunities are reduced for the child and also mothers of these children spend more time looking after them leaving them having less time for other children and for agricultural, domestic and economic activities which ultimately hampers the living standard of such families. The prudent estimate of prevalence of clubfoot is approximately one in every 1000 live births. Some research suggests two in 1000 live births in some countries. Most of these children are receiving little or no treatment for their disorder for number of reasons including the following:

1. The clubfoot deformity is not recognised at birth: Many birth attendants and parents, particularly in the rural areas, are unaware that clubfoot deformity can be treated and the need for early treatment.

2. When recognised, there is no treatment available: Lack of trained local medical or paramedical workers make clubfoot treatment inaccessible for many families.

3. Inadequate treatment: Many medical personnel have not had an opportunity to upgrade their skills over the years.

4. Religious Beliefs: In some part of the rural communities, parents sometimes accept the disease as god's punishment and they don't treat it in medical ways.

Objectives of the Study

- To study the awareness of clubfoot among rural and marginal population of Uttar Pradesh.
- To understand the impact of social, economical and demographical barriers in treatment of the clubfoot.
- To understand the demographic profile of the patients affected by the clubfoot.
- To study the identification and subsequent course of action at the point of delivery for treatment of clubfoot by parents in rural area of Uttar Pradesh.
- To study the factors influencing discontinuation of the treatment of clubfoot among rural population of Uttar Pradesh.
- To study the role of health activists in identification and treatment of clubfoot in rural areas of Uttar Pradesh.

- To study the genealogical medical history of clubfoot among rural and marginal population of Uttar Pradesh.
- To study the impact of media for spreading the awareness of clubfoot among rural areas of Uttar Pradesh.
- To study the technology adaptation among rural and marginal population of Uttar Pradesh.

Research Methodology

Respondents for Parent's survey were selected through non-probability based Random Sampling. Prior to framing the questionnaire for parents of clubfoot affected children, researcher had informal discussions with 30 such parents. A detailed questionnaire was then prepared to conduct in-depth structured interviews of parents of Clubfoot affected children. The questionnaire comprised of sections such as classification, about the child, treatment, community and communication covering all broad aspects related to the study. The survey questionnaire was administered on 50 parents.

Pathways to Identify Clubfoot affected child

There is a possibility that the clubfoot of a child can be diagnosed during pregnancy but there is a 50-50 probability to it as the diagnosis depends on the proficiency of the radiologist/gynaecologist performing the check and also on the ultra-sonography machine they're using. While discussing with doctors about the diagnosis of Clubfoot during pregnancy, most of them told that many parents go for abortion in case it is detected during pregnancy and if abortion is possible at that point in time (usually during 18-20-week scan). Under Pradhan Mantri Surakshit Matritva Yojana, ultrasounds are being provided free of cost at some government health facility in a district at 3rd, 6th and 9th month of pregnancy. On 9th day of every month, mass check-up is being held for high risk pregnancies. Even if the birth defect is diagnosed during pregnancy, the treatment can only begin after birth. Since Clubfoot is a congenital defect i.e. it is present at the time of birth, it is commonly recognised by the doctors and paramedical staff, at the point of delivery, soon after birth just by having a look on the shape and position of the child's foot. At times, the doctor might request for X-rays to confirm the birth defect before starting the treatment or referring it to appropriate point of treatment. At CHCs, screening of new-borns is also undertaken by the two RBSK health teams present at CHC to identify if the child is born with one (or more) of the 31 selected health conditions listed under RBSK. If the identification is missed at the point of birth, during the initial 42 days of birth it can be detected by ASHAs as they visit the home of the new-born for post-natal care of the mother and child at regular intervals during the first six weeks of the baby being born. Also, they are entrusted with the responsibility of immunization and vaccination of children aged from 6 weeks to 5 years

so if the ASHAs are briefed properly to identify the birth defect, it can also be identified at the vaccination points and on the Village Health and Nutrition Day (VHNDs) which is being held every month at village level for immunization and vaccination of children. Apart from ASHAs, the Anganwadi workers can also play a vital role in identification of such children as children go to Anganwadi Centres during the age of 3-6 years, a play school as well as nutrition centre in a village. But Anganwadi workers need to be trained just like ASHAs to identify Clubfoot in children. Nodal teachers have also been appointed in Schools under RBSK who are entrusted with the responsibility to identify children born with those 31 selected health conditions. A brief training is also held for such teachers time-to-time whenever there is introduction of government schemes related to children aged 6-18 so that the health department can leverage the workforce and infrastructure of the Education Department. Also, under School 24 Health Programs of RBSK, Medical check-ups are held for children enrolled in Anganwadi Centres and Schools so that any deficiency, disease, defect or developmental delay including disability can be identified earlier and the child can be treated at an early age. A major limitation in identifying clubfoot at Anganwadi Centres and School is that not all the children are enrolled in the Anganwadis and Schools. Out of the children enrolled in these places, many of them are absent on a regular basis. So, the scope of identification is limited to the Enrolment Ratio and Absenteeism at these places. In a nutshell, following are the broad pathways to identify Clubfoot in a Children:

During Pregnancy

• through ultrasounds (50% probability of detection)*- available free of cost at specific points in a district At the time of birth • through Gynae/Paediatrician

• through Medical Officers, Gynaecologists, Paediatricians and RBSK teams at CHCs

• through Paramedical staff present at the Point of delivery If identification is missed at the point of birth-

• 0 days to 42 days... through Accredited Social Health Activist (ASHA)

• 6 weeks to 5 years • at Vaccination points through ASHAs (Village Health and Nutrition Days)

• 3 years to 6 years

• in Pre-schools through Anganwadi workers and RBSK team

• School Health Program under RBSK- mobile health team screening children in Schools.

Stages of Identification

Clubfoot can be identified during pregnancy by way of Ultra-sonography (by radiologists and gynaecologists) but the percentage of women going USG during pregnancy in the state of Uttar Pradesh is

30.8%, digging up further the data is even more skewed between urban and rural areas where the percentage of such women in rural areas is mere 26% and in Urban areas is 52.1%. Also, since the probability of identification is ~50%, there is high possibility of false negative results during identification of Clubfoot during pregnancy with more women going for ultrasounds during pregnancy. Also, there is also ethical issues surrounding identification of clubfoot during pregnancy as most of the rural population especially in the state of Uttar Pradesh are not literate enough to understand the risk associated with abortion of pregnancy. Many families may pressurise the girl to get the baby aborted even when the pregnancy is older than 20 weeks (the permissible limit for abortion as per law) without considering the risks associated with it which may further put the mother's life and health on risk. Birth: The birth of a child can occur at the following places in case it is an institutional delivery which is 56.7% of total deliveries in the state: (a) Government Hospitals (b) Private Hospitals (c) Trust Run Hospitals or (d) Home. For (a), (b), and (c)- the birth defect can be identified at the point of birth provided the postnatal check-up of baby is taken up by the doctor and paramedical staff diligently to screen birth conditions if the child is born with any.

For Home Deliveries which is 44.3% of total deliveries, the Skilled Birth Attendants and Unskilled Birth Attendants (Daai) are present at the delivery point so they are also vital in identification of Clubfoot if provided with proper briefing and training.

After Birth: During Post-Natal Care: ASHAs are associated with postnatal care in the rural areas. ASHAs visit the home of new born for initial six weeks for postnatal care of mother as well as the child. Also, apart from the home visits of new born babies, they also visit 3-4 homes on a daily basis as a part of awareness activities. They also motivate the masses for institutional deliveries and attending immunization and vaccination drives in the villages. Their incentives are also decided based on this and they get INRs. 600 for institutional delivery through them and ~Rs.150 for attending vaccination drives in the village.

The period of postnatal care is crucial and the baby and mother is under constant vigil of ASHA workers which becomes an important point at which Clubfoot can be identified early in childhood.

Vaccination: Village and Health and Nutrition Day (VHND) are held every month in the village for the vaccination and immunization of children of age 6 weeks to 5 years. Initially, the frequency of vaccination is more and later in years it becomes less frequent. These vaccination points are also critical as children would be visiting these places so it also becomes an important place to identify early the children born with clubfoot. But the limitation with vaccination point is that not all the children born are fully vaccinated and the full immunization of rate differs place to place depending upon the literacy rate, health facility coverage and other related indicators.

According to WHO guideline, "Complete or full immunization" coverage is defined as a child has received a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis and

tetanus (DPT); at least three doses of polio vaccine; and one dose of measles vaccine. The full immunization rate in Uttar Pradesh is 51.1% which means out of 100 children born, ~57 children are getting all the vaccinations mentioned above.

Pre-school (Anganwadi): Under RBSK, the Child Health Screening and Early Intervention Services envisage to cover the 30 listed health conditions in RBSK. Under RBSK, these health conditions are detected, treated and managed (follow ups) for free through the 2 dedicated mobile health teams in every block in the country. The teams screen the children enrolled in Anganwadis at least twice a year. Children who will be diagnosed with any of the 27 to 30 health conditions, clubfoot being one of them, would receive follow up referral support and treatment including surgical interventions at tertiary level free of cost. Micro plan is assigned to the health teams at the beginning of the year for the coverage of Anganwadi Centres village to village. Since Clubfoot is also one the 30 health conditions mentioned under RBSK, it becomes duty of the RBSK team to screen and refer children to the point of treatment. It becomes essential to provide them with proper support through our clubfoot clinic so that more and more patients are referred by the RBSK teams. School: Children from 6 to 18 years of age studying in Government and Government aided schools would also be receiving regular check-ups by the mobile health teams under RBSK.

Technical People to Target

Pregnancy Stage- Gynaecologists and Radiologists

Birth Stage

Public Health Facilities District Hospitals-Gynaecologists, Paediatricians and Paramedical Staff Community Health Centres- Doctors, Gynaecologists, Paramedical Staff and RBSK Mobile Health Teams Primary Health Centres- ASHAs and ANMs Private Facilities- Gynaecologists, Paediatricians and Paramedical Staff Home Delivery- Skilled Birth Attendants, Unskilled Birth Attendants, ASHAs, ANMs After Birth Stage Post-natal care- ASHAs, ANMs Vaccination-ANMs, ASHAs and Anganwadi Workers Pre-school- Anganwadi Workers and RBSK Mobile Health Team.

Gynaecologists/Obstetrician

A gynaecologist is a doctor skilled in the treatment of women's diseases especially those of reproductive organs (of women who aren't pregnant) and Obstetricians also deals with pregnant women and are also associated with prenatal check-ups and also with the deliveries. Since it is the first point where a pregnant woman reaches in case of check-up or in case of complication, it becomes an important first point of detection for any birth defect including clubfoot either during USG during pregnancy or at the time of birth.

Radiologists are the specialist doctors who are also entrusted, along with obstetrician, with prenatal check-ups of Pregnant women through USG. It is also one of the first point of detection of any birth defect including clubfoot by way of USG.

Paediatricians are specialist doctors who specializes in the care of children. So, if a child gets sick, it would be visiting a Paediatricians. It can also be seen in the preliminary findings of the Parent's survey that 12% of the children were identified by paediatricians. Since the immune system of child is not that strong in the early age, there are chances that he may suffer from minor ailments at early age and visits Paediatricians for treatment. So, it becomes necessary to equip the paediatricians with basic knowledge of Clubfoot, it's treatment, advancement in treatment, the free treatment under RBSK

Orthopaedic Surgeons An orthopaedic surgeon is a surgeon who has been educated and trained in the diagnosis and preoperative, operative and post-operative treatment of diseases and injuries of muscoskeletal system. They may be practicing solo or in multi-speciality group or in a super-speciality or multi-speciality hospitals. In big cities, there might be a possibility that one may find paediatric orthopaedic who are specialist orthopaedic surgeon dealing with diagnosis and preoperative, operative and postoperative treatment of diseases and injuries of muscoskeletal system of 29 children. They are the specialist doctors dealing with the birth defect of Clubfoot. Paediatric orthopaedic is a concept of big cities in India. And in tier 2 or tier 3 cities, simple orthopaedic surgeons are treating children also. Orthopaedic surgeons are the specialist doctors who treats clubfoot.

Paramedical Staff General Nurse and Midwife and Auxiliary Nursing Midwife are the general paramedical staff available at Hospitals. Apart from them there can be assistants of doctors and emergency medical technicians in case of Private Hospitals.

Skilled Birth Attendants A skilled birth attendant is a health professional who provides emergency as well as basic care to pregnant women and their new born babies during pregnancy, delivery and are also associated with post-natal care. A skilled birth attendant can be a GNM, ANM, Obstetrician or a Nurse.

Unskilled Birth Attendants or Traditional Birth Attendant The daai, or traditional birth attendant (TBA) is still the primary health care provider during times of pregnancy and childbirth in much of the Rural India and also in Uttar Pradesh. In the preliminary findings of the Survey, 20% of the children were born at Home under supervision 30 of a Traditional Birth Attendant. A TBA is typically an older or widowed woman and draws upon years of experience and generations of traditional knowledge for her delivery practice.

ASHA Accredited Social Health Activists are incentive-based community health workers instituted by the Indian Government's Ministry of Health and family Welfare as a part of National Rural Health Mission. An ASHA is selected from the community itself and is accountable to it. The ASHAs are trained to work as an interface between the public health system and the community. They are primarily entrusted with the

responsibility of motivating the community for institutional childbirth, facilitating other healthcare services, attending immunization camps and building awareness about healthcare entitlements. They are paid on the basis of these two things usually, ~Rs. 600 per institutional delivery through them and ~Rs. 150 for attending immunization drive with a bare minimum of Rs 1000 per month. Under RBSK operational guidelines also, ASHAs will be coordinating with the health teams for early detection and treatment of the 30 selected health conditions. There is 1 ASHA volunteer for every ~1000 of population. For a group of ~20 ASHAs, there is one ASHA Sangini whose main role is to supervise the ~20 ASHAs and conducting a monthly meeting of these ASHAs to discuss the happenings of the month and to fix agenda for the next month. Monthly meetings of ASHAs are also held at block level once a month with Health Education Officer, Medical Superintendent and MO/IC to brief them about new schemes and initiatives and also to monitor their performance.

Anganwadi Worker Anganwadi is a type of rural child care and nutrition centre in rural India. Anganwadi workers have specified responsibilities under the guidelines such as active participation in executing the program (Integrated Child Development Services Program) to combat child hunger and Malnutrition, organizing pre-school activities, providing of health and nutrition education to families esp. pregnant women etc.

Preliminary Findings of the Survey & Significant Hindrances in the Treatment

Profile of Families

The families so interviewed were classified into categories R1, R2, R3A, R3B, R4A, R4B based on the education level of the chief wage earner and type of house (kaccha, pucca and semi-pucca) that they were living in currently. The matrix used here has been developed by to segment rural customer base.

Following is the definition of Pucca, Kaccha and SemiPucca House:

Pucca House: Pucca house is the one of which predominant materials of wall and roof are as given below: a. Wall: Burnt bricks, G.I. Sheets or other metal sheets, stone, cement, concrete etc. b. Roof: Tiles, slate, corrugated iron, zinc or other metal sheets or asbestos, cement sheets, burnt bricks, lime stone RBC/RCC etc,

Kaccha House: A house with mud, thatch walls and thatch roofs, i.e., walls made of grass, leaves, reeds etc., and roof or similar materials.

Semi-Pucca: Houses which do not fail within the pucca/ kutcha category, generally such houses will have either the wall or roof of pucca material. Most families (32%) from the sample were from R2 category

followed by R1, R4A, R3A, R3B and R4B. Telephonic Interviews were also conducted to set off balance between Rural and Urban population and to include diverse set of families in the survey.

Table 1 : Economic Profile of Families (Respondents)

Education of Chief Wage Earner (CWE)	Type of House (Residence)		
	Pakka	Semi-Pakka	Kachha
Illiterate	R4A	R4A	R4B
Below SSC (Std. X)	R3A	R4B	R4A
SSC/HSC	R2	R3A	R3B
Attended College (But not Graduated)	R1	R2	R3B
Graduate / Post-Graduate (General)	R1	R2	R3A
Graduate / Post-Graduate (Professional)	R1	R2	R3A

There were 42% respondents living in urban areas and 58% in Rural area. R1 18% R2 30% R3A 16% R3B 12% R4A 16% R4B 8% Socio Economic Classification of Families

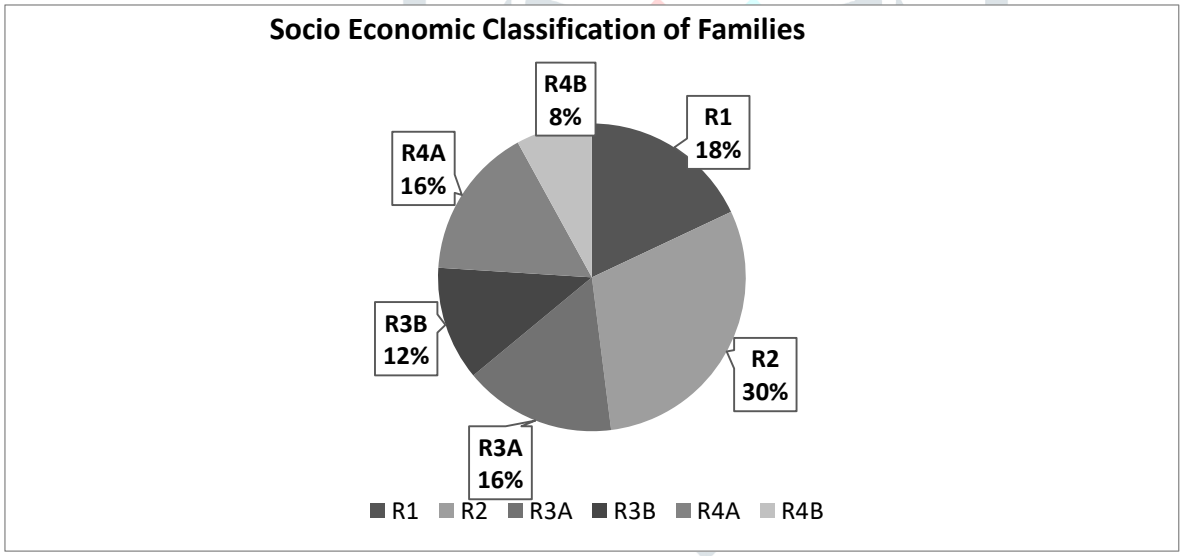


Figure 1: Socio-Economic Classification of Familites

Figure shows Socio Economic Classification of Families, Basis of Socio-Economic Classification **(Source-MRSI, The New SEC System 2011 34 16.2. Profile of Families)**

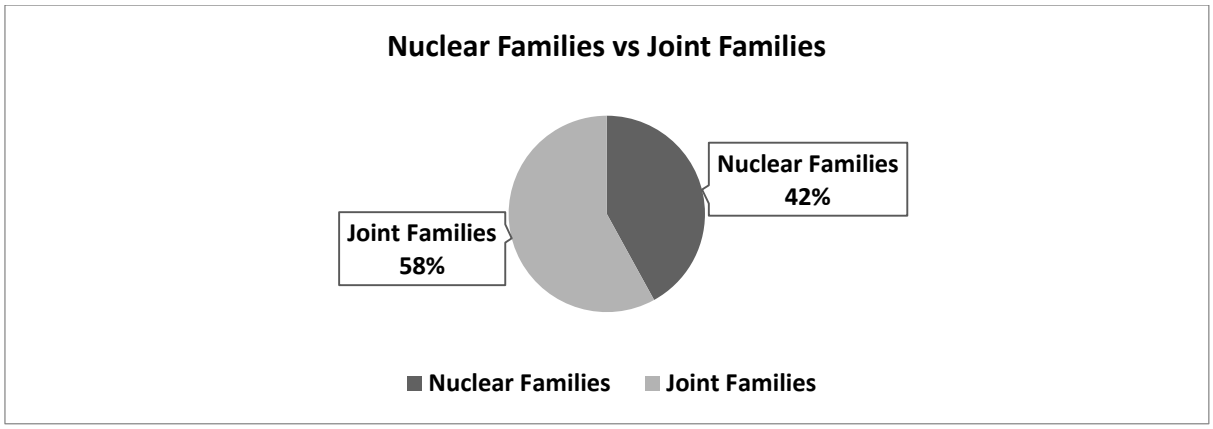


Figure 2: Type of Family

There were 58% joint families and 42% nuclear families which is a good representative of the general population as most of the families in Uttar Pradesh are joint in nature and the family lives together. Families living in the same house and having different kitchen have also been considered joint families by the respondents and also in the survey questionnaire. Having joint families significantly lessen the burden of care of children in case of emergency and also financial help is also available through inside the family which further reduces the risk of borrowing the money for healthcare from outside.

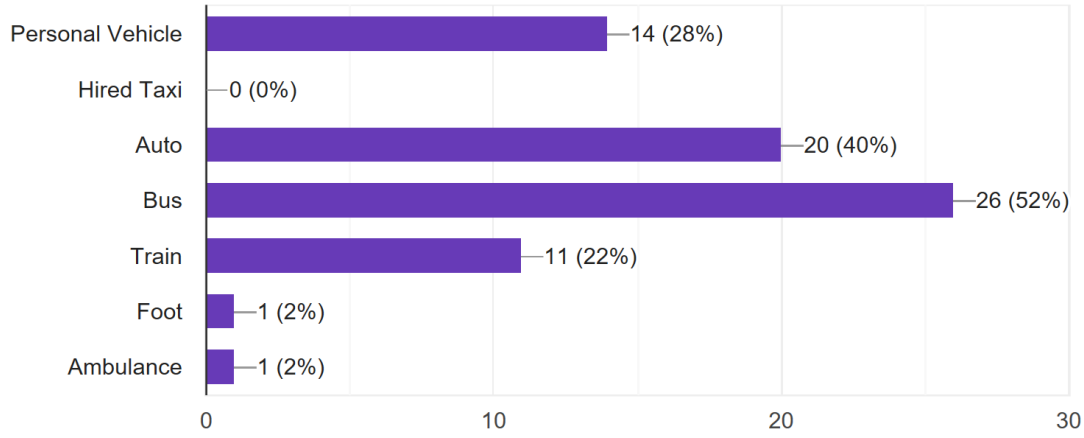


Figure 3: Type of Transportation to commute for treatment

Most of the patients used bus service to come to the clinic, around 52% used it. 40% of the patients used Autos. 28% used personal vehicles and cited that it saved them time. 22% of them used train, one patient used the 108-ambulance service to come to the clinic. In the recent orders of the government, it would now be possible for patients to travel between districts through ambulances for cases listed under RBSK. The questions had multiple responses so the total of percentages might not add up to 100%

Profile of Families-Sources of Income

Most respondents were salaried employees or daily wage labourers (76% of total respondents) and this was one of the main reasons of dropouts and missing appointments in the clinic as 58% of the total population was rural in the sample and also the patients were coming from far off places, it was seen that wages of 1-2 days were lost per week during the active phase of treatment.

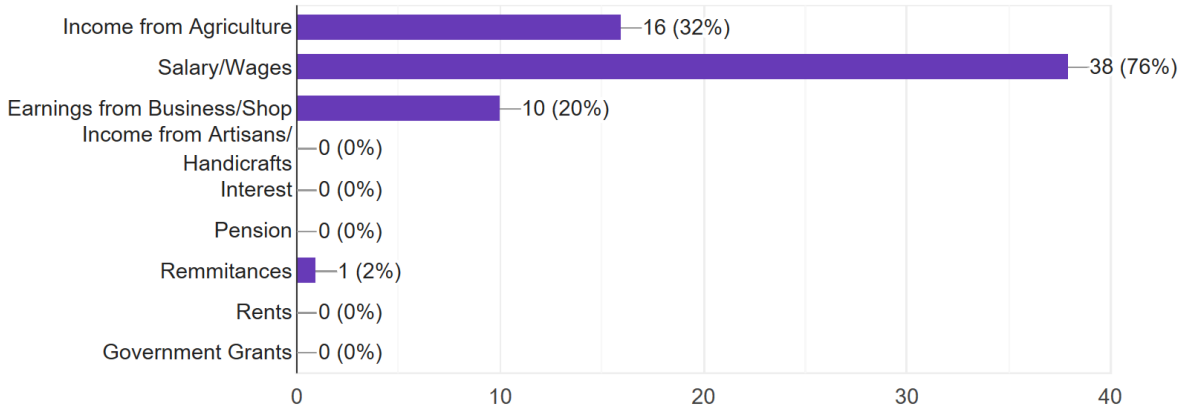


Figure 4: Economic & Earning Profile of Families

The below figure shows profile of Families Borrowings for healthcare in last one year. Since most of the families were joint families and treatment of clubfoot is free under RBSK, not many of the patients borrowed money from outside. Small sum of money borrowed internally from family members are not considered as borrowings and this is the reason most of the respondents did not take loan in last one year for healthcare.

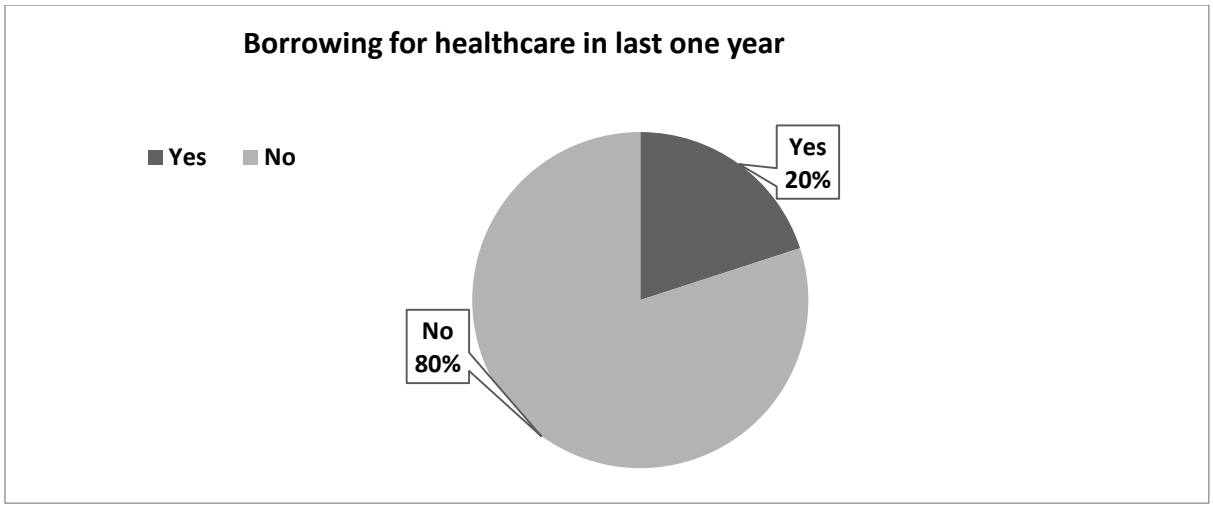


Figure 5: Borrowing for healthcare in last one year

Awareness about both the birth defect Clubfoot and the Government Scheme- Rashtriya Bal Swasthya Karyakram (RBSK) is minimal among the parents of the clubfoot affected children. There were many patients found during the survey who initially thought the deformity to be Polio and thought its untreatable. Also, it was general perception of the people that treatment of Clubfoot is very expensive as most of them first enquired it from a private orthopaedic clinic. Unawareness about the free treatment of Clubfoot under RBSK was major setback that the footfall of the Clinics Knew about RBSK 20% Did not know about RBSK 80% Awareness about RBSK Yes 20% No 80% Borrowing for healthcare in last one year

Awareness about Clubfoot is not as much as expected. Once the information regarding free treatment under the aegis of government is disseminated to the masses of Uttar Pradesh, the clinics will have their footfalls increased.

Family History of Clubfoot

As genetics is one of the causes of clubfoot as indicated by various researches, a question to enquire the same was also included in the questionnaire and only 8% of the total parents surveyed had someone in their family who also had/has clubfoot. One of the children was adopted and not biological. 2 of the 50 children had someone in their immediate family who had clubfoot and 2 had someone in their extended family. No One 90% Adopted Child 2% Extended Family 4% Brother 2% Mother 2% Family History of Clubfoot

Awareness about RBSK Never heard about Clubfoot before 84% Heard about Clubfoot 16% Awareness about Clubfoot Figure 20 Awareness about Clubfoot

Delayed Treatment

Most of the parents (around 76% of all respondents) started the treatment of their children in the initial 3 months only followed by 3 to 6 months (10%), 6 to 9 months (10%) and 12+ months (4%). The first point of treatment is either the nearest health facility, government or private, or a private orthopaedic surgeon where the cost of treatment is much higher than a public health facility.

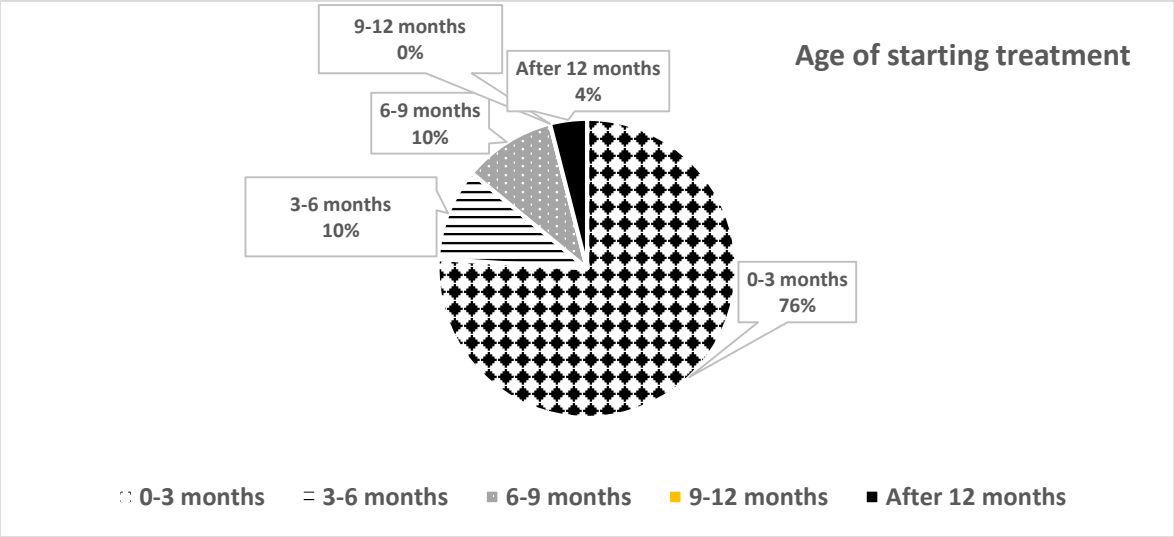


Figure 6: Age of Starting the Clubfoot Treatment

Access to healthcare

Yes 90% No 10% Patients Comfortable contacting clinic with doubts Yes 90% and No 10%. Sufficient information to look after the cast Government Hospital 20% Private Hospital 20% Trust Run Hospital CHC 2% 20% PHC 38% Nearest Health Facility Less than 10 kms 82% 10-20 kms 14% 20-30 kms 2% More than 40 kms 2% Distance of Nearest Health Facility.

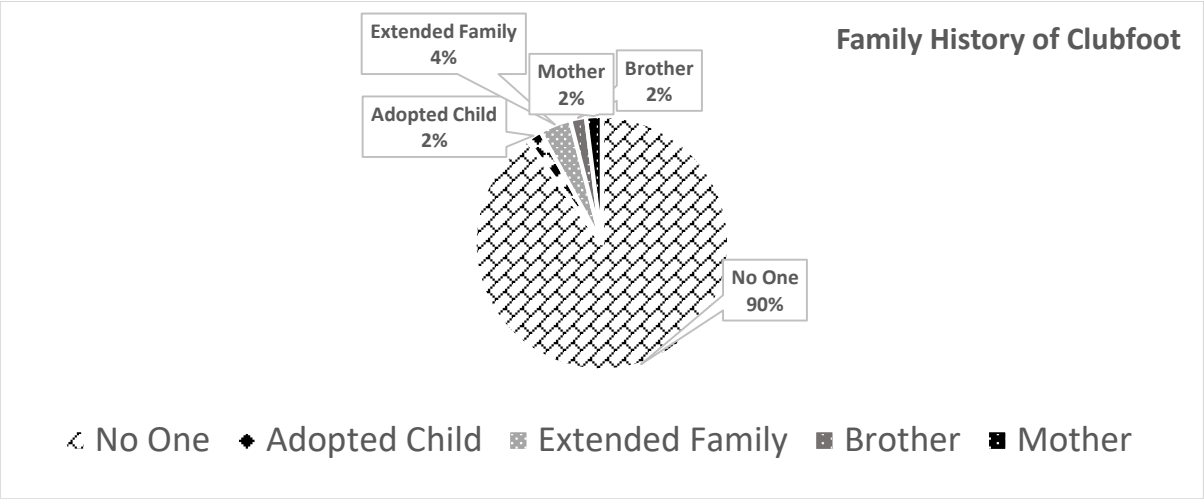


Figure 7: Family History of Clubfoot (Disease)

Most of the children (84% of all respondents) reached Clubfoot Clinic in the initial stage of casting only. Casting in Clubfoot Clinic is free, it works as an incentive for the parents to get enrolled in treatment as early as possible.

Distance of Nearest Health Facility

Since PHC is the most basic unit of healthcare in the 3-tier healthcare system, most of the patients (38% of all respondents) had it nearest to their homes followed by equal proportion (20%) of CHC, Government Hospital (DH) and Private Hospital. One patient also had trust run hospital in the near to his respective residence.

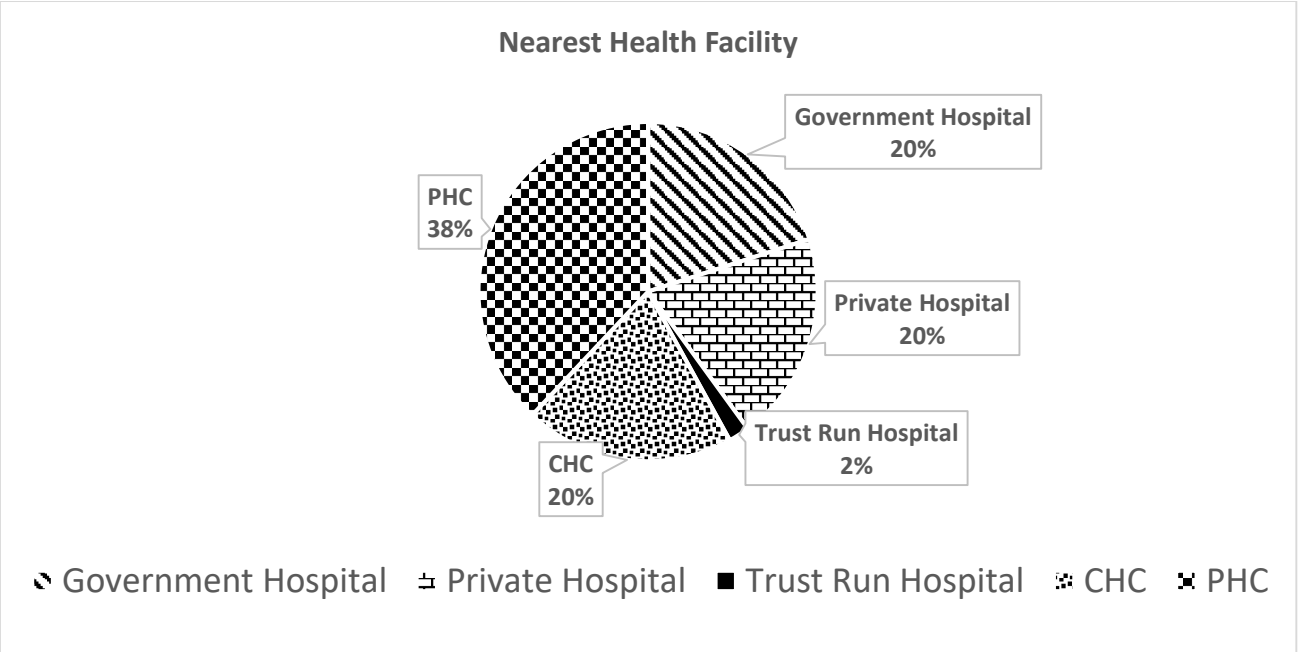


Figure 8: Nearest Health-Care Facility

Currently majority (52% of all respondents) of the patients travelled more than 40 kms to reach the clinic, this also included some patients travelling 250+ kilo meters every week to get the casting done. Near to one-fourth of the patients had the clubfoot clinics less than 10 kms from their home, for 10-20 kms, 20-30 kms and 30-40 kms bracket there were 16%, 8% and 2% respondents respectively. Similarly, time taken to reach the clubfoot clinic, it took more than 3 hours to 18% of the patients to reaching the clinic. It also Less than 1 hour 35% 1-2 hours 25% 2-3 hours 22% More than 3 hours 18%

Time taken to reach Clubfoot Clinic

Distance of Clubfoot Clinic - Time taken to reach Clubfoot Clinic Less than 10 kms 22% 10-20 kms 16% 20-30 kms 30-40 kms 8% 2% More than 40 kms 52%

Distance of Clubfoot Clinic 40 includes patients travelling 7 hours from places as far as Pratapgarh and Allahabad. 35% of the patients travelled one hour or less, 25% travelled between 1 to 2 hours and 22% travelled 2 to 3 hours to reach the clubfoot clinic. With the launch of new clinics, the travel time will also be reduced and positive impact can be expected on the dropout rates.

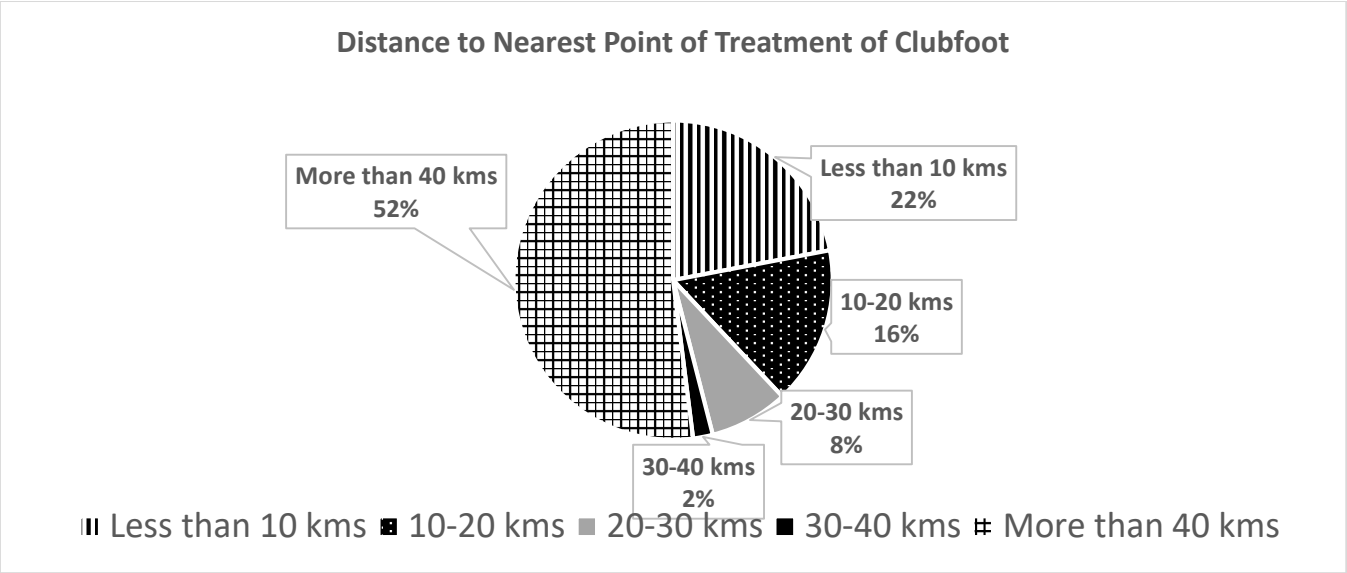


Figure 9: Distance to nearest Point of Treatment of Clubfoot (Disease)

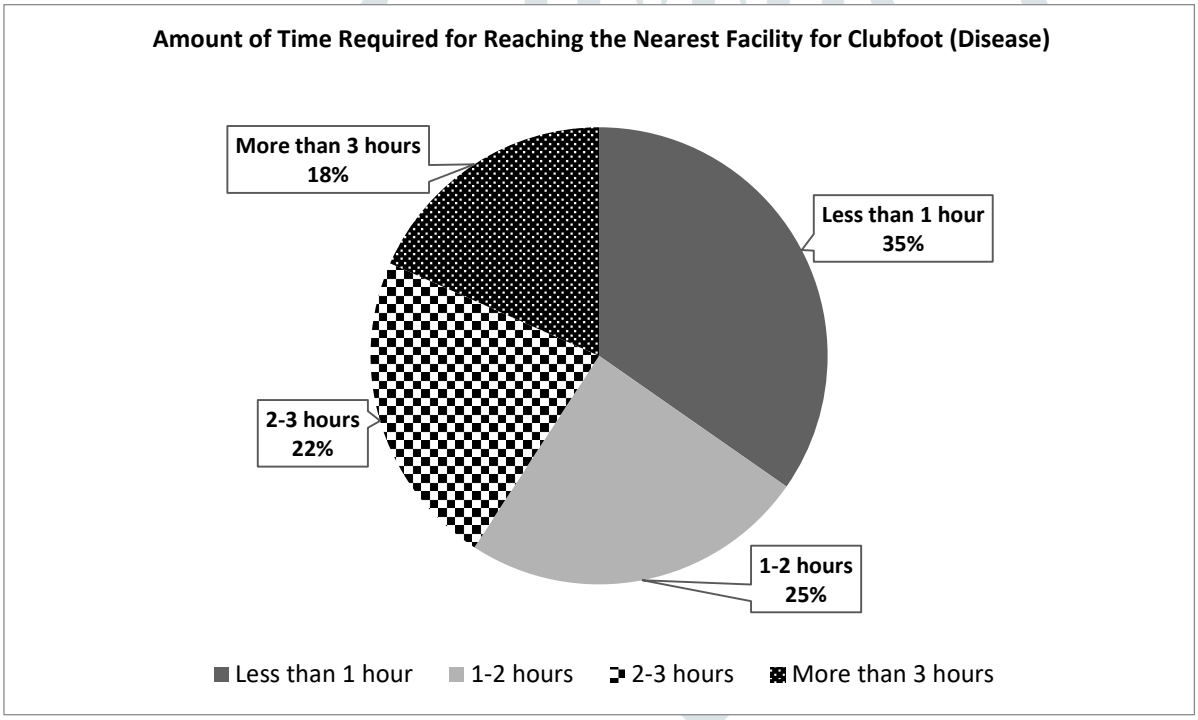


Figure 10: Amount of Time Required for Reaching the Nearest Facility for Clubfoot (Disease) Treatment

Distance of the facility had been cited by two-third of the patients as the major hindrance in the treatment process.

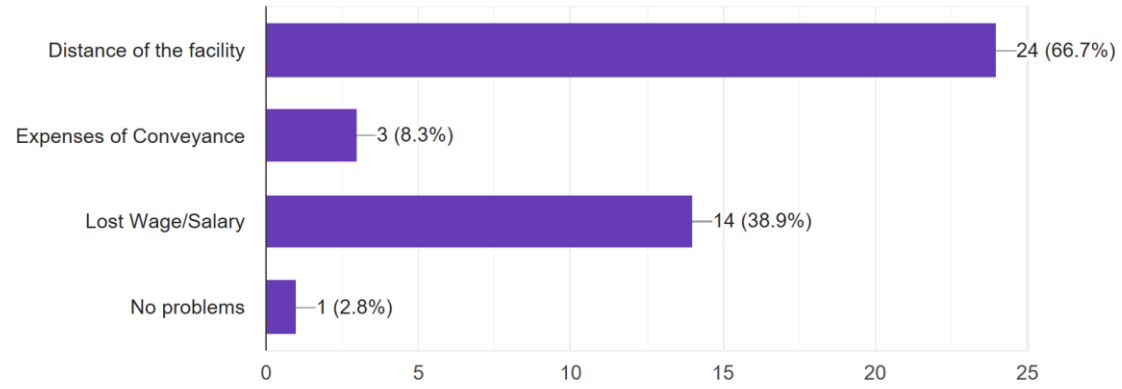


Figure 11: Major Hindrance in the Treatment of the Clubfoot (Disease)

Lost wages and salary came second to it and for 38.9% this was the major hindrance in the treatment.

Three people cited as expense of the conveyance a significant hindrance. To compensate for the lost wages and expense of the conveyance, transport subsidy can be given to motivate patients for continuous treatment and follow up after the active phase.

Parents' anxiety due to Clubfoot in their Child

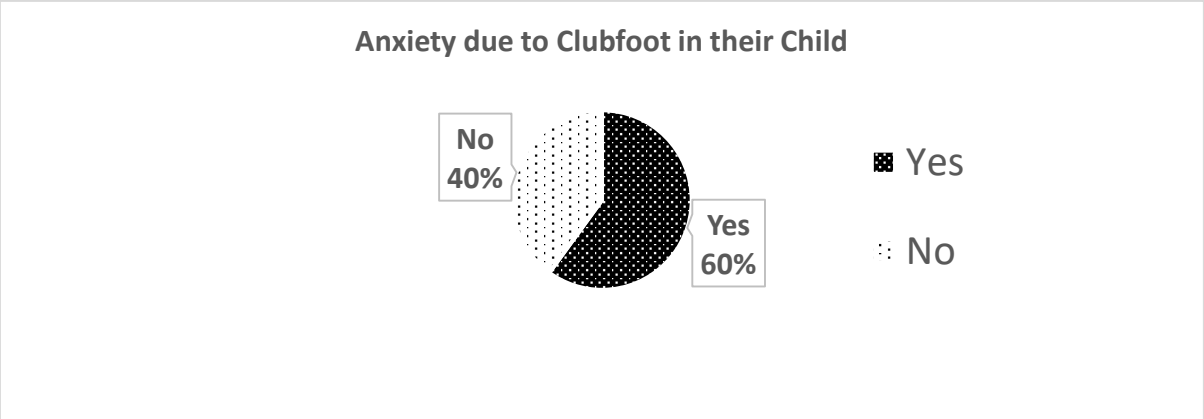


Figure 12: Anxiety due to Clubfoot in their Child

Most of the patients before coming to the clinic were anxious and doubtful about the treatment and its success but now since parents meet other parents of clubfoot patients whose treatment have been successful, they feel less anxious and hopeful regarding the treatment. Seeing successful treatment of other patients without surgical intervention, people are motivated to complete the treatment process diligently. 40% of the total surveyed parents said they fell no more anxious about the clubfoot and are very hopeful about the

treatment process. 60% of the patients were minimally and moderately anxious regarding the treatment patients, most of the patients who were anxious includes most of the parents of newly enrolled children.

Communication- Asset Profile

60% of the parents of the children possess Smartphone with internet connection, 40% of them have feature phone. 77% of them have television- 31.8% with cable connection and 47.7% without cable connection. 36.4% of the parents have subscribed to a newspaper. As per the results of the survey, one way of communication could be through phones and voice advisory phone calls, SMSs can be one medium of reaching out to the general population and health activists.

Recommendations

The awareness and outreach strategy would be leveraging the healthcare machinery of the state, at all levels as GOI has also come up with RBSK programme in which treatment of Clubfoot is free for children in the age of 0 to 18 years. The awareness strategy so designed is effective, achievable and replicable (with some revisions depending upon place it is going to be used). In order to make the strategy effective, the main people, authorities and groups to target are to be identified beforehand. Since the data of institutional delivery, pregnant women undergoing USG, , full immunization rate, enrolment ratio, absenteeism in school is very skewed district to district depending upon literacy, urbanisation, healthcare facility coverage and other related factors, the plan is charted out based on the primary data collected through the survey and the secondary data referred through the government sources such as Annual Health Survey, National Family Health Survey, Census data of village and town amenities, independent reports on education in the state etc. As per the data so collected and studied, different priorities were defined so as to cover the villages and towns of the state of Uttar Pradesh and also to estimate the workforce required in terms of program executives and branch managers. Uttar Pradesh consists of 75 districts 49 divided among 18 divisions. First, the clubfoot clinics will be opened at the Divisional Headquarters and then in the nearby districts. The plan is to be rolled out in phases and the priorities for selecting the towns and villages is devised in such a manner that it covers maximum population by targeting minimum number of villages initially so the results can be seen instantaneously

Internet and Applications

Only 38% of the parents surfed the internet often and applications used by them include WhatsApp (44%) and Facebook (28%) majorly. Patients using mobile applications such as WhatsApp and Facebook can be selectively targeted by way of advertisement reaching out to the target population only. Mobile penetration in the rural areas is not as much as urban areas and also much of the rural population of Uttar Pradesh can't read and write, this can be some of the reasons advertising through these mediums might not give results as much as expected but surely it would be of big help in the urban areas.

Reading Newspaper Daily Only 32% of the parents read newspaper daily and 68% did not. The data will be even more skewed in case of Rural Uttar Pradesh as much of the population is illiterate. Advertising through Newspapers are useful but costs a lot, it might be useful once all the clinics are open throughout Uttar Pradesh. Yes 38% No 62% Surfing internet often Yes 32% No 68% Reading newspaper daily Figure 38 Internet use by Parents Figure 39 Newspaper reading

Newspaper and Cable TV 20% of the total parents had Local Cable TV provider and 12% had satellite TV connections. Video advertisements or educational videos can be broadcasted on local televisions to reach to a greater number of people. 32% of the parents did not have cable connection and 36% did not even have television. Here the cost of advertisement would be significant as the cable TV charges as per slot basis (how many times an advertisement is aired) and also lump sum package are also available for broadcasting advertisement on local cable.

Suggested activities (Rural and Urban) for identification & treatment of clubfoot in marginal population of Uttar Pradesh

Rural

1. Educating ASHAs, school teachers and Anganwadi workers about Clubfoot. The point that most of the people don't know about the free treatment of Clubfoot holds them back to get treatment for it. There is a misconception among people that it costs a lot for the treatment of Clubfoot which is actually true with respect to Private Points of Treatment but not in case of Government Health Facilities. Once they know about RBSK and MF, there is more probability that they reach for treatment in early stages.

2. Attending ASHA meetings with ASHA Sangini(supervisor) at Village Level which is held every month. Program Executive can coordinate with ASHAs and their supervisors to fix a suitable time for meeting and can simultaneously conduct some sort of awareness activities.

3. Pamphlets containing information about Clubfoot in simple Hindi for distribution inside villages through ASHAs during and after meetings.

4. Sensitization activities to be taken up by Program Executives collaborating their efforts with ASHAs and RBSK. PEs can also visit villages along with RBSK teams.

Urban

1. For early identification of Clubfoot or any other birth defect, Pregnant women can avail free Ultra sound services at CHCs and District Hospitals. (Currently available at Kanshiram Hospital, Bilhaur CHC and Ghatampur CHC). → Single Point Change to motivate them for Ultrasound during pregnancy.

2. Health Executives should be trained properly for briefing Medical Officers, Specialist Doctors, ASHAs and Paramedical Staff about Clubfoot.

3. Health executives should conduct awareness activities on 9th of every month, at CHCs and DHs, when there is mass screening and management of women with High Risk Pregnancies (PM Surakshit Matritva Abhiyan).

4. For increasing footfall in clinic a. Prosthetist and Orthotist can be contacted for dropped out patients and seeking referrals from the P&O centre in case the patient can't afford the cost of braces.

b. Awareness activities should be carried out in the private Orthopaedic, Gynaecology and Paediatric clinics for referrals in case the patients cannot afford treatment at private points of treatment.

c. Awareness campaigns in CHCs/PHCs/DHs so that the staff of the hospitals and general public know about MiracleFeet initiative.

5. Continuous Medical Education (CME) conferences can be targeted to reach out to specialists such as Orthopaedicians, Gynaecologists and Paediatricians.

Items to be Developed

• IEC Materials- IEC Material for ASHAs and general public should be developed keeping in mind the average educational levels of them. The material should comprise of Pictures and instructions in simple Hindi for identification of clubfoot and its treatment.

• Materials for Medical Practitioners should also be developed so that it can be given to them in case they want to know more about the initiative further. Details about clubfoot, recent advancement in its treatment,

• Videos and Images- Videos and Images in Hindi can be developed to be shown on Screens in Government Hospitals and as filler during Meetings of Medical Officers. It can be shown on the televisions in the wards and other common areas of the hospital.

• Posters, Pamphlets, Leaflets in simple Hindi should be developed to be distributed among the people attending awareness drives in villages and towns. It can also be used to distribute among the ASHAs, Anganwadi workers etc. Posters should be pasted at visible points in the hospital especially near the Labour Room, Paediatric Wing, New born care unit, Gynaecology Wing, Registration Desk and other important places in the hospital building and outside.

Audio Advisory and Inbound Calling Service Audio advisory service is a medium of information dissemination especially in the rural areas. The literacy rate in the rural areas of Uttar Pradesh is low which makes it a suitable medium for disseminating information to the rural masses. It delivers the message to the target audience via phone calls through 40-60 seconds pre-recorded audio messages. The message will be 55

having an easy to remember toll free phone number (1800-xxx-xxx) in case there are any queries from the receivers' end. These phone calls can be targeted to the personal phone numbers of the program executives so this service won't need any extra manpower to handle the phone calls.

Critical data points such as duration of the call, point at which phone was disconnected, number of successful calls, calls not picked up. This may help us knowing what kind of messages is being accepted more at the receivers' end. So, at the back end, we can also analyse the information seeking behaviour of the people over the time.

There is a total of ~2,20,000 ASHAs in the state of Uttar Pradesh, so if 10 lines are allocated to the given load of phone numbers and calls are being made for 12 hours a day, ideally from morning 9 AM to night 9 PM, then all the ASHAs can be covered in 3.5 months. After covering ASHAs, school teachers, AWW and general population can also be targeted.

References

- Beeman RW, Stuart JJ, Haas MS and Denell RE: Genetic analysis of the homeotic gene complex (HOM-C) in the beetle Tribolium castaneum. Dev Biol. 133:196–209. 1989
- Boehm S, Limpaphayom N, Alaee F, Sinclair MF and Dobbs MB: Early results of the Ponseti method for the treatment of clubfoot in distal arthrogryposis. J Bone Joint Surg Am. 90:1501–1507. 2008
- Castelli-Gair J and Akam M: How the Hox gene Ultrabithorax specifies two different segments: The significance of spatial and temporal regulation within metameres. Development. 121:2973–2982. 1995
- Dobbs MB and Gurnett CA: Update on clubfoot: Etiology and treatment. Clin Orthop Relat Res. 467:1146–1153. 2009
- Finnerty JR, Pang K, Burton P, Paulson D and Martindale MQ: Origins of bilateral symmetry: Hox and dpp expression in a sea anemone. Science. 304:1335–1337. 2004
- Giesberts RB, van der Steen MC, Maathuis PGM, Besselaar AT, Hekman EEG, Verkerke GJ (2018) Influence of cast change interval in the Ponseti method: A systematic review
- Kite JH: Principles involved in the treatment of congenital clubfoot. J Bone Joint Surg Am. 21:595–606. 1939.
- Pirani S, Zeznik L and Hodges D: Magnetic resonance imaging study of the congenital clubfoot treated with the Ponseti method. J Pediatr Orthop. 21:719–726. 2001
- Ponseti IV: Common errors in the treatment of congenital clubfoot. Int Orthop. 21:137–141. 1997
- Ponseti IV: Treatment of congenital club foot. J Bone Joint Surg Am. 74:448–454. 1992

- Terrazas-Lafargue G, Morcuende JA. Effect of Cast Removal Timing in the Correction of Idiopathic Clubfoot by the Ponseti Method. The Iowa Orthopaedic Journal.

Questionnaire for Parents

1. **RESPONDENT ID-**_____

INTRODUCTORY QUES

2. Name of the Child-_____
3. Sex of the Child
    a. Male
    b. Female
    c. Other
4. Name of Father-_____
5. Name of Mother-_____
6. Name of Other Primary Caregiver-_____
7. Date of Birth of Child (DD/MM/YYYY)-___/___/_____
8. Address
    a. Line 1_____
    b. Line 2_____
    c. Village (if Rural)/Ward (if Urban) _____
    d. Block_____
    e. District_____
    f. State_____
9. Mobile No.-_____(_____)
    _____(_____)
    _____(_____)

CLASSIFICATION

10. Nearest Health Facility
    a. Sub Centre
    b. PHC
    c. CHC
    d. Government Hospital
    e. Private Hospital

f. Trust-run Hospital

11. How far is the Health facility from your home?

a. Less than 10 kms
b. 10-20 kms
c. 20-30 kms
d. 30-40 kms
e. More than 40 kms

12. Family Type

a. Nuclear
b. Joint

(Prompt- Nuclear: living with just wife and children, Joint: living with parents, brother-sisters, wife, children and other family members)

13. Number of Family Members_____

14. Socio-Economic Classification of the household. Please circle the appropriate cell in the grid.

Education of Chief Wage Earner (CWE)	Type of House		
	Pucca	Semi-Pucca	Kaccha
Illiterate	R4A	R4A	R4B
Below SSC (School upto 9 standard)	R3A	R3B	R4A
SSC/HSC	R2	R3A	R3B
Some College, but not Graduate	R1	R2	R3B
Graduate/Post Graduate (General)	R1	R2	R3A
Graduate/Post Graduate (Professional)	R1	R2	R3A

(**Pucca House**: Pucca house is the one of which predominant materials of wall and roof are as given below:

a. Wall: Burnt bricks, G.I. Sheets or other metal sheets, stone, cement, concrete etc.
b. Roof: Tiles, slate, corrugated iron, zinc or other metal sheets or asbestos, cement sheets, burnt bricks, lime stone RBC/RCC etc,

Kaccha House: A house with mud, thatch walls and thatch roofs, i.e., walls made of grass, leaves, reeds etc., and roof or similar materials.

Semi-Pucca: Houses which do not fail within the pucca/ kutcha category, generally such houses will have either the wall or roof of pucca material.)

15. What would be your approximate family income?

a. Per month_____

b. Per Year_____

16. What are the different sources of income of your family? Please circle the appropriate box. (Multiple response possible)

	Y	N
Income from agriculture	1	2
Salary/Wages	1	2
Earnings from Business/Shop	1	2
Income from Artisans/Handicrafts	1	2
Interest	1	2
Pensions	1	2
Remittances	1	2
Rents	1	2
Government grants	1	2
Any Other (Please specify) _____	1	2

17. Have your family borrowed money for health care during last one year?

a. Yes

b. No

ABOUT THE CHILD

18. Where was the Child born?

a. Private Hospital/Nursing Home

b. Government Hospital/CHC

c. Trust-run Hospitals

d. Home

19. Did you ever hear about clubfoot before it occurred to the child?

a. Yes

b. No

20. When was the clubfoot first identified in the Child?

a. During pregnancy

b. At the time of birth

c. 0-3 months

d. 3-6 months

e. 6-9 months

f. 9-12 months

g. After 12 months_____

21. Who identified it?

a. Father/Mother of the child
b. Doctors/Staff at the point of delivery
c. Paediatrician
d. ASHA/Anganwadi
e. Family member
f. Someone from community/Friend
g. Other, please specify_____

22. Is there anyone in the family who had the same birth defect? If yes, who?

a. Grand Parents
b. Father
c. Mother
d. Brother
e. Sister
f. Extended Family

TREATMENT

23. Has the child already started treatment?

a. Yes (Continue to Q.24)
b. No (Proceed to Q.38)

24. At what age of the child did the treatment started?

a. 0-3 months
b. 3-6 months
c. 6-9 months
d. 9-12 months
e. After 12 months_____

25. Was the first point of treatment of Clubfoot different from this (**MiracleFeet Clubfoot Clinic**)?

a. Yes (Continue to Q.26)
b. No (Proceed to Q.29)

26. What was the first point of treatment of Clubfoot?

a. Quacks/ *Bengali Doctor*/
b. Pehlwan/ Massager
c. Private Hospital
d. Government Hospital
e. Trust-run Hospital
f. Other, please specify_____

27. What was the reason of discontinuing first point of Treatment?

a. High cost of treatment
b. High cost of transportation
c. Unsatisfactory Treatment
d. Advice from family/community
e. Other, please specify_____

28. Who referred to the first point of treatment?

(only ask if the first point of treatment is different from **MiracleFeet Clubfoot Clinic**)

a. Parents
b. Doctors/Staff at the Point of Delivery
c. Paediatrician
d. Family Member
e. Someone from community/ Friend
f. Other, please specify

29. Who referred to this Clinic **(MiracleFeet)**?

a. Parents
b. Doctors, Nurses or Hospital staff at the Point of Delivery
c. Paediatrician
d. ASHA/Anganwadi
e. Family Member
f. Someone from community/ friend
g. Posters/radio announcements
h. Other, please specify

30. How much did you spend on treatment before coming to this clinic (**MiracleFeet**)?

a. Less than 1000
b. 1000-5000
c. 5000-10000
d. 10000-15000
e. More than 15000

31. At which stage of Clubfoot did you come to this clinic (**MiracleFeet**)?

a. Casting_____#_____
b. Tenotomy
c. Bracing

32. How far is **MiracleFeet Clubfoot Clinic** from your Home?

a. Less than 10 kms
b. 10-20 kms
c. 20-30 kms
d. 30-40 kms
e. More than 40 kms

33. What mode of Transportation do you use to come to the Clinic? (Multiple Response Possible)

a. Personal Vehicle
b. Hired Taxi
c. Auto
d. Bus
e. Train
f. Foot
g. Other, please specify

34. How much time does it take you to come to this clinic (**MiracleFeet**) from your home?

a. Less than 1 hour
b. 1-2 hours
c. 2-3 hours
d. More than 3 hours

35. Do you feel comfortable to contact the clinic with questions?

a. Yes
b. No

36. Did you have sufficient information to be able to look after the cast?

a. Yes
b. No

37. What are the most significant hinderance in the treatment of the Child?

a. Distance of the facility
b. Expenses of Conveyance
c. Lost Wage/Salary
d. Other, please specify_____

COMMUNITY

38. Are you aware of any child in your village/town who is presently having clubfoot?

a. Yes (Continue to Q.39)
b. No (Proceed to Q.43)
c. I don't know (Proceed to Q.43)

39. If yes, how many such people are there in your village? _____

40. Are they receiving any medical treatment?

a. Yes
b. No
c. I don't know

41. Are their families satisfied with the services?

a. Yes
b. No
c. I don't know

42. Do the persons/their families get any counselling? If yes, then at what interval?

a. I don't know
b. No
c. More than once a week
d. Once in two weeks
e. Once in a month
f. Once in 2 months
g. Once in more than 2 months

PARENTS

43. Does Clubfoot in your child makes you anxious or depressed at times?

a. Yes
b. No

44. Do you think Society looks down upon people with Clubfoot?

a. Yes
b. No

45. Have you delayed treatment/missed appointments because of superstitious reasons?

a. Yes
b. No

46. Have family or community members encouraged you to seek medical treatment for your child?

a. Yes
b. No

47. Were you advised by anyone to delay treatment/not to take treatment for your Child's Clubfoot?

a. Yes, then reason? _____
b. No

48. Have you adhered to any other kind of treatment other than/instead of medical?

a. Yes, then what? _____

b. No

COMMUNICATION

49. Are you aware that Government is providing free treatment to Children (aged 0-18 years) for 31 selected health conditions including clubfoot?

a. Yes

b. No

50. Which of the following things have you known (related to Clubfoot)?

a. *Nukkad Natak*- Attended _____Seen _____Heard about _____

b. Special Campaign-Attended _____Seen _____Heard about _____

c. Posters- Seen _____Heard about_____

d. Any other Advertisement, please specify_____

Seen _____Heard About _____

51. Do you have the following in your house? Please circle the appropriate box. (Multiple Response Possible)

a. TV with Cable/Satellite	1
b. TV without Cable/Satellite	2
c. Radio	3
d. Feature Phone	4
e. Smartphone with Internet	5
f. Newspaper Subscription	6
g. Landline	7
h. Electricity Connection	8

52. How many times in a month do you visit the following places?

1. Post Office	
2. MFI/Banks	
3. ATMs	
4. Gram Panchayat	
5. Ration Shops/FPS	
6. Fairs	
7. School	
8. College	

9. Bus Stand	
10. Railway Station	

53. Do you use Social Media? If yes, which all sites and applications?

a. WhatsApp
b. Facebook
c. Snapchat
d. Instagram
e. Others, please specify_____

54. Do you surf the internet often?

a. Yes
b. No

55. Do you read newspaper daily?

a. Yes
b. No

56. Which Newspaper have you subscribed to?

a. I don't have a newspaper subscription
b. National Newspaper_____
c. Local Newspaper_____

57. Which DTH have you installed in your TV?

a. Tata Sky/Dish TV/VideoconD2H etc
b. Local Cable TV Provider
c. I don't have a cable connection
d. I don't have a TV

58. What radio channels do you usually listen to?

a. _____
b. _____
c. _____
d. _____

Any improvements, changes that you would suggest in the processes of MiracleFeet Clubfoot Clinic

_____

_____

_____

Signature of the Respondent

ANY SPECIFIC OBSERVATION

****

Journal of Emerging Technologies and Innovative Research
An International Open Access Journal
www.jetir.org | editor@jetir.org

Certificate of Publication

The Board of

Journal of Emerging Technologies and Innovative Research (ISSN : 2349-5162)

Is hereby awarding this certificate to

Mr. Shirish Srivastava

In recognition of the publication of the paper entitled

A study on identification and treatment of Clubfoot patients among Rural and Marginal population of Uttar Pradesh

Published In JETIR (www.JETIR.org) ISSN UGC Approved (Journal No: 63975) & 5.87 Impact Factor

Published in Volume 6 Issue 2 , February-2019 | Date of Publication: 2019-02-01

Parin P
EDITOR

EDITOR IN CHIEF

ISSN 2349-5162

JETIR1902B10 Research Paper Weblink http://www.jetir.org/view?paper=JETIR1902B10 Registration ID : 197508

Journal of Emerging Technologies and Innovative Research
An International Open Access Journal
www.jetir.org | editor@jetir.org

Certificate of Publication

The Board of

Journal of Emerging Technologies and Innovative Research (ISSN : 2349-5162)

Is hereby awarding this certificate to

Dr. Ritesh K. Patel

In recognition of the publication of the paper entitled

A study on identification and treatment of Clubfoot patients among Rural and Marginal population of Uttar Pradesh

Published In JETIR (www.JETIR.org) ISSN UGC Approved (Journal No: 63975) & 5.87 Impact Factor

Published in Volume 6 Issue 2 , February-2019 | Date of Publication: 2019-02-01

EDITOR

EDITOR IN CHIEF

ISSN 2349-5162

JETIR1902B10 Research Paper Weblink http://www.jetir.org/view?paper=JETIR1902B10 Registration ID : 197508