Abstract

Assessment of Organizational & Social factors affecting the Efficiency of Rural Health Workers: A Case Study of Udaipur District

By
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The shortage of qualified health workers in rural areas is a critical challenge for India's health sector. Although state governments have instituted several mechanisms, salary and non-salary, to attract health workers to rural areas, individually these mechanisms typically focus on single issues (e.g. salary). This study explores the various organizational as well as social factors which affect the efficiency of a health workers and thereby reflecting poorly on the health indicators and this study also tries to identify factors which form the basis of a health worker decision to stay or not stay at the headquarters. It then develops a framework for clustering these complex attributes into potential ―incentive packages for better rural job satisfaction and enhanced motivation.

The study was carried out in Udaipur district of Rajasthan. A total of 60 interviews were conducted with variety of participants: doctors, nurses and ANMs. The information collected was analyzed and findings were collated into the organizational and social factors impacting a health worker's performance.

The findings indicate that, while financial and educational incentives attract doctors and nurses to rural postings, they do not make effective retention strategies. Frustration among rural health workers often stems from the lack of infrastructure, support staff, and drugs, a feeling exasperated by local political interference and lack of security. Mundane issues such as lack of water, electricity, education facilities for children, and connectivity increases dissatisfaction and affects the presence of health officials at the health facility.

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga, Unani, Siddha, & Homeopathy
BAMS	Bachelor of Ayurvedic Medicine and Surgery
CHC	Community Health Centre
CO	Country Office
FLW	Front Line Worker
HIV	Human Immunodeficiency Virus
ICMR	Indian Council of Medical Research
IV	Intravenous
M & E	Monitoring & Evaulation
MD	Doctor of Medicine
MDG	Millennium Development Goals
MIES	Management Information & Evaluation System
MO	Medical Officer
MOHFW	Ministry of Health & Family Welfare
MPWs	Multi Purpose Health worker
MS	Master of Surgery
NASG	Non Pneumatic Anti-shock Garment
NGO	Non Government Organization
PHC	Primary Health Centre
RCH	Reproductive & Child Health
SC	Sub-centre
SPC	State Program Coordinator
TT	Tetanus Toxoid
WHO	World Health Organization

PART I - INTERNSHIP REPORT

Organizational Profile

Pathfinder International - Global Leader in Reproductive Health

Pathfinder International's mission is to ensure that people everywhere have the right and opportunity to live a healthy sexual and reproductive life.

History

Pathfinder International was originally incorporated as The Pathfinder Fund in 1957. Its pioneering family planning work, however, began decades earlier in the late 1920s when Pathfinder founder, Dr. Clarence Gamble, supported efforts to introduce contraception to women and couples in the United States and 60 other countries. Despite the highly sensitive and complex nature of our work, Pathfinder has steadily expanded operations since 1957. Over the decades it has taken difficult positions to increase access to high-quality reproductive health services. This has earned Pathfinder wide recognition and respect throughout the world, highlighted by the 1996 United Nations Population Award.

Since its inception, Pathfinder International has maintained an unwavering belief in the right of women and families to have access to contraception and to quality reproductive health care. Pathfinder's founder Clarence Gamble, a pioneer in family planning and maternal health, introduced contraception to more than 60 developing countries, including some where Pathfinder is still engaged today.

Pathfinder International places reproductive health services at the center of all that we do—believing that health care is not only a fundamental human right but is critical for expanding opportunities for women, families, communities, and nations, while paving the way for transformations in environmental stewardship, decreases in population pressures, and innovations in poverty reduction. In more than 25 countries, Pathfinder provides women, men, and adolescents with a range of quality health services—from contraception and maternal care to HIV prevention and AIDS care and treatment. Pathfinder strives to strengthen access to family planning, ensure availability of safe abortion services, advocate for sound reproductive health policies, and, through all of our work, improve the rights and lives of the people we serve. By partnering with local governments, NGOs, and community- and faith-based organizations, we create programs that are responsive to the reproductive health needs of local populations. Pathfinder brings services to isolated rural areas by training community members to function as volunteer health workers and by creating referral networks. We improve and expand existing services in both urban and rural areas by renovating clinics and training health care providers at all levels to offer a wider range of services and contraceptive choices.

Pathfinder's work focuses on overcoming barriers and is based on developing long-term relationships, not only with clients, but with entire communities. Working in traditional societies, it understands that changes in attitude and behavior must have the support of religious and community leaders, the guardians of local culture. It trains doctors, nurses, midwives, traditional birth attendants, community-based health workers, and teachers. At the same time, capacity building of its partner organizations to make them stronger, more effective, and able to thrive independently once our support has ended.

The NGO, being a pioneer organization has been funding and promoting reproductive health and sexual health related activities across the globe. From an initial vision to make planning for small families a socially acceptable and sustainable behavior norm, its activities have moved to implement family planning and RCH programmes within a wider canvas of sustainable development. Its commitment and work for the welfare of people at large, has placed it amongst the leading NGOs at the International Level.

Geographical focus

Pathfinder has brought reproductive health care to tens of millions of people in more than 120 countries in Africa, Asia, the Near East, Latin America, and Europe. Today, its 800-plus employees work alongside more than 300 local partner organizations, helping implement 60 regional and multi-national programs in more than 25 countries.

Key Areas of Work

To highlight the significance of sexual and reproductive health, Pathfinder International works on the following key areas of intervention:

- Reproductive Health/Family Planning
- HIV/AIDS
- Maternal & Newborn Care
- Adolescents' health
- Abortion/Post abortion care
- Community based care
- Social change
- Advocacy

Pathfinder International recognizes the large benefits of a small family and has been advocating for small families from a people's perspective. This includes tackling population issues within a non-coercive, rights based and gender sensitive framework that is pro-people, pro-poor, pro-women and pro-youth, which addresses the issues of access and quality of services.

Areas of Expertise

Advocacy

With more than 50 years of experience providing reproductive health services, Pathfinder believes it is critical to bring the real world impact of laws, policies, and programs on the lives of women and their families we work with to policymakers' attention. Pathfinder directly advocates to Members of Congress, government officials, parliamentarians, and UN representatives on the behalf of those we serve, seeking to build support for international reproductive health and

family planning programs, and champion laws and policies that advance women's health and rights.

Key Issues

Ensuring Reproductive Rights for All

Governments around the world recognized reproductive health as a fundamental human right at the landmark International Conference on Population and Development (ICPD) in 1994. Fifteen years later, many governments have failed to protect, respect, and realize this right. Pathfinder works to hold both developed and developing country governments accountable for their ICPD commitments to promote reproductive rights, and improve reproductive health and access to family planning services worldwide.

Investing in Sexual and Reproductive Health

Hundreds of millions of women in developing countries lack access to basic reproductive health services, such as contraception. Globally, funding for these critical programs is declining. Pathfinder advocates both in the US and abroad for increased investment in sexual and reproductive health programs, ensuring women everywhere have full access to the life-saving and life-changing reproductive health care they both want and need.

Meeting Young People's Needs

Today's generation of young people is the largest in history—more than half the world's population is in, or entering, their reproductive years. Most of them live in developing countries and face enormous challenges: cultural pressures of early marriage and pregnancy, limited opportunities for education and employment, and increased risk of HIV infection. Pathfinder seeks to prioritize young people within broader international health and development efforts, ensuring their access to information and services necessary to make healthy sexual and reproductive choices.

Alleviating Poverty around the Globe

Rapid population growth exacerbates conditions that already burden poor countries, including poverty, gender inequity, civil conflict, climate change, and large-scale health challenges such as high maternal and child mortality rates, and HIV and AIDS. Pathfinder knows investments in women is key to eradicating poverty and works to ensure reproductive health and family planning programs are maintained as a critical component of the Millennium Development Goals (MDGs). Adopted by world leaders in 2000, the MDGs provide a framework for dramatically reducing poverty through international cooperation by 2015.

Integrating Health Services

Reproductive health and family planning services are paramount to preventing HIV and maternal mortality. To that end, Pathfinder advocates for the integration of reproductive health, maternal health, and HIV and AIDS programs. Integration helps to ensure women's complete healthcare needs are addressed, ultimately improving the health outcomes and life chances of women and girls.

Increasing Access to Safe, Legal Abortion

Unsafe abortion is a critical public health and human rights issue. Each year, more than 78,000 women die from the consequences of unsafe abortion. Whether a woman lives or dies seeking an abortion is largely dependent upon where she lives, and the legality of the procedure. Pathfinder is committed to challenging laws and policies that restrict women's access to safe abortion services.

Programmatic strategies

- Advocacy
- Communication
- Service delivery
- Capacity building
- Research and documentation
- Scaling up of successful pilot projects

Departments

- Program Division
- Research Division
- Communication Division
- Human Resource
- Finance & Administration division
- MIES

Major Projects

Pathfinder frequently manages projects that span several countries and/or represent major undertakings in the field of reproductive health. Some of the most significant work is listed below.

Multinational

- 3 Billion Reasons
- Addressing Post-Partum Haemmorage
- Extending Service Delivery
- Community based Family Planning

Country Based (Major projects of India are being enumerated here)

Pathfinder International has a long history in India, from projects testing contraceptive methods in 1953 to integrating family planning into existing social welfare programs in the early 1970s.

Since 1999, Pathfinder has focused on advancing the reproductive health needs of underserved and vulnerable populations, particularly adolescents, whose needs are often neglected because of cultural sensitivities to discuss sexual activity outside of marriage. Pathfinder's work has also expanded to address the growing problems of unsafe abortion and HIV and AIDS.

Pathfinder currently manages five projects across the country, focusing on the following key areas:

- Reproductive Health Among Adolescents and Youth;
- HIV and AIDS; and,
- Maternal and Newborn Health

Through these varied projects in reproductive health and family planning, Pathfinder continues to lead improvements in health services for Indian women and families.

Current Projects in India

- **PRACHAR** - Promoting Change in Reproductive Behavior: A major project working to improve the reproductive health status of adolescents and young couples in Bihar state.
- **MUKTA** - Controlling the Spead of STIs and HIV and AIDS: A project that aims to reduce the spread of STIs and HIV and AIDS among sex workers and other vulnerable populations in Maharashtra.
- **RAKSHA** - Addressing Postpartum Hemorrhage: A major project to reduce the morbidity and mortality associated with postpartum hemorrhage in India and four other countries.
- **PRAGATI** - Community Partnerships for Family Well-Being: A project in Madan Pur Khader focused on increasing awareness about reproductive health among adolescents and young couples within the overall health of families.
- **PRAGYA** - Gender Operations Research Study: This project investigates factors contributing to delaying the age of marriage in areas where Pathfinder conducted training in 05-06.

Scope of Work during Training:

At Pathfinder International, I was placed as Monitoring & Evaluation officer for the RAKSHA project- Addressing post-partum haemorrhage during the internship period of 3 months from January 2011 to April 2011. This training allowed me to get a better insight into the working of an NGO and moreover understanding the ground realities of maternal and new born care including the clinical component.

As a Program Officer (M&E), I participated in all activities of monitoring and project performance information systems. I assisted the State Program Coordinator (SPC), Raksha, in the design of monitoring and performance information system and ensured that the systems are implemented to high quality standards. I also reviewed and scrutinized monthly performance and quarterly progress reports.

Major Responsibilities

Research

- Initiated the Non Pneumatic Anti-shock Garment (NASG) qualitative research study at the Rajasthan state office with the support of SPC and conducted interviews with the service providers for the same. The study was conducted with the help of pre tested, open ended questionnaire to get the providers' opinion on the efficacy of NASG and its usage.
- Supported the SPC & rest of the State office staff in organizing the NASG orientation training for the residents, nursing staff and professors at a tertiary level facility.

Monitoring & Evaluation activities

- Involved in the implementation of the M&E activities and preparing monitoring reports and submitting to the Country Office (CO) at Delhi. In relation to this, I make regular field visits along with the clinical consultant to the targeted intervention facilities.

- Also involved in active monitoring of NGO Implementation Partners (NIPs), the Community Mobilizers (CM) and Front line Workers (FLWs) like ASHAs on field with support from SPC and other staff members.

Others

- Compilation and documentation of the case studies/success stories from field.
- Drafting reports and documenting project achievements for communications like newsletter etc.
- Monthly Compilation of the clinical and community level data and analyzing and documenting reports and submitting to the CO.

Reflective Learning

- Through regular field visits, I understood the ground realities that affect a woman's health. By having this practical exposure, I got an insight into the understanding of clinical and community interventions that is aimed at decreasing maternal morbidity and mortality.
- During my internship, I understood the organizational hierarchy and the various roles and responsibilities associated with particular designation. This aspect will help me in planning my career growth within the present organization.
- I learnt the essence of professional communication which includes both written and oral communication.
- I understood my roles and responsibilities within the project on an operational level. This helped in gain exposure towards a number of issues in health sector.
- I was involved in conducting various trainings with the support of the state office, like training of FLWs, service providers etc. This experience helped me a lot in gaining an insight into planning and executing trainings successfully.
- I also learnt about the functioning of the state health department.

PART II - Dissertation

"Assessment of Organizational and Social Factors affecting the efficiency of Rural Health Workers: A case of Udaipur district"

Chapter 1 Introduction

Overview

It has been long recognized that health workers form the foundation of health service delivery. Their numbers, skill, and commitment are highly critical for the delivery of quality health care. Renewed attention is being given to the role of geographical imbalances in the health workforce, a feature of nearly all health systems, which raises concerns about equity in terms of accessibility to health care and efficiency i.e. whether the resources are allocated where they have the biggest impact on health outcomes. The issue is particularly relevant for developing countries with limited resources and poor health outcomes. Ultimately, the difficulties to attract and retain staff in rural facilities stem from the preferences that health workers have and the choices they make. A growing body of evidence shows that, apart from wages, other job attributes like training opportunities, career development prospects, and living and working conditions also play a role.

Health workforce is central to advancing health. The health sector, more than any other sector, depends on people to carry out its mission. In any health care system, it is the health workers—professionals, technicians, and auxiliaries—who determine what services will be offered; when, where, and to what extent they will be utilized; and as a result, what impact the services will have on the health status of individuals. The success of health activities largely depends on the effectiveness and quality with which these resources are managed. Health workers are not just individuals but integral parts of functioning health teams in which each member contributes different skills and performs different functions. But currently in many parts of the world, they are simply too few. A study of 198 countries found that maternal and child death rates were higher in those with fewer health workers[1]. Developing capable, motivated and supported health workers is essential for achievement of national and global health goals[2].

However, health workers in many developing countries are poorly motivated, inadequately trained and unproductive. Their poor motivation is often because of poor living conditions, low salaries and low social and professional recognition. To adapt and in face of these factors, health

workers adopt coping strategies that further limit their access to communities they are supposed to serve.[3]

With more than one billion people, India is the second most populous country in the world accounting for 17% of the world's population. Yet there are not enough workforces to cater to the growing rural population. In India, performance and quality of health system in rural areas is significantly dependent on Auxiliary Nurse Midwives (ANMs), the multipurpose extension health workers who works at the interface between the community and public health system. There are 0.8 million general nursing midwives, 0.5 million auxiliary nursing midwives in the different states[4]. It is estimated that only about 40% of the nearly 1.4 million registered nurses are currently active in the country because of low recruitment, migration, attrition and drop-outs due to poor working conditions limiting the communities' access to health services[5].

At present the department of health in India has been facing the problem of non-resident staff. Only about 23% of ANMs stay at the headquarters and majority of the doctors don't stay at the facilities[6]. Place of residence is the most important factor having a bearing on the reliability and availability of curative services provided by the staff. Service delivery is influenced by the place of residence of the health workers in two ways: quality of services and range of services. Those who stay at the headquarter are more likely to keep time of CHC/PHC/sub center and out-patient work schedule because they save commuting time, and are less likely to take leave for personal work/ sickness in the family. Non-resident staff would not be able to provide 24 hours services such as delivery care and emergency care.

The health sector in India also faces multiple challenges in the geographic distribution of human resources for health. Though about one-third of Indians live in rural areas, the population-to-doctor ratio is much higher in rural than urban areas. Doctors in both the public and private sectors are concentrated in urban areas. While the public sector has made considerable efforts to place doctors (and a variety of other health workers) in rural areas, issues like absenteeism, "ghost doctors" and dual practice have compromised the effectiveness of this effort. . The draft Approach Paper (2006) by Nirupam Bajpai and R.H. Dholakiya clearly states that "rural healthcare in most states including Rajasthan is marked by several severe problems like absenteeism of doctors/ health providers, low levels of skills, shortage of medicines, inadequate

supervision/monitoring, callous attitudes and poor community participation. These problems in health care delivery are leaving well-intentioned spending without any desired impact.

There is a lack of policies in the human resource development in the public health system. Human resource policies cover all those factors that influence the performance and commitment of workers in any work situation. These include appropriate incentives for performance (financial and others), autonomy in decision-making, career development opportunities, transparent policies for transfers and promotions, in-service training opportunities, regular performance appraisals and monitoring and supportive supervision. At present there are no clear policies for human resources development in the public health system. Current promotional structures provide no mechanism for placing the most skilled and able staff in the most responsible positions. Promotional opportunities for ANMs and paramedical staff are particularly limited. Gender disparity in promotions has been evident[7]. There are no rewards for good work or clear expectations on work roles and feedback and proper performance appraisals. There are no clear policies for transfers and staff deployment. Transfers are politically influenced. Those with political clout get better placements. Professional development and in-service training opportunities are limited.

In the absence of systematic monitoring and supervision systems, health workers do not receive appropriate and timely performance appraisals or constructive feedback. There appears to be a system wide breakdown in line management and personal accountability from the top echelons to the community level staff, and this breakdown of management, authority and accountability is not lost on local communities. All of this has resulted in a demoralized and poorly motivated health workforce with low public accountability.

Udaipur District

The study was conducted in Udaipur, a primarily rural district located in southern Rajasthan, India with a population of 26, 33,000 (Census, 2011). For purposes of administration, Udaipur is divided in to eleven blocks with population in each block ranging from 150,000 to 350,000. All tehsils (revenue units) of the district are co-terminus with blocks (development units), except for Girwa tehsil, which comprises two blocks. Udaipur City has 1 government medical college with

2 associated hospitals, 4 nursing colleges, 2 dental colleges with dental superspeciality facilities, an Ayurvedic college with 4 hospitals and a Homeopathic Medical College with hospital. Most medical facilities, especially those in the private sector, are concentrated in Udaipur city, which is a municipality with 50 wards. A network of 538 sub-centers, 92 Primary Health Care Centers and 18 Community Health Centres provides primary health care in the district.

In the district as a whole, 44% of the facilities are operated by government and the rest (56%) by the private sector (Table 1). However, 65% of all private facilities are concentrated in urban areas, mostly in Udaipur city, whereas 84% of government facilities are located in rural areas. By disaggregating these facilities by the type of provider, we find that non-physicians were running as many as 44 (35%) of the 125 rural private facilities, while 35 (14%) of the 242 rural government facilities (excluding sub-centres) did not have a regularly posted physician[8].

Location	*Government*	*Private*	*Total*
Rural	242	125	367
Urban	46	236	282
Total	288	361	649

Table 1: Total number of health facilities in Udaipur district

Sex ratio of Udaipur district is 972 and Literacy rate of male and female is 74.5% and 43.7% (Census 2011).

As in other parts of North India, communities are divided on lines of caste, gender, and socioeconomic status. Income opportunities are few and there is widespread poverty as evidenced by the fact that almost 50% of the district population lives below poverty line.

Rationale for the Study

Working conditions of health workers are poor as facilities are chronically understaffed and ill equipped with the basic supplies. For example, buildings are badly maintained and also transport available to staff for outreach work is limited or unavailable. In remote or dangerous areas there are security issues around travel of ANMs over long distances. Personal safety is a major concern especially if the ANM is unmarried or not recruited from the local area. Many ANMs do not stay in the sub-centre as they are required to because the building may not exist or be inadequate. Difficulty in finding proper accommodation in rural areas, poor transport facilities and delays in obtaining or being reimbursed transport allowances add to her hardship[9]. ANMs are located in a non- institutional setting, at the interface of the health services and the community in relative isolation from their colleagues. This position makes them vulnerable and exposes them to the cross fire of widely differing expectations by the government and the people. Trying to achieve the delicate balance between their roles as family planning motivators (defined by the former) and as health care workers (as demanded by the latter), ANMs encounter many unpleasant experiences in the community ranging from indifference to open hostility which affects their performance.

A second major challenge is that, doctors posted in rural PHCs do not stay there and commute from urban areas. Their availability at night is, thus, very limited. Also since doctors do not stay in the village, people do not have the confidence whether, when they will go, he or she will get the treatment.

Thereby, a lot of organizational and social factors affect the efficiency of rural health care service providers. Studies have shown that due to lack of transparency in transfers, majority of the staff are insecure about their jobs. One major factor which doesn't attract doctors to rural areas and affect their efficiency in a big way is that time of service in rural areas is not clearly stated. There is lack of career growth opportunities as compared to their urban counterparts. Rural doctors do not make as much money as doctors working in urban areas, work longer hours per week, and are professionally isolated which affects their efficiency in delivering quality services. Poor infrastructure, for example, roads, telephones, emergency services, and per capita medical personnel also add to the miseries.

The global problem of the unequal distribution of the health workforce between cities and villages, with its severe consequences for the availability and quality of health services, and on health outcomes in rural and remote geographical areas, is also marked in India. Despite the fact that development of human resources often plays an integral role within health care management, little empirical research has explored the relationship between organizational factors, human resource practices and social factors.

This study seeks to understand and elaborate the mix of reasons why qualified health workers 'do not stay on' – why they don't want to continue working in underserved areas. It also highlights the conditions of health workers living in these areas, and their needs. Along with this, this study the reasons for poor availability of health care service providers to the rural communities in a district of Udaipur in Rajasthan, where conditions are typical of large parts of northern and central India. In doing so, we focus on identifying the determinants that affect their decision on residing (or not residing) within their work area, a decision that significantly affects their availability and performance.

Review of Literature

A lot of efforts have been made in the public sector to place doctors and a variety of other health workers in rural areas through its vast network of health sub-centres, primary and community health centres in these areas. However, high levels of vacancies in these health facilities due to appointed health workers not taking up posts, absenteeism and dual practice have compromised this effort. This problem is particularly acute for doctors at Primary Health Centres (PHCs) and for specialist doctors at Community Health Centres (CHCs). PHCs serve as the first point of contact for curative services in rural areas and have a critical role in locating basic health services within communities. One study finds that absenteeism among primary care workers in India is as high as 40%, making it is highest in the world[10]. These problems contribute to the unreliability of official estimates, and may explain official failures to increase allocations of facilities and beds where they are needed most.

Many reasons have been documented for why health workers typically choose not to work in rural areas. Salary emerges as an important factor of a job and strongly affects the willingness to work in rural areas[11]. In India, starting salaries for allopathic physicians in the public sector is around Rs. 20,000 per month and about half of that for nurses. However, there is little additional incentive given for those who are posted in rural areas. Various studies have shown that salary is an important determinant of employment choice[12].

Factors other than salary also play an important role in the preference of urban positions. For example access to training, health care and education for children, promotion opportunities, the availability of electricity, water and housing are all reasons that urban jobs are usually favored[13]. In Pakistan, the absence of equipment and supplies was a major deterrent for accepting a rural post[14]. A study on rural health worker motivation in Vietnam highlighted the importance of appreciation and support from managers and colleagues as well as from the community[15]. A study to assess the perceptions of working conditions amongst health workers in north-eastern Nigeria and gauging their motivation level emphasized that though salary is the prime factor in making a difference but presence of conflict at work place, freedom of expression, managerial support for staff welfare, managerial support for staff career development, availability of tools

and consumables at the workplace and progress towards personal professional goals appear to be play a role in worker motivation[16].

Various studies have also thrown light on the reasons why ANMs are often not available to the communities they are supposed to serve. The reasons cited for the ANM's non-availability include the large population that she has to cover, her restricted mobility and the fact that she does not stay in the sub-center village or area[17]. A study conducted by Indian Council of Medical Research in 1997 in 23 districts of the country showed that only 57% of all ANMs stayed at their place of posting, while the rest commuted to their place of work[18]. A study conducted by Action Research by Action Research and Training for Health in rural Rajasthan, India, revealed a correlation between the place of residence of the Auxiliary Nurse Midwives (ANMs) and their effectiveness. The majority (62 per cent) of the ANMs did not live in the villages where they worked because of poor living conditions, threats to their personal security and other factors. The study concluded that improving the living and working conditions of the ANMs, and their own empowerment within the system, is essential for better maternal and child health care.[19].

Research Objectives

General Objective

- To study the organizational and social factors affecting the efficiency of rural health workers.

Specific Objectives

- To identify the factors and determinants that affect the decision of rural service providers on residing (or not residing) within their work area.
- To assess the perception of working conditions and work load amongst rural health care service providers.
- To understand the social factors that demotivates the rural health care service providers.

Chapter 2 Data and Methods

Research Problem

Conceptual Framework

Factors behind Health workers' efficiency are complex, and influenced variously by personal factors as well as by their relationships and interactions with the health system, the communities they live and work in, and the community in which they work.

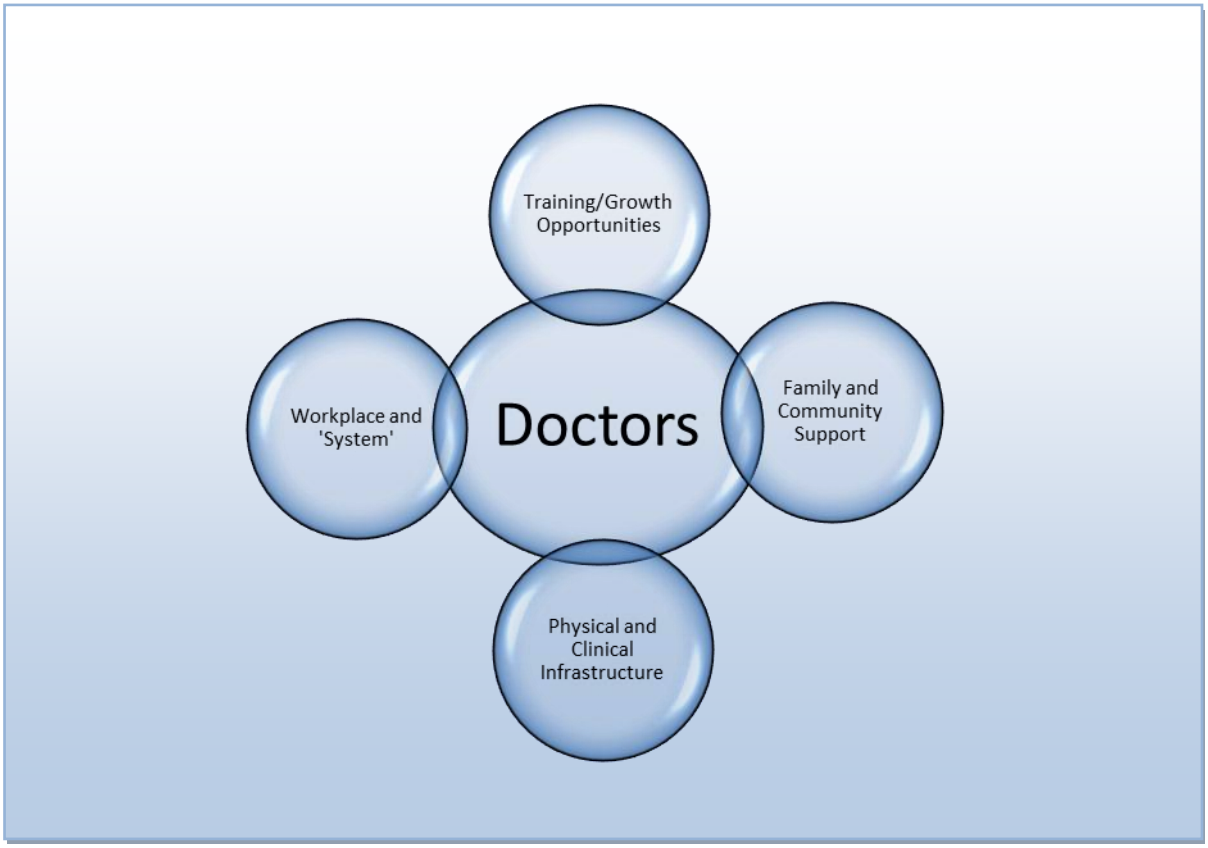

Fig 1 : Key factors affecting physicians' performance in rural areas

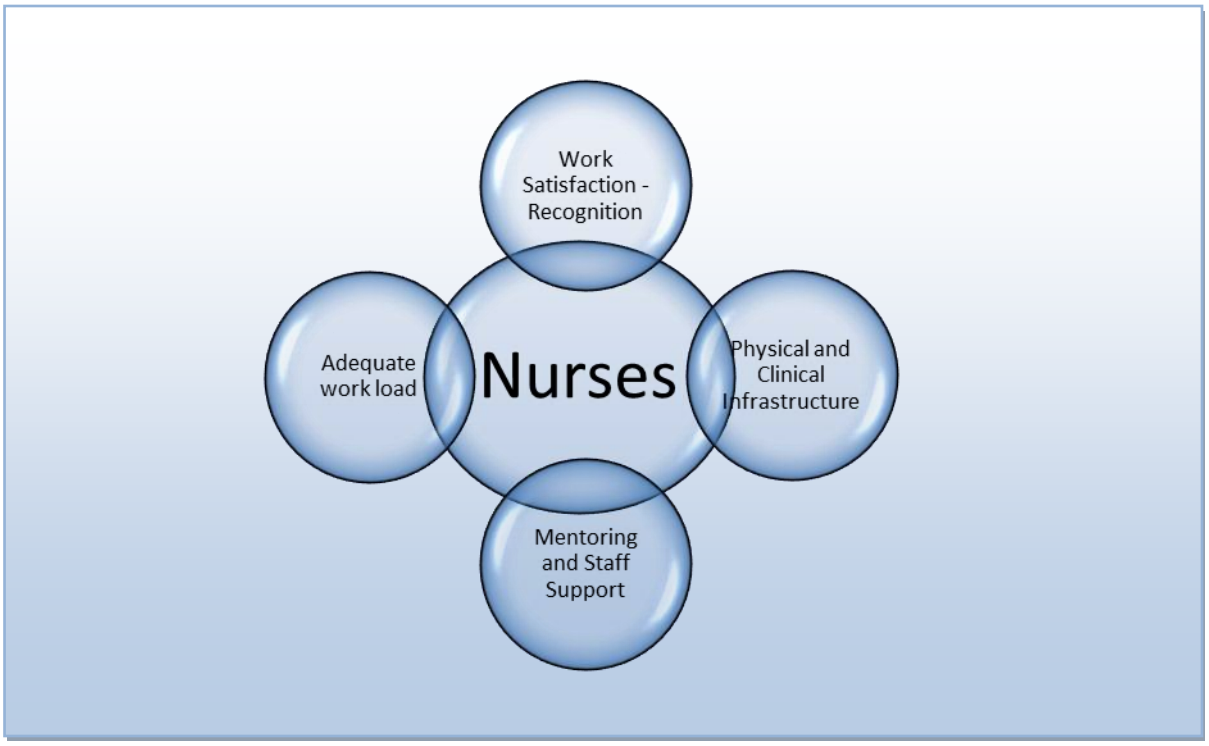

Fig 2 : Key factors affecting Nurses' performance in rural area

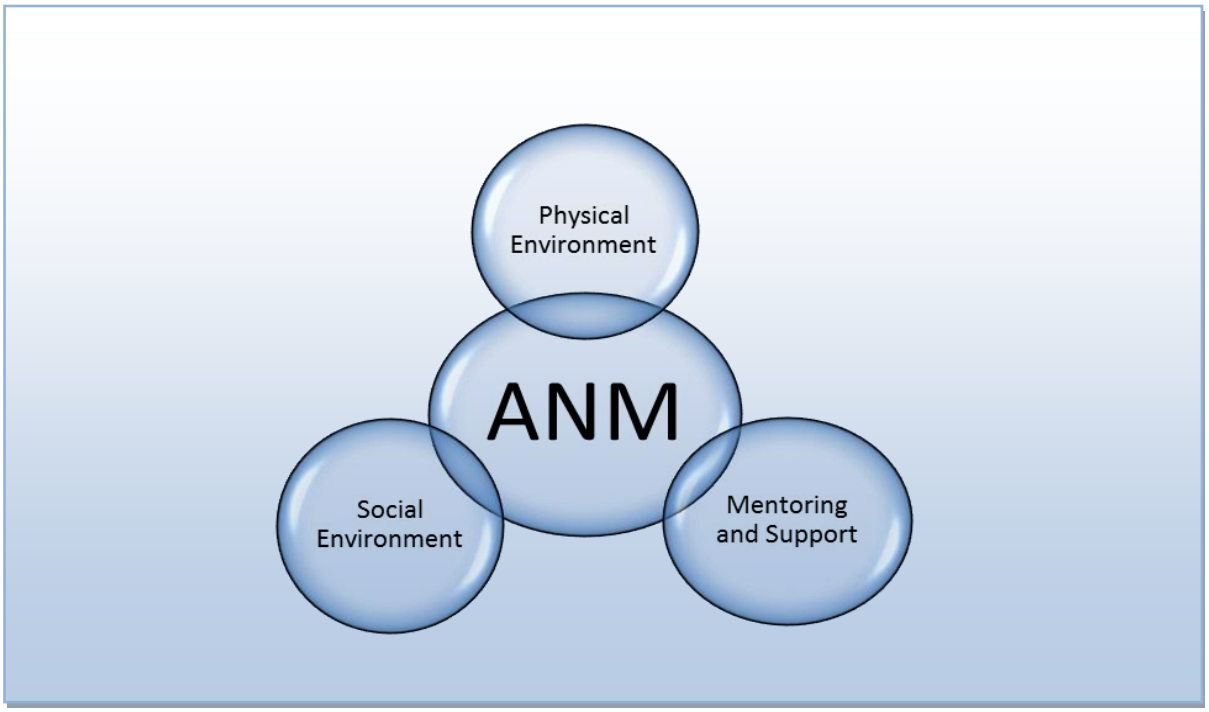

Fig 3 : Key factors affecting ANMs' performance in rural area

Methodology

The Study Design

A mix of quantitative and qualitative methodology was adopted to fulfill the general as well as specific objectives. A cross- sectional, questionnaire based study was conducted to achieve the objectives. Secondary information on facilities was collected through a checklist. A semi-structured questionnaire was designed to gather the necessary data. Findings were documented to assess the organizational and social factors affecting the rural health care workers.

Data Source

The study was conducted in 3 blocks of Udaipur district namely Badgaon, Girwa, Jhadol using purposive sampling. In view of the objectives to be covered, respondents were contacted and data was collected by pre- tested questionnaires. A sample size of 60 respondents was covered from various locations of three blocks mentioned above from Udaipur district.

Data Collection

A semi-structured, pre-tested questionnaire was used to conduct interviews. The respondents were selected randomly from the 3 blocks.

Prior to the interviews, all participants were informed about the main objectives of the study and how the information collected from them would be used. Respondents were informed that the data would be treated in a confidential manner and a verbal consent was obtained.

The study questionnaire was pretested on a sample of 10 respondents mainly doctors and ANMs and minor revisions were made based on the observations. The questionnaires covered the following domains: (a) background information of the respondent (socio-demographics, residence, education); (b) their family background; (c) respondent perceptions about work load and working conditions in rural areas; and (d) respondent perception of the social factors.

Quantitative data was entered and analyzed in MS-excel. Responses of the participants to the in-depth interviews were analyzed manually by collecting all statements on a particular subject, identifying constant themes that emerged in the interviews, noting the range of responses on the

themes, and then selecting illustrative comments for inclusion in the report. Information from these interviews was triangulated with findings from the earlier quantitative phase. From the data, a generic framework of attributes considered important by health care workers in their work area and work posting was constructed. This framework clustered attributes into two broad categories—organizational, and social attributes. Within these broad categories, job attributes and sub-attributes were identified. During the analysis, attributes and sub-attributes that were mentioned frequently or consistently were given more emphasis.

Chapter 3 Results and Findings

Field Setting

The study covered 4 CHCs, 16 PHCs and 22 SCs (selected randomly) located in remote and rural areas across 3 blocks in Udaipur. Some of the healthcare centres selected were distant from the district headquarters and poorly connected by public transport. Majority of the CHCs, PHCs and SCs were adequately linked asphalt roads. In many cases, the main means of public transport were jeeps and buses overcrowded with people. Healthcare workers posted in these locations generally relied on the public transport for travelling to block or district healthcare centres when called for meetings or other work related visits.

Majority of the SCs visited lacked basic facilities of water supply, electricity and equipment. In places where adequate equipment was available, erratic electricity supply prevented its utilization. Barring a few instances, staff quarters were in bad condition. Many of the doctors who stayed at the staff quarters lived alone compelled by lack of proper housing and educational facilities for their children. Lack of avenues for society and entertainment were apparent in many instances, and feelings of social isolation and loneliness were common

Profile of the Respondents

The sample selected for the study consisted of 25 doctors, 22 ANMs and 13 Staff nurses working at various PHCs, CHCs and SCs.

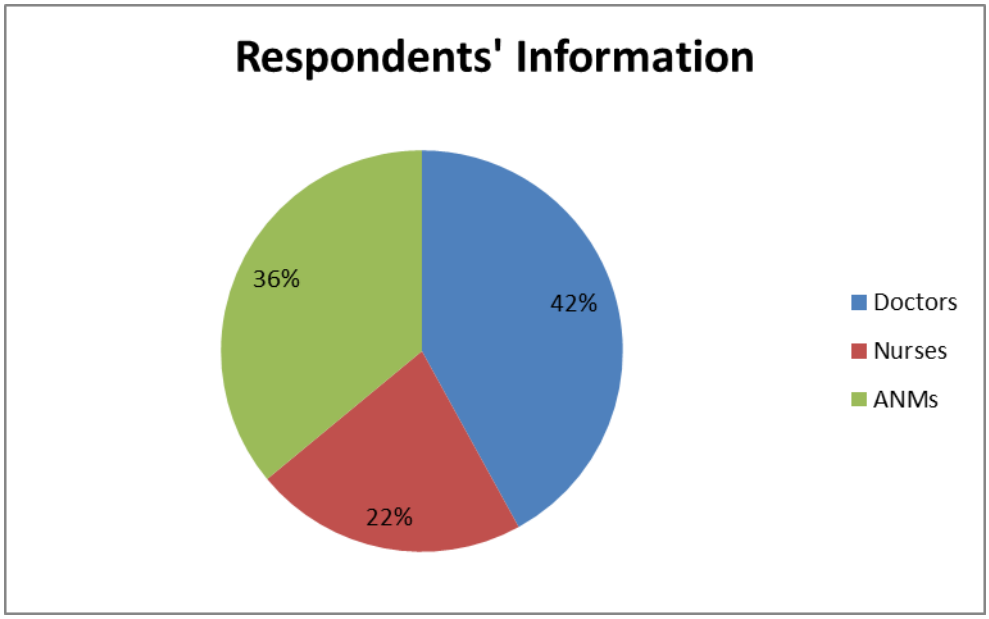

Fig 4: Percentage of the selected respondents

Personal Profile of Doctors

32% of the doctors in this study had had a rural upbringing. At least five respondents identified themselves as being ethnically tribal, and having community affiliations to tribal groups. 20 % of the doctors belonged to either other district or other state.

A majority of respondents were married at the time of interview (23/25), often with children. 48% of the doctors stayed at the headquarters. In some of these instances, the spouses and children were located in proximate towns, with opportunities to visit them on weekends or once a month.

Most of the respondents (22/25) in this selection were MBBS graduates, and the remaining 3 were AYUSH graduates. 3 respondents had postgraduate degrees (MD or MS) of specialization.

CHARACTERISTICS	FREQUENCY
Age-group	
20-29	3(12%)
30-44	17(68%)
45+	5(20%)
	Median age: 35
Gender	
Male	21(84%)
Female	4(16%)
Caste	
Scheduled caste	2(8%)
Scheduled tribe	5(20%)
Others	18(72%)
Marital status	
Currently married	23(92%)
Divorced, widowed, separated	0%
Never married	2(8%)
Background	
Rural	8(32%)
Urban	17(68%)
Residing within the PHC/CHC village	
Yes	13(52%)
No	12(48%)

Type of employment	
Permanent	72%
Contractual	28%
System of medicine	
Allopathy	22(88%)
AYUSH	3(12%)
Qualification	
Medical graduate	19(86%)
Medical postgraduate	3(14%)
Years of service	
1-5 years	5(20%)
5-10 years	18(72%)
More than 10 years	2(8%)
Work Place	
PHC	52%
CHC	48%

Table 2: Profile of the doctors

Personal Profile of the Staff Nurses

Mean age of staff nurses was 36.9 years. Majority of the staff nurses were married. Majority not only fulfilled basic educational qualification but had higher education. 3 staff nurses were graduates.

CHARACTERISTIC	FREQUENCY
Age-group	
20-29	2(15%)
30-44	8(62%)
45+	3(23%)
Gender	
Male	6(46%)
Female	7(54%)
Marital status	
Currently married	12(92%)
Divorced, widowed, separated	0%
Never married	1(8%)
Educational status	
Upto 10th standard	3(14%)
10th-12th	7(32%)
Graduate or above	3(14%)
Background	
Rural	7(54%)
Urban	6(46%)

Residing within the PHC/CHC village	
Yes	9(69%)
No	4(31%)
Type of employment	
Permanent	8(62%)
Contractual	5(38%)

Table 3: Profile of the staff nurses

Personal Profile of ANMs

Most ANMs in the sample were in their thirties, median age being 39 years. Almost all (95%) of them were ever married. A large proportion of them (62%) did not reside in the SC area and commuted daily from either city or neighboring village. Besides being alone, 13% of the ever-married ANMs did not have any economic support from the family: husband either was retired; or had died or separated.

CHARACTERISTIC	FREQUENCY
Age-group	
20-29	8%
30-44	65%
45+	27%
	Median age:39
Caste	
Scheduled caste	10%
Scheduled tribe	15%
Others	75%
Marital status	
Currently married	86%
Divorced, widowed, separated	9%
Never married	5%
Educational status	
Upto 10th standard	50%
10th-12th	40%
Graduate or above	10%

Background	
Rural	53%
Urban	47%
Residing within the SC village	
Yes	36%
No	64%
Type of employment	
Permanent	73%
Contractual	27%

Table 4: Profile of ANMs

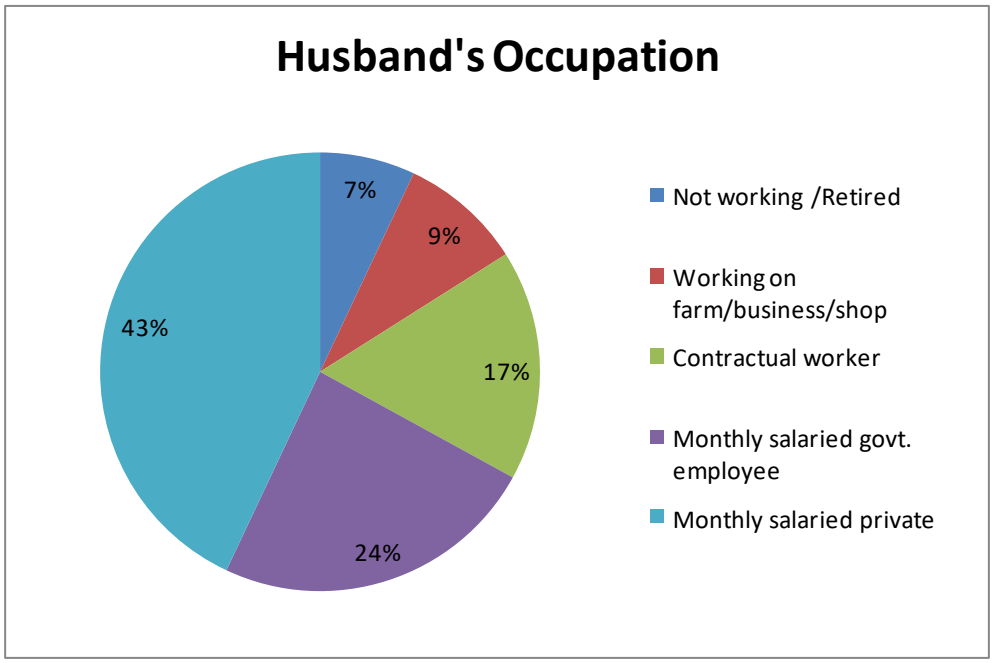

Fig 5: Occupation of the ANM's husband

Amenities and Infrastructure at the facilities

Sub Centre

At least one village in almost all the sub-center areas was connected with an asphalt road. It was however not easy to commute to the town in times of need. In 23% of the villages, only one or two buses plied to the town daily. The nearest town was often far away (a mean distance of 20 kilometers), which entailed significant investment in terms of time and money. Though most of the sub-center areas had primary schools, 72% had a secondary school and only 27% had higher secondary school within the sub-center area. Middle or secondary school was more than 5 kilometers away from nearly half of the sub-centers. This distance could pose significant stress on children if they were to travel to their schools from the sub-center village every day.

An ANM is expected to reside in the sub-health centre and provide services to about 5000 population in her area. Physical facilities and amenities are critical for her security and performance. All the 22 sub-health centres visited had buildings, mostly located in the village. However only two-third had electricity and only a quarter had water supply round-the clock. Only 7 had toilet for clients. Telephone was available in only 2 sub- centres. Not even half of the sub-centres had safe or secure environment for ANMs to stay at night. Most of the buildings were old and crumbling. Furniture was not adequate in the sub-centres. Only 8 had labour tables. Though most sub-centres had thermometer, adult weighing machine, stethoscope, blood pressure apparatus, child weighing scale, and foetoscope, many did not have critical lifesaving equipment. Drugs for minor ailments, iron and folic acid tablets and TT injection were available in most of the sub-health centres. Lack of life saving drugs and equipment hindered emergency and first-aid services.

Overall, ANMs were providing basic maternal and child health services in the sub-health centres even though facilities, instruments and equipment were inadequate. However, observations indicated that ANMs were providing services on an adhoc day-to-day basis rather than following a systematic plan. Nearly all were conducting antenatal clinics and immunization sessions and registering vital events.

Primary Health Centre

16 PHCs were visited in the 3 blocks. All the 16 PHCs had buildings with electrical supply but it was not regular, and neither of the PHCs had the generator facility. Round-the clock water supply was available in 9 PHCs. 10 out of the 16 PHCs had functioning toilet facility. Telephone was not available in any of the PHCs. Separate labour room was available in all the PHCs. Laboratory Technician was present in only 10 PHCs. 15 PHCs had labour table but the quality and the utilization was not uniform. Labour tables were either new and not used, or old and rusted. Drugs for minor ailments, I.V. fluids, iron and folic acid tablets, tetanus toxoid injections were available in almost all PHCs. Drugs like oxytocin, misoprostol, methergin were available only in 10 centres.

Only 4 of the 16 PHCs visited were providing round the clock services. Beds were available in all the PHCs but the condition of the beds were found to be in poor condition in some PHCs. Doctors were not available at the time of visit in six PHCs. All the PHCs were conducting antenatal, postnatal and immunization clinics.

Fig 6: PHC Nai, a health facility in Girwa block

Fig 7: PHC Ogna in Jhadol Block

Fig 8: PHC Tidi in Badgaon block

Community Health Centre

4 CHCs were visited in three blocks. Most of them had electricity and round the clock water supply. All CHCs had separate labour rooms. Operation theatre was also present in three of the four CHCs. Baby resuscitation apparatus was present in only half of the CHCs visited. Most of the CHCs had residential quarters in the hospital complex. But safety and security were a problem in 2 CHCs. Toilet was available in the ward for clients, but separate arrangements were made for hospital staff in 3 CHCs.

All the four CHCs provided 24 hours services. Gynaecologist & Obstetrician was available in only 1 CHC, physicians were available in all CHCs and pediatrician was not available in any of the CHC. Only 2 CHCs had surgeons posted. Anesthetist was not available in any of the CHCs. Adequate staff nurses for 24/7 services were available in all the CHCs. Lab technician was available only in all CHCs and round the clock laboratory was present in only 1 CHC.

Factors that affect the Efficiency of Rural Health Workers

Factors that affect the decision of doctors' choice of place of residence

- **Children education**

The quality of schools for children emerged as an important factor deterring the doctors from living in rural areas with their families. 76% of the doctors said that standard of education is poor in the rural areas and around 24% said its average. Issues with schools included the quality of the teaching, and schools' infrastructure. Thereby, it came out from the responses that the presence of the secondary or higher secondary schools in the PHC/CHC area was not the deciding factor to stay at the PHC/CHC. Interestingly, there was an overwhelming demand for private schools teaching in English.

> "Very poor standard of education for children: in today's competitive environment, the standard of schools in rural areas isn't up to the mark."(Medical Officer, *non-resident*)
>
> "Poor quality of education, teachers are not good. (Medical Officer, *non-resident*)

- **Proximity to Family**

Proximity meant working in the same area as their families lived or being able to physically live with their families.

> "You don't want to stay here all alone in isolation. That is why I commute from the city ever day to the PHC so that I can stay with my wife and children." (MO, *non-resident)*

In some of the instance, doctors posted in remote and tribal areas, used to visit their spouses and children on weekends or once a month.

> "My family is in (a nearby town). My wife is a teacher in a government school. I have a four year old daughter. I stay here (in the village) from Monday to Saturday and go to the family on Saturdays and in emergencies." (*Allopathic doctor, resident, 5 years in rural and remote areas, male*)

Interestingly it was observed that those who belonged to other district or other state stayed at the staff quarters.

- **Poor Living conditions**

Presence of basic amenities within the facility area such as electricity, presence of tap water did not significantly affect the doctors' decision to reside or not reside in the village. Whether or not the living quarters were present or not, it did not make any difference in their place of stay. Majority of the PHCs, CHCs visited had the basic amenities like water and electricity. However, during the interviews, most doctors irrespective of their residential status referred to poor quality of accommodation. Many of the PHCs (44%) did not have staff quarters. Although all the CHCs had staff quarters but some were reported to be in bad condition.

> "I can't get my family here. There are no facilities. Infrastructure is zero, all other facilities are zero. This is a remote place. Problem of electricity, erratic supply." (*Allopathic doctor, resident, 5 years in rural and remote areas, male)*

- **Poor Connectivity**

Since many of the PHCs and CHCs are not well connected by road to adjacent town and Udaipur city, majority of the doctors found it difficult to have access to markets and good educational facilities for their children.

Factors that affect ANM's and nurses place of residence

Majority of the ANMs (62%) and nurses (31%) did not stay in the SC village. They either resided in another village or town.

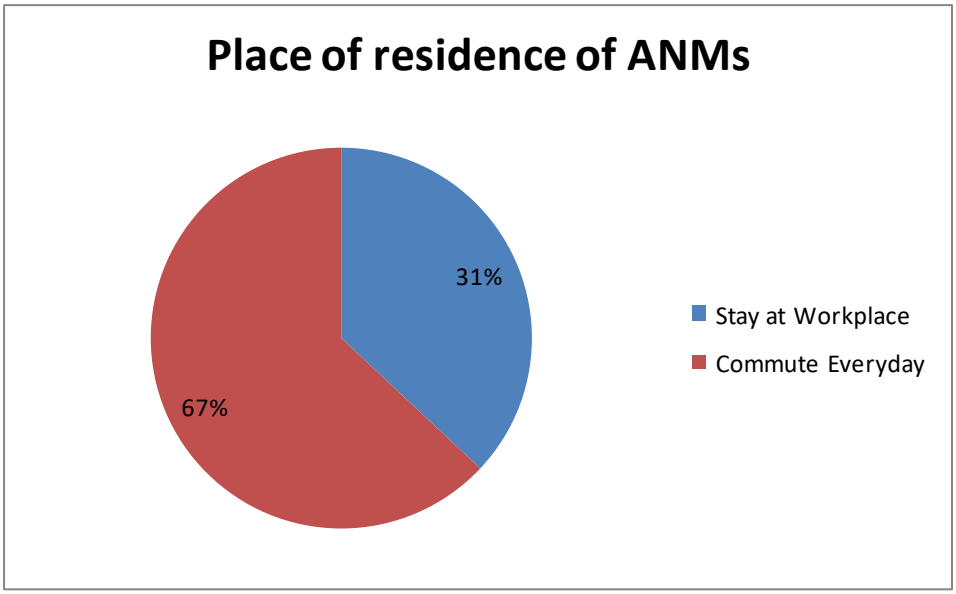

Fig 9: ANM's choice of Place of Residence

- **Amenities: availability and quality**

Presence of amenities within the sub-center and PHC area such as electrification, presence of tap water or asphalt road was not significantly associated with residential status of the ANMs and nurses. Whether or not the sub-center and PHC had living quarters also did not make a difference to their place of stay. Larger proportion of ANMs and female nurses however stayed in sub-center areas where living quarters were located in the center of the village, than in those where they were remote. Poor quality of accommodation possibly does not make living any easier than not having any living quarters. During in-depth interviews most ANMs and staff nurses, irrespective of residential status, referred to poor quality of sub-center and PHC accommodation and lack of amenities. Many non-resident staff cited these difficulties as reasons for not staying in the sub-centre/ PHC village. In face of the difficulties posed by lack of amenities and infrastructure, spouses' place of residence and relationship with the community became an important consideration in deciding where to stay.

"Electricity in the PHC is a problem, and water is also a problem -- water stops flowing after filling a few buckets. Milk and vegetables are not available in the village. My husband works in another district, and it is difficult to reside here alone" *35 years, non-resident, Staff nurse*

"There is no building in the name of this sub-center. Rents are high -- people ask for Rs 500-600 for a house, which I cannot afford. My husband works in the city. But this is a nice village – I stay with my relatives. It helps to stay in the sub-center village, because it makes my work easier" *31 years, resident, ANM*

- **Education facilities for children**

ANMs posted in the sub-center where a secondary or higher school is located, were also significantly more likely to reside in the sub-center village, suggesting that children's education plays a significant role in influencing the decision of place of stay of an ANM. This inference was supported by the ANMs responses from in-depth interviews. However the same trend could not be seen while interviewing nurses. Many of the respondents said that that the presence of the secondary school in the vicinity of the village did not affect much of their decision to reside in the same village.

Most of the respondents reported being concerned about their children's education: many who had earlier lived in the same village said that they had shifted to a bigger village or town because local facilities for education of grown-up children were either remote, or of poor quality. In such instances, they traded their children's inconvenience of commuting to school with their own time and effort in commuting to the sub-centre/PHC/CHC from a town. By contrast, respondents whose children were very young and either did not go to school or went to primary school found it convenient to live in the sub-center/ PHC/CHC area.

> "I stayed in the sub-center village for 4-5 years. Because of my children's schooling I have recently shifted to the town. A lot of children's time was wasted in commuting from the (sub-center) village" *38 year old ANM, non-resident.*
>
> "If one stays at the PHC, only then could one give some time to oneself and family. I recently got married. I prefer staying near my PHC." *25 year old nurse, resident.*

- **Distance from district headquarters**

Analysis revealed that distance from the district headquarters significantly influenced the decision to reside in the facility area: the nearer the nurse/ANM is posted to the district headquarters, more likely he/she is to reside in the town. In-depth interviews helped explain these findings: proximity to the town made it easier for them to commute to their place of work—commuting from a shorter distance entails less cost in terms of time, money, and energy.

> "During my earlier posting, I used to reside at the sub-center because it was not possible to up-down from there. But now, my sub-center is close to Udaipur, and also because of my children's studies, I do not reside in the sub-center. Wherever one may stay, the work should be completed on time…" *38 year old ANM, non-resident.*

- **Safety at the workplace**

Majority of the ANMs (77%) and 38% of the nurses felt unsafe in their work area. This problem was majorly highlighted in the case of ANMs. They often lived in fear of several men who threaten abuse or intimidate them. In-depth interviews brought out in detail the circumstances and situations of sexual harassment and intimidation ANMs face in their work place. While several ANMs (both resident and non-residents) reported that they themselves had been harassed or intimidated at least once during their professional life, majority reported instances in which another ANM had suffered harassment. Many ANMs reported instances of men under the influence of alcohol, threatening, abusing or hitting them. This is one of the major factors that affected the decision of ANM's place of residence. More on the social determinants will be elaborated later in the report.

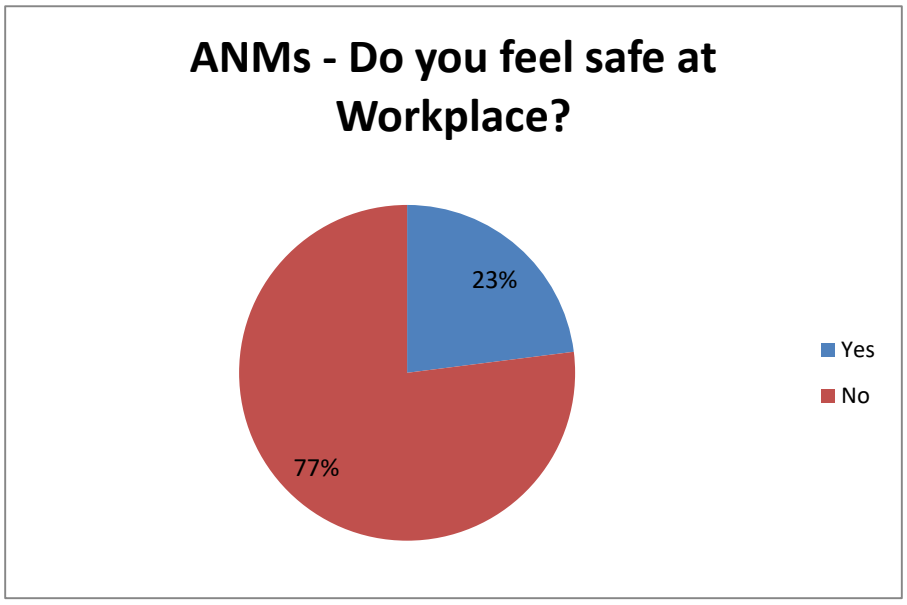

Fig 10: Perception of Safety in the work area

Personal characteristics: Background of place of origin and phase of life

Analysis suggested that ANMs having rural origin were significantly more likely to reside in villages, as compared to their urban-bred counterparts, who continued to stay in towns. Similarly, those belonging to backward castes were more likely to reside in villages as compared to those of other castes.

Besides being better adjusted to a rural set-up, ANMs having rural background and belonging to backward castes were likely to be poorer, and would prefer staying in the villages to augment their incomes by collecting fee for services. They were also likely to be posted in distant and remote areas, where commuting everyday would be expensive and may not be feasible. Analysis further revealed that ANMs belonging to higher castes were more likely to be posted in blocks closer to the town —this could reflect discrimination in postings.

Women aged below 30 or above 44 years were significantly more likely to reside within the work area as compared to those aged 30 to 44 years. This is possibly because of greater needs in this period of their lives that could not be met by residing in villages, a hypothesis supported by the fact that education of children was perceived as one of the most important needs by the respondents with grown up children, and that presence of secondary and higher secondary school within the work area was significantly associated with residing.

Perception of working conditions and work load amongst rural health care service providers.

Need for better infrastructure

An important issue which the service providers had was the poor facilities with which they had to perform their jobs. Poor health center infrastructure, irregularity in the supply of drugs, and inadequate equipment constrained them. Around 62% of the respondents stated the need for improving the quality and regularity of medical supplies and provision of better workplace infrastructure to improve working conditions and enhance job satisfaction.

> When we are doing caesarean section, most of the things we have to arrange on our own. As such government is not able to supply all the things to the peripheries like the drugs and equipment - there are many things which we have to order personally. (*Allopathic doctor and specialist, permanent, 4 years in rural area, female*)

> We don't have the basic equipment for routine investigation like urea, creatinine, such routine investigations are not possible. If I am not able to properly investigate a patient then how will I be able to give him proper treatment? Once a 30 bed hospital is made there should be an X-ray machine, one sonography and one specialist. All these facilities are not here. We are not able to serve our patients like we want to. (*Allopathic doctor and specialist, permanent, 5 years in rural area, male*)

> There is problem of electricity here. Last night I had to perform delivery without the electricity. Stocks supply is not regular. We are putting our best but government is not. Ultimately the patient suffers. *(ANM posted at PHC*)

> Often a thermometer or a torch is missing what to say of delivery tables or a cupboard to store drugs. I am made to run from pillar to post to obtain supplies (*ANM,contractual*.)

For AYUSH doctors, the lack of AYUSH medicines restricted their ability to practice their system of medicine.

> I can't practice my discipline. AYUSH medicines are not given importance. Our demands are not given much attention. This is often frustrating. (*AYUSH doctor, Contractual, 3 year in rural area*)

Analysis also revealed that 43% of the respondents stated the need for trained staff. Lack of adequate staff increased their work load.

> I am the only doctor at the PHC. Have to do all the work. Because of the work load I feel unsure. Another staff nurse will be helpful.
>
> (*Allopathic doctor, permanent, 4 year work in rural area*)

For nurses the lack of staff, particularly doctors, was particularly problematic because it shifted clinical responsibilities to them even though they were not adequately trained.

> Medical officers must be there. We follow instructions and cannot take decisions on patient health. (*Nurse, PHC, 5 years in rural area*)
>
> Doctor is often not present. I've to handle the patients all alone. I am forced to take decisions for which I am not trained.*(Staff nurse. contractual. 3 years in rural area*)

Lack of transparency and rational procedures for transfers and promotions

Majority of the respondents expressed the need to have clarity on transfer and promotion procedures.

Medical officers were concerned about the lack of clear-cut transfer and promotion policies. According to them, if the posting in rural or difficult areas was going to be for a fixed term with guaranteed transfer after this, there was a greater likelihood of attracting more doctors to work in rural areas.

> If a doctor gets posted in a remote area then there is no such policy that that poor person would get transferred after 5 – 10 years. The poor guy keeps aging and continues to stay in the village. Nobody wants to stay there forever. (*Allopathic doctor and specialist, regular, 8 years in rural areas*).
>
> Placing new doctors at remote PHCs and giving them the assurance that they will be transferred after a definite period/or given postgraduate seat and place experienced (8–10 years' experience)/senior doctors at the headquarters of the remote area would be good. (*Allopathic doctor, 6 years in remote area, permanent*)

> I have been working here for 8 years. If we go by government norms then after 5 years of duty in a tribal area I should have been transferred to another less remote place - but all these things are not possible. I don't want to blame the government but this is a fact that without making a lot of personal efforts, there will be no transfer. (*Allopathic doctor and specialist, contractual, 8 years in remote areas, male*).

Absence of a well-defined transfer policy also affected ANMs significantly. While some of them continue to be posted in remote and difficult areas for long durations, others manage to remain at comfortable postings closer to town from where it is easier to commute daily.

> I don't have influential contacts. My husband works in another city. Its very difficult to commute from here. Not safe to stay. (*ANM, contractual, 10 years*)

Salary is important

Majority of the respondents expressed dissatisfaction regarding their present remuneration. 55% of the ANMs said that their salary does not justify the amount of work they are expected to do.

> Toil from morning to evening and still we don't get our due. Living costs are rising and with this salary, it is very difficult to meet ends. (*ANM, permanent, 12 years in rural area)*

Among contractual service providers, especially AYUSH doctors, higher pay-scales were a frequently expressed need, with majority of them claiming that their compensation and the terms of their contracts were prohibitive. A number of respondents reported how their salaries had not been increased to match the rising prices of commodities and services.

> They are giving me 15,000 per month which is nothing. When I joined here, rice was Rs 11 per kg. Now, how can you manage in 15,000? Costs are rising but our salary is the same. Our economic condition has been disturbed badly - today if our children fall ill what will I do in Rs 15,000? Salary is not good. (*AYUSH doctor, contractual, 3 years in rural area, male*)

> When we started here, we were getting 8000, but now it is 15000. After so many years it is still 15000. In 8000, living was difficult - then it got 15000 and it felt a little good. But with the economic situation now, 15000 is looking equal to that 8000 – it seems there is no difference. And people below us have superseded us - like a worker is getting 20000. So we are feeling a little let down. (*AYUSH doctor, contractual, 4 years in rural areas, male*).

Some of the AYUSH doctor also expressed that their salary is were considerably less than those of medical officers with whom they sought parity.

> "We do as much work as the permanent doctor...we should get at least that much...if not more".(*AYUSH doctor, Contractual, 3 years in rural area, Female*)

Significant number of nurses specifically contractual nurses were also not satisfied with their salary.

> "Salary is not very good...but now it's better after recent revisions. But not as much as private sector. (*Staff nurse, permanent*).

Another concern, particularly among those on contract was the irregularity with which they received their salary.

> "We never get salary on time...got it after three months...what do we do for those 3-4 months. (*AYUSH doctor, 4 year in rural area, contractual*).
>
> "Our salary is sometimes not received on time. Sometimes it comes as late as middle of the month". (*Staff nurse, 3 year in rural area, contractual*)

However the bottom line that featured prominently during the interviews with doctors was that higher salaries will act as a motivator and will attract the younger generation to work in rural areas and also enhance retention.

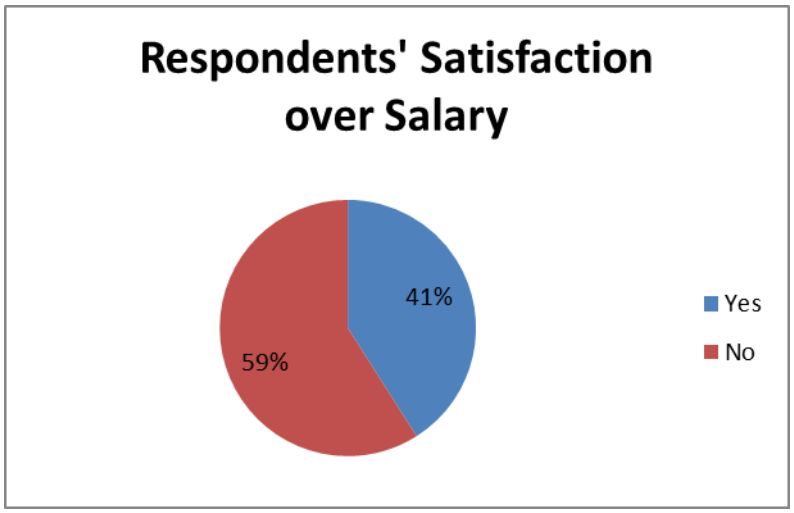

Fig 11: Respondents' salary satisfaction

Concerns over Job security

The security of a regular job was also a widely and strongly expressed need among contractual doctors. Many of them had joined their current contractual positions, based on assurances or expectations of conversion to a regular position after a period of time. The uncertainties of contract employment were magnified in the case of AYUSH doctors, since there are no regular jobs earmarked for non-allopathic practitioners.

> I want to see myself progressing. I feel there can be some progress if we stick here but here, it might also happen that we leave and go. My wife and children all stay outside, so sometimes I think "leave it, just for 15000 rupees..." but because I see some possibilities so I think that in a year or two I might get regular then I can bring my wife here. (*AYUSH doctor, contractual, 3 years in remote area, male*).

> Our job is not secure. We are under contract and when the allopathic doctor will come then we we will find that we are not needed. So we have no certainty here. Allopathic doctors have a regular post here so it's fine for them (*AYUSH doctor, contractual, 3 years in rural area, female*)

Nurses and ANMs also voiced their concern about job security.

> The contractual employee works with the hope that she will become regular. There is no specific time period for becoming a regular staff. There is no higher education facility and no educational leave or pay.(*Staff nurse, contractual, 6 years in remote area,female*)

Erosion of Professional Skills

Erosion of professional skills and confidence was a commonly reported problem, as often attributed by respondents to others of their acquaintance, as to themselves. Frequently this was linked to limitations of resources (clinical facilities and equipment) to practice a high standard of medicine, and the lack of opportunity for further academic development.

Opportunities to enhance skills and academic exposure in areas which reflect community needs act to further doctors' professional interests and can reduce problems of intellectual attrition and isolation – doctors particularly emphasized the need for refresher clinical skills training in areas such as emergency and accident care, obstetrics and maternal health, tuberculosis and malaria care.

> This is a very competitive world. We should be updated with all the new things, what is going before us and behind us. In a government job we don't have this opportunity. Opportunities to attend seminar, conferences, training are a rarity.(*Allopathic doctor, specialist, 7 year in rural area, male*).
>
> "See, the main thing is in rural areas, once you go there it should not become a dead end, as far as learning is concerned. That is the main fear."(*Allopathic doctor, regular, 1.5 years in rural area*)

> Science is moving forward and we are lagging behind… in some emergency if there is some critical disease, I don't know, then I ask another doctor. If he knows then it's OK or else I have to look up books - and books are not here with us. Sometimes we've to train nurses and other workers on various diseases and at that time we feel disappointed that we can't give them full knowledge. (*AYUSH doctor, 4 years in rural area, male*)

Nurses also voiced their concern that staff nurses are not deputed regularly for continuation education like workshops and seminars to update their knowledge in nursing and provide specialized bedside nursing care. There are no programmes for self-development. In many places, staff nurses were working alone and there is no chance for professional interaction and exchange. There is no access to book and journals.

For AYUSH qualified doctors in contractual positions, the experience of prescribing allopathic medicines in government clinics was sometimes problematic. Colleagues with allopathic degrees widely did not perceive their competence to be at par, and did not trust them with all aspects of medical management. AYUSH doctors did not have opportunities to pursue or enhance their skills and knowledge in their own systems of medicine.

> Since we are in the (Ayurvedic) profession, we always feel good to give pure Ayurvedic treatment. But we have to (give allopathic treatment) since we have been posted in government facilities. (*AYUSH doctor, contractual, 3 years in remote areas,female*)

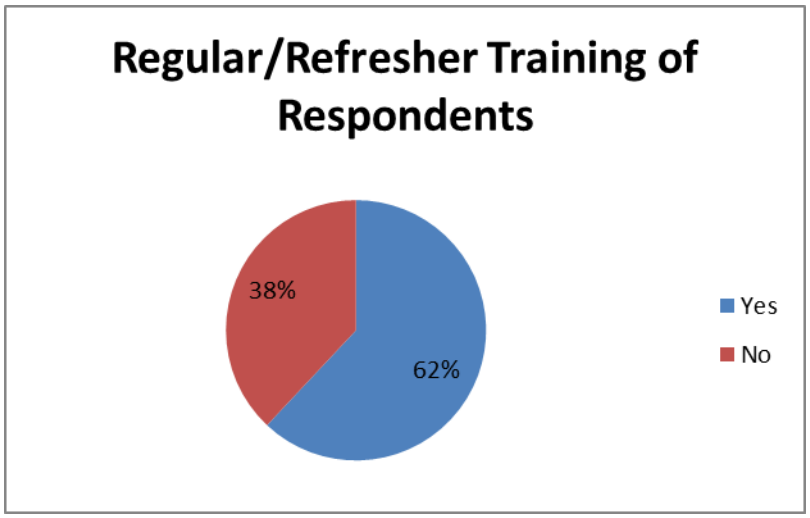

Fig 12: Information on Training given to the respondents

Political Interference

Majority of the respondents reported that they have experienced political interference at some parts of their career.

The doctors hated interference from local leaders and for many it was a major frustrating factor.

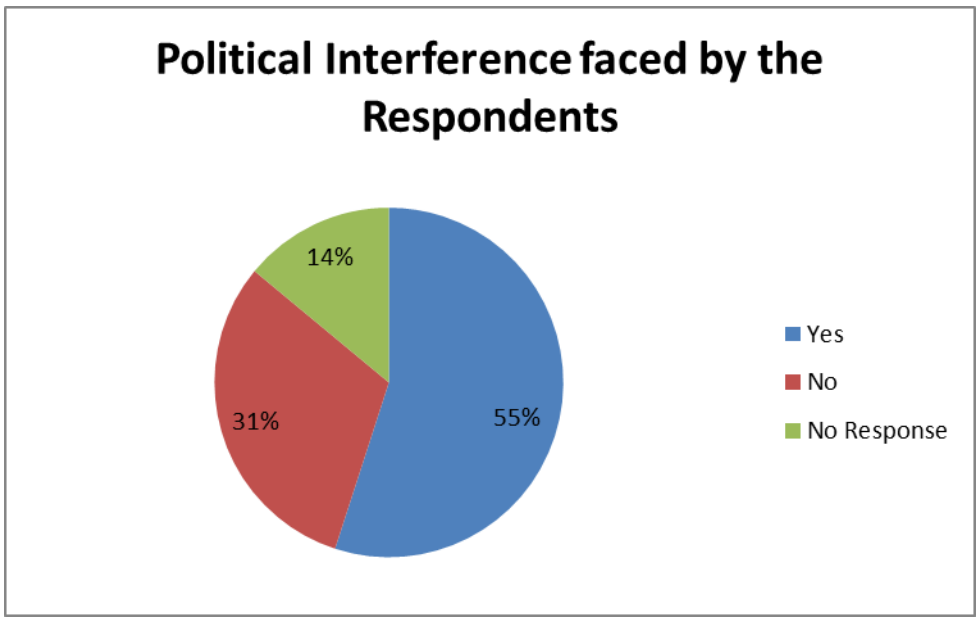

Fig 13: Political Interference faced by the respondents

Lack of mentoring and supervisory support

This factor came our more prominently with the interviews of ANMs and staff nurses. In view of difficult living and working conditions, support by supervisors for coping becomes critical. Most of the ANMs reported that supervisors did not attempt to solve problems related to their working conditions or place of stay. ANMs perceived supervisors as being insensitive, and the relationship was evidently hierarchical. None of the ANMs interviewed reported any significant support of supervisors or officers for dealing even with grave problems such as sexual harassment incidents. For fear of rebuke, many ANMs do not even raise their problems with supervisors but instead try to develop their own mechanisms for coping.

"My sub-center does not have a building and I am still living in rented accommodation as my husband stays in Bahrain. But the landlord is asking me to vacate the house, and often harasses me. I have reported this many times to the supervisors and to panchayat people, but no one listens. This is my biggest problem"*33 year old ANM,*

"I do not tell any of my problems to anyone—because nobody listens. On telling our supervisors, they say, do not talk of your problems" *33 year,ANM.*

"On telling our problems to the supervisors, they say you will have to work despite all your problems. Sometimes on not meeting our targets, they ridicule us—sometimes other ANMs are in tears because of this……." *32 year old ANM.*

To understand the social factors that demotivates the rural health care service providers.

Security

Particularly the female staff expressed concerns regarding the security issues at or after work. Majority of them said that they feel unsafe at their work areas especially at night.

> Gets unsafe at night. No guard is there to keep a watch. Fear night duties. Nurses should not be posted at night without any security. (*Staff nurse, regular, 4 years in rural area.)*

Issues of opportunistic sexual harassment also came to light. The profession of an ANM demands her accessibility to the men and women of the village at all hours: some men exploited this accessibility, more so in event of her being alone and vulnerable. Few ANMs reported instances of sexual harassment (physical molestation) at pretences of calling to attend a delivery, offering a lift for a field trip, or seeking treatment by a male, evidently feigning an illness.

Health workers also feared the possibility of community violence.

> Its very difficult to handle drunk patients and relatives. If patient dies in the hospital, community blames death on the doctor and resorts to violence. Support of local self-government must be sought to ensure doctors' safety. (*Allopathic doctor, 3 years in rural area, permanent.*)

ANMs also reported that most of the times, men under the influence of alcohol abused and harassed them especially at times when she refused to go to home to conduct the deliveries. It was revealed during the interviews that refusal to go home and conduct deliveries became one of the supposed excuses to do physical and mental harassment on ANMs.

Community support

Secure relationships with the community could help the service providers to cope with lack of amenities and infrastructure. Communities are extremely heterogeneous around SCs, and this reflected on ANMs perceptions of the community, which were often seemingly contradictory. In general, resident ANMs were appreciative of the friendliness and helping nature of some families in the village. They were however critical of most others "illiterate villagers" for not accepting the family planning methods (and hence affecting their performance).

> Have to work with tribal population. Not at all motivated towards health. Very difficult to make them understand and adopt family planning methods. They don't pay heed to what I say. No matter how hard I try but all my efforts down the drain.(*ANM, regular, 10 years in rural area.*)

On the one hand communities do not appear to provide security or support to the ANMs; on the other it does not appear to exercise its authority to ensure that they reside within the work area. This is especially true if ANMs otherwise enjoy good relationship with some of its influential member families, as suggested by the following responses:

> "I use a vehicle for commuting. I live nearby and therefore can commute easily. Villagers are completely satisfied with my work - I complete my work on time. They therefore do not object to my not staying here" (ANM, non-resident)
>
> "For the last 14 years, I stayed at the sub-center. Then because of certain problems, I stopped staying here. The villagers say that I may stay in the town nearby, but wish that I do not leave the village (get a transfer)" (ANM, non-resident)

Analysis for doctors and nurses revealed that over all they enjoyed the community support. But for some of the respondents who belonged to other states, language barrier was one major hurdle in establishing rapport with the villagers. Presence of tribal population in some blocks also made matters worse because of language barrier.

> Patients don't understand what is being told to them because of language barriers and illiteracy. I sometimes feel of working in those places where I can understand the language and feel appreciated and valued.(*Staff nurse, contractual, 3 year in rural area.)*

Lack of social life

Many doctors and nurses especially those who belonged to urban areas said that social life in rural areas is literally redundant.

> No social life…if you want to relax in the evening…you do not know where to go… (*Allopathic doctor, contractual, 1 year in remote area, male*)

Lack of avenues for society and entertainment were apparent in many instances, and feelings of social isolation and loneliness were common.

The connectivity to the Udaipur city and nearby town was decently good in well-developed blocks but only 1-2 buses plied a day in remote areas.

Chapter 4 Discussion

Based on an analysis of human resource management in the health sector of the country, some authors have suggested that non-availability of staff reflects the larger problems of lack of accountability within the public system, lack of awareness among clients, and political protection to poor performers[20]. This view is echoed in private by a large number of public health managers in the government sector. There is indeed a positive correlation between the availability of health workers and better health outcomes, as well as increased coverage of essential health interventions. These correlations have been demonstrated in a number of cross-country ecological analysis.

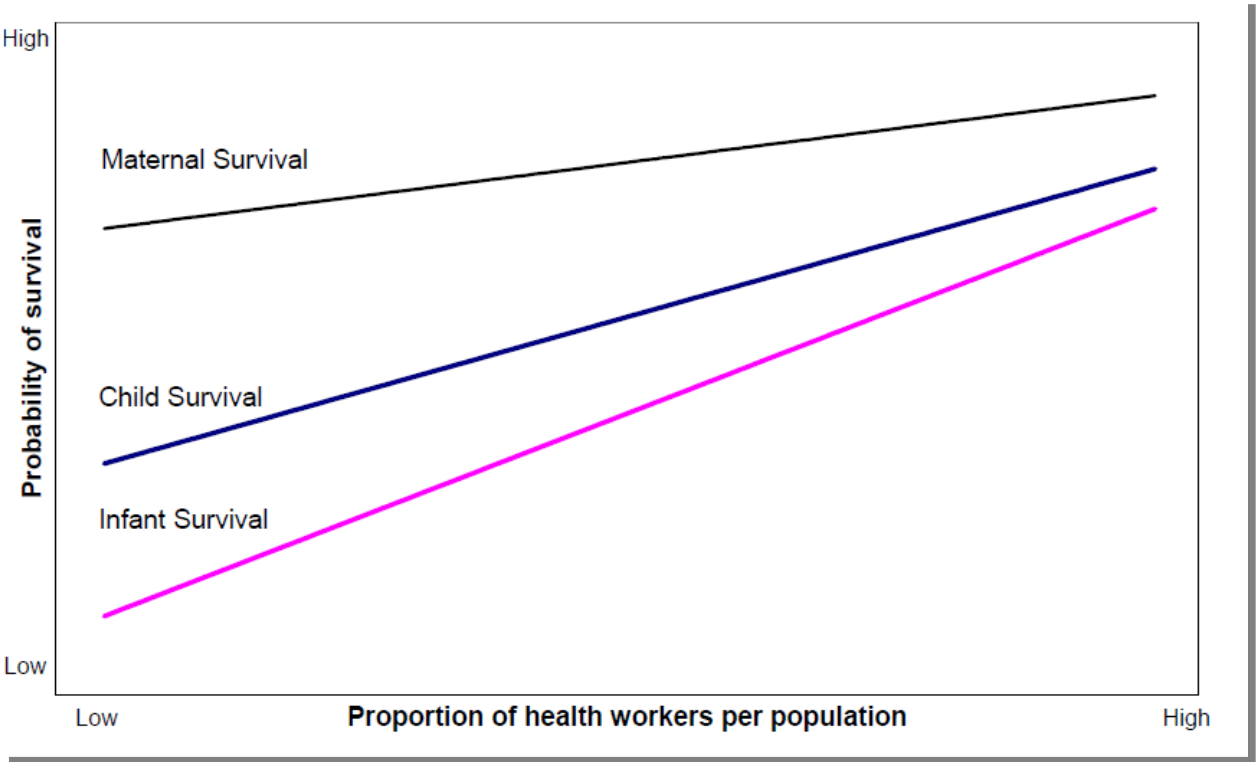

Fig 14 : Density of health workers (doctors, nurses and midwives) and probability of survival

Source: World health report 2006: working together for health. WHO, 2006.

Earlier studies and program evaluations suggest that poor residential facilities and inability to meet basic family needs are prime reasons why ANMs do not reside in their work area[7]. Community affinities were among the key motivational factors which contributed to doctors' decisions to reside locally.

The World Health Report 2006 estimated that the world lacks about 4 million health workers, if a minimum level of health outcomes is to be achieved. The report identified 57 'crisis' countries as being the most affected by this dearth in health personnel, predominantly in Sub-Saharan Africa and Asia. However, health worker shortages are currently reported by many other countries, both developed and developing. Such shortages are symptoms of a poorly managed health workforce and health care system. The causes of the crisis are complex, and have to do with insufficient production capacity, but also with an inability to keep the workers that are being produced in the places where they are most needed. Therefore, because of the complex web of factors that influences the mobility of health workers, any efforts to scale up the health workforce in response to the crisis must be combined with effective measures to attract and maintain both existent and newly trained health workers where they are needed most.

The distribution of private providers is also worrisome; one study estimates that over 80 percent of the qualified private provider market is concentrated in urban areas[2]. A related issue is the shortage of female doctors in rural areas. Other categories of health workers are likely to be similarly maldistributed. The lack of qualified medical professionals in rural areas has resulted in the majority of rural households receiving care from private providers, many of whom have little or no formal qualification to practice medicine. One policy response to this situation is to strengthen the public sector presence in rural areas by ensuring that health centers are staffed according to government norms. In conjunction, the government can also look beyond the public sector and examine ways in which qualified private practitioners can be induced to work in rural areas. For either strategy to be successful, the key is to create the right incentive climate to attract health workers to rural postings.

Based on the result of the study, following framework is proposed which describes not only the individual factors, but also how health workers might consider one or more of these factors in

arriving at this critical decision to reside or not to reside and the various organizational and social factors which affects their efficiency in delivering services.

Table 5 presents the organizational and social attributes by health worker type. The colour coding suggests weaker, medium and stronger attributes that indicated up to what extent is the health workers efficiency is affected by the stated factors. For e.g. certain organizational issues figured prominently for all such as salary, the need for good clinical infrastructure, recognition at work place etc. However, certain factors like presence of mentoring and support staff came out as a medium attribute for doctors but was rated highly for nurses and ANMs. Similarly as far as the physical infrastructure was concerned, analysis revealed that more than 60% of the ANMs were dissatisfied with the physical infrastructure of their SCs and said that because of lack of good living conditions they cannot reside in the staff accommodation and it hampers their productivity. Majority of the respondents also emphasized concerns about contextual factors pertaining to living in a rural area.

Important Parameters	Doctors	Nurses	ANM	Overall Analysis
Organizational Parameters				
Work Satisfaction - Working Hours vis-a-vis renumeration				Very Strong
Adequate Work Load				Very Strong
Political Interference in Workplace				Very Strong
Physical Infrastructure				Strong
Clinical Infrastructure				Very Strong
Recognition at work Place				Very Strong
Presence of Mentoring and Support Staff				Strong
Accomodation at Workplace				Medium
Training/Growth Opportunities at Workplace				Medium - Strong
Social Parameters				
Standard of Education in school areas				Strong
Presence of Secondary and Higher secondary school				Weak
Safety at Workplace				Very Strong
Community Support				Medium-strong
Proximity to the family				Very Strong
Social life				Weak-Medium
Distance of residence from the school				Medium

Analysing Metrix	Meaning
less than 30%	Weaker Attribute
30-60%	Medium Attribute
greater than 60%	Strong Attribute

Ease of staying	Inconvenience of not staying
Good living quarters	Cost of transport
Good schools for children	Cost of rent in the town
Community support	Travel time
Personal Security	Accountability to the system
Other amenities like nearby market	Pressure from the community
Social life	
Job of spouse	

Fig. 15: Framework for decision making by respondents

According to this framework, a health worker's decision to reside or not could be considered an "economic" decision that he/she takes after having weighed the "ease of staying" and "inconvenience of not staying" in the work area. Ease of staying is often not significant because of uniformly poor living conditions and deters them from residing in the work area. Occasionally however, job of spouse, family support, and large village increases the ease. In absence of significant pressure from the community or system to reside, inconvenience of not staying depends only on factors such as cost of commuting and travel time. Where this inconvenience is large, decision shifts in favor of residing.

Government agencies have sometimes recognized the poor living conditions of the health workers and inadequate support they receive. An action plan of Ministry of Health & Family Welfare (MOHFW) for revamping the family welfare program in India identified improving the quality and outreach of services was outlined as a major thrust area. While emphasizing client orientation, it affirmed that state governments should look into the practical problems of the

workers such as their place of stay, mobility, travel expenses, etc because “inadequate attention to these problems seriously hampers the working of service providers at the grass root level”[21].

In Rajasthan, Women Resource Center (WRC) has also been carrying out gender sensitive training of all cadres of government health personnel in a few districts. It is hoped that gender sensitive training would not only make them more sensitive to the needs of women clients, but would also help the male providers and officials to become more empathetic towards the female health workers especially ANMs as they are more prone for opportunistic sexual harrasement and be responsive to their needs.

Another move relates to the judgment of Supreme Court of India in the case of Vishakha and others versus the state government of Rajasthan and others--- the judgment explicitly placed the state responsible for preventing sexual harassment of female employees at the work place[22]. In pursuance of this order, a complaint committee has been constituted in MOHFW to look into the complaints of sexual harassment of women employees in the department. As per directions, the committee is also working in matters relating to appropriate working conditions of women employees at the place of work. Formation of such committees at the district level would not only provide the ANMs and other female service health providers a platform to voice their needs and grievances, they would also be well placed to take locally relevant actions for improving their living conditions and grievances, they would also be well placed to take locally relevant actions for improving their living conditions.

Chapter 5 Conclusions and Recommendations

Overall the findings of interviews indicated that while financial and educational incentives attract doctors and nurses to rural postings, they do not make effective retention strategies. Frustration among rural health workers often stems from the lack of infrastructure, support staff, and drugs, a feeling exasperated by local political interference and lack of security. Mundane issues such as lack of water, electricity, education facilities for children, and connectivity increase dissatisfaction also a primary care job commands little respect.

The findings of the research include that equipment; drug supplies and physical infrastructure are serious constraints on health workers' performance at the rural facility level. Where specialists are available, they are hampered by the lack of specialist equipment; drug shortages dent trust between patients and doctors and prevent the prescription of rational drug regimes. Physical infrastructure is too poor to attract doctors, staff nurses and ANMs to government accommodation, as well as frequently unsanitary, dangerous, and a cause of low morale among staff and patients. Staffing levels are another problem, as doctors struggle to provide services supposed to be provided by twice as many doctors. Posts for specialists are particularly unlikely to be filled; thereby increasing the work load for doctors and nurses who said sometimes they see more than 100 patients per day, under significant physical and resource constraints. However, it was also seen that in some facilities, where even the maiden doctor was also not present, the staff nurse had to take all the work load in spite of the fact that she is not trained to see all types of problems.

It was also observed with respect to residing at the staff quarters, although critical role of ANM has been universally recognized but still they received little support in terms of mobility, security and logistics; and in a hierarchy dominated by doctors and administrators, are often sexually and socially vulnerable themselves. On the one hand, health administration does not support these frontline workers, on the other they do not hold them accountable for residing in the work area. Excessive emphasis of the program mangers on monitoring achievement of sterilization targets has been well documented in India. Achieving targets could be taken as a valid excuse for not

attracting any action for other duties such as residing in the area. While recommendations have been made to initiate disciplinary actions against those who refuse to live within their work area, it does not seem to have much effect in practice.

The absence of doctors who are posted to rural facilities compounds the problem of high vacancies levels in the system. Although lot of research has gone into the reasons of ANMs for not staying but this study tries to explore the reasons behind a doctor's non availability at night as he does not stays at the headquarters. Factors associated with absenteeism include postgraduate training, low levels of job satisfaction, and, crucially, the weakness of disciplinary actions against absenteeism.

Poor management of personnel and unsatisfactory working conditions, usually associated with a discouraged work force, make it difficult for the health system to be responsive to patients' expectations. In sum, the success of reforms depends on adjustments in the number, skills mix, distribution, education and training, management and working conditions (including incentive systems) of the work force. Paying attention to human resource implications of health sector reforms is particularly important in poor countries, where the impact of effective and accessible health services on health status, and consequently on poverty reduction, can be significant.

Recommendations

This study explores the organizational and social factors that hamper the productivity of the health workers and also the reasons behind their reasons of staying at the headquarters or not. There is an urgent need to have a comprehensive human resource policy for the health sector that explicitly lays down directions for supporting as well as enforcing accountability to the health workers. Some of the issues that such a policy could address are as follows:

Recruitment and posting

- Geographical and ethnic affinities, and a rural upbringing, appeared to be dominant factors in favouring a doctor's decisions to join and also to remain in service in rural locations. This finding supports the deployment of policies such as affirmative action for entry into medical education for doctors originating from underserved areas.
- For ANMs, women with rural background may be preferred in recruitment given the fact that they are more likely to reside in the villages which will increase their availability and accessibility to the community, thereby improving their performance.

Improving the infrastructure and working conditions:

- This includes better infrastructure, materials and, ironically, more manpower.
- The presence of adequate numbers of staff in health facilities will improve the working experience for those already in station, creating a positive cycle: more manpower improves working conditions which in turn attracts more manpower / aids in retention.
- Support staff was often absent and the doctor was left to do all the work. Majority of the doctors resented PHC related administrative work. There should be a separation of clinical work and administrative work.
- There should be adequate numbers of support staff with minimum of 2 doctors at PHC including at least 1 lady doctor. Support staff should be better trained and cooperative.
- Two ANMs should be provided for every SC at least where the post of MPW (M) is vacant.

Enhancing career growth opportunities:

- Nurturance of health workers' professional interests and ambitions, and stemming the erosion of professional skills is another critical step in raising the social profile of government services.
- Opportunities to enhance skills and academic exposure in areas which reflect community needs act to further doctors' professional interests and can reduce problems of intellectual attrition and isolation. Doctors particularly emphasized the need for refresher clinical skills training in areas such as emergency and accident care, obstetrics and maternal health, tuberculosis and malaria care.
- Electronic communication on medical subjects with peers and specialists through video and teleconferencing interfaces has become possible, and could help in countering the professional isolation and skill attrition experienced by rural doctors.
- The introduction of postgraduate specialist degrees in rural medicine and primary care is another intervention that can act to enhance the acceptability and status of rural practice.
- As far as the training of nurses and ANMs is concerned, there is persistent need to conduct at least one or two refresher courses every year. Findings of the study also revealed that many nurses and ANMs expressed dissatisfaction regarding government training. They said that many of the trainings conducted suffered from shortages of good faculty and adequate budget. Establishment of more medical and nursing training institutes in rural and remote areas should be done. ANM training schools should be strengthened with introduction of standard protocols.
- A separate registering and administrative body for ANM will help improve status of ANMs and attract upper class and better qualified females. Continued education including medical updates and post-graduation courses with guarantee of career advancement will improve morale and quality of services provided.

Transparent transfer and promotion policies:

- Career pathways and cadres are not clearly defined or structured.
- After completing 3 years of rural service, the government must assure transfer of doctors to better areas. Transfer policy processes must be streamlined and they should be made transparent.
- If made to stay in rural areas for more than 3 years, promotions must be given.
- Equal opportunities for promotion must be made available to all nurses. There are too few promotions and the waiting period is too long. ANMs and staff nurses usually get only one promotion in their career spanning almost four decades. Job dissatisfaction is high due to inadequate facilities and lack of opportunities for self-development or promotion. First posting may be in a rural area with the option of transfers after a definite period of time (5–10 years) so that the nurses don't feel like they're stuck.
- It also emerged from the study that ANMs have varying needs at different periods of time during their career. Absence of a well-defined transfer policy means that while some of them continue to be posted in remote and difficult areas for long durations, others manage to remain at comfortable postings closer to town from where it is easier to commute daily. A transfer policy that takes into consideration increasing personal responsibilities and needs of ANMs over time by posting them into progressively bigger villages or towns after defined periods of time will be helpful in this regard.

Salary

- While the need for an absolute increase in pay-scales did not emerge as a strong theme amongst doctors, this should not be interpreted to mean that the issue of economic returns is insignificant.
- A graded salary scale based on remoteness and difficulty of terrain, and greater benefits (pensions, housing, free education for children) to doctors serving in difficult areas could be of particular utility, the implicit risks to personal security and social isolation.
- Performance based incentives for added workload can be given to ANMs.

Work recognition

- There should be an institution of formal recognition and rewards for providing services under difficult conditions.

Managerial changes

- Doctors cannot make independent decisions on administrative affairs. Often need permissions from higher authorities for simple decisions. Processes are bureaucratic, and communication between PHC facilities and health quarters is limited. Re-imbursements of money spent become difficult. Meetings with authorities can be held every 6 months to voice concerns.
- For ANMs, The annual appraisal of the individual health staff should be linked to performance indicators such as coverage for immunization, diarrhea patients treated, deliveries attended, family planning cases and place of residence. The panchayat and the local community can be empowered to monitor the visits of the ANM and support her work. This performance appraisal should be linked to rewards such as public recognition of work, increase in salary, promotions etc. The management should take active steps to solve long standing problems of the staff. Efficient logistic management and staff friendly human resources policies would help improve performance of ANM. Corruption, nepotism, political interference in administration should be eliminated.

Job security

- This concern was more for contractual workers. Contractual jobs in the government should be converted to permanent positions.

Good education for children and proximity to family

- Enhanced and assured government employee benefits, notably quality housing and children's education.

Safety and Security

- General local security is required at work place and after work hours. Guards must be provided. Women must not be posted alone. Support of local self-government must be sought to ensure doctors ‘safety. This can increase the health worker’s availability to the community and also result in more staff residing at headquarters.

Limitations of the Study

There are certain limitations in regard to this study. These should be highlighted and addressed in a better way. The limitations felt and suggestive actions are:

- Perspective of beneficiaries/villagers receiving the services could not be taken. It can be done in future to highlight the problems the villagers face because of non availability and lack of accessibility of the health workers.
- Perspective of the Government officials of Rajasthan was not taken on the extent to which the factors are actionable by the government in case of policy implications.
- Since most of the interviews were taken in the health facilities, so sometimes the respondents were hesitant in giving answers to some questions. Therefore some answers may be partially true.
- The sample size selected for the study was small because of paucity of time and resources.

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APPENDIX A

Interview Questionnaire for Health Workers

Consent Form

My name is …… I am a student of IIHMR, New Delhi.

I am conducting a study about the **organizational and social factors affecting the efficiency of rural health care service providers.** I would appreciate your participation in this study. I would like to ask you few questions in this regard. The interview will take about 15-20 minutes to complete. Whatever information you provide will be kept confidential.

Participation in this study is voluntary and you can choose not to answer any question or all the questions. However, I hope that you will participate in this study since your participation is important to us.

At this time do you want to ask me anything about the survey?

Respondent Agrees to be interviewed begin the interview……Begin interview

If the respondent does not agree to be interviewed ……End

May I begin the interview now?

Location……..

Sub Area…….

Date: ☐☐.☐☐.☐☐☐☐ ……

Signature of the Respondent

SECTION A: BACKGROUND CHARACTERISTICS

S. no.	Question	Coding Categories	Skip to
1.	Name of the respondent	_____	
2.	What is your age? (In years)	20- 29…… 1 30- 44…… 2 45 and above……..... 3	
3.	What is your gender?	Male …….. 1 Female …… 2	
4.	What is your marital status?	Single(never married) …… 1 Married ……. 2 Separated ……... 3 Widowed …… 4 Divorced …….. 5 Others(specify) _____ 6	
5.	What is your religion?	Hindu …….. 1 Muslim ……. 2 Sikh …… 3 Christian ……..... 4 Others(specify) _____ 5	
6.	What is your caste?	Scheduled Caste …… 1 Scheduled Tribe ……. 2 Others …… 3	

7.	What is your educational status?	Up to 10th standard …… 1 10th – 12th ……. 2 Graduation ……... 3 Diploma in nursing …… 4 Degree in nursing …… 5 MBBS …….. 6 AYUSH …….. 7 Others …….. 8	
8.	What is your designation?	Medical Officer ……..... 1 ANM …… 2 GNM ……... 3	
10.	Type of employment?	Regular…… 1 Contractual……..... 2	
11.	What is your monthly basic salary?	3500-8000 …… 1 8000-15,000 ……. 2 15,000-20,000 …….. 3 >20,000 …… 4	
12.	What is your background of place of residence?	Rural …… 1 Urban ……... 2	
13.	What is your place of origin?	Same district ……... 1 Same state, other district ……. 2 Other state (please specify) ……..... 3	
14.	How long have you been working in this profession?	1-5 years …… 1 5-10 years …….. 2 10-20 years ……..... 3 More than 20 years …….. 4	

15.	How long have you been posted at your current facility?	Less than a year …… 1 1-5 Years …….. 2 5-10 years ……... 3 More than 10 years …… 4	
16.	Do you reside in the SC/PHC/CHC area?	Yes …….. 1 No …….. 2	→ Q20.
17.	Do you stay alone?	Yes …….. 1 No …… 2	
18.	Is your accommodation rented?	Yes …… 1 No …… 2	→ Q.21.
19.	Does your salary cover it?	Yes ……..... 1 No …….. 2	
20.	How far is the work station from your place of residence?	0-5 kms …… 1 6-10 kms …….. 2 11-30 kms ……..... 3 31-50 kms …… 4	
21.	What mode of transport do you use for commuting to duty station?	On foot …… 1 Public transport ……... 2 Private transport …….. 3 Personal vehicle ……... 4	If 2,3,4 skip to Q24.
22.	If on foot, how many kilometers do you walk daily?	1-3kms …… 1 3-5 kms …… 2 >5 kms …… 3	
23.	What is the amount of money you spend on transport daily?	Rs. 0-10 …… 1 Rs. 10-30 ……..... 2 Rs 30-50 …….. 3 More than Rs 50 …….. 4	

SECTION-B: FAMILY BACKGROUND

S. no.	Question	Response	Skip to
24.	Type of family	Nuclear …… 1 Joint …….. 2	
25.	How many children do you have?	None …… 1 One …….. 2 Two …….. 3 More than two..…… 4	Q32. -
26.	What is the age of your youngest child?		
27.	Does the younger child go to school?	Yes …….. 1 No ……... 2	
28.	In which class does your child/eldest child study?	Below 5th …… 1 5th -9th …….. 2 9th – 12th …….. 3 Graduation …….. 4 Others …….. 5	
29.	Where do you leave your child/ (children) when you go for work?	Neighbour …….. 1 Elders at home …….. 2 Elder children …… 3 Leave the child alone ……. 4 Others(Please specify) …… 5	
30.	What is your spouse education?	Illiterate ……... 1 Primary …… 2 Matric …….. 3	

		Graduate & above …….... 4	
31.	What is your spouse's main occupation?	Not working …… 1 Student …… 2 Working on farm/business/shop……...3 Contractual worker …….. 4 Monthly salaried govt. employee …… 5 Monthly salaried private ……. 6 Others(Please specify) ……. 7	Q43.
32.	Where does your spouse work?	Within the village/town …… 1 Outside the village/town …….. 2	
33.	If outside the village/town, how frequently does he/she visit home?	Everyday ……. 1 Once in 15 days …….. 2 Once in 30 days ……... 3 Once in 3 months ……..... 4 Seasonally, once or twice a year…….. 5 For festivals and holidays …….. 6	-
34.	What is your spouse monthly income?		

SECTION- C: PERCEPTIONS REGARDING WORKPLACE AND WORKLOAD

S. no.	Question	Response	Skip to
35.	How many working hours do you put in a day?	5-8 ……. 1 More than 8 ……. 2 Not fixed …….. 3	

36.	How many beneficiaries/ patients do you visit/see?	0-20 ……..... 1 20-40……... 2 More than 40 …… 3	
37.	Are you satisfied with your present remuneration?	Yes ……. 1 No ……... 2	
38.	Do you get remuneration as and when due?	Yes …….. 1 No …… 2	
39.	Besides remuneration, do you allowance (TA/DA) for providing services outside your place of posting?	Yes …….. 1 No ……... 2	
40.	When do you feel most dissatisfied with your work?	1. Target oriented work 2. Frequent change of shifts/night duties 3. Working far from place of residence 4. Excessive demands from supervisors 5. Administrative work 6. Others (Please specify)	
41.	Where is your facility located?	Centre of the village …… 1 Distant from the village …….. 2	
42.	Is your facility govt. owned or rented building?	Govt. owned …… 1 Rented or donated to SC/PHC …… 2	
43.	Do you have an accommodation at your facility?	Yes …….. 1 No …… 2	
44.	Do you get vehicle for official purpose/outreach work?	Yes …….. 1 No …… 2	➔Q48.
45.	What mode of transport do you use for field purpose/in your duty hours?	On foot ……. 1 Public transport …… 2 Personal vehicle …….. 3	

46.	Do you get transport allowance?	Yes ……... 1 No …… 2	→ Q48.
47.	Is it obtained /reimbursed on time?	Yes …….. 1 No …….. 2	
48.	Is your facility adequately equipped?	Yes …….. 1 No ……... 2	→ Q50.
49.	If no, what are the reasons?	Inadequate supply of drugs & lack of necessary equiptments……. ……. 1 Lack of basic amenities viz. toilets, electricity, good furniture ……. 2 Shortage of trained staff ……. 3	
50.	Does your department have a transfer policy?	Yes ……. 1 No …….. 2	
51.	Have you faced any undue political interference?	Yes ……. 1 No …….. 2	→ Q54.
52.	How frequently do you face it?	Often ……... 1 Sometimes …….. 2 During opening of restriction (opening of bank) …….. 3 No response ……... 4	
53.	What kind of political interference do you face and how does it affect your working atmosphere?		
54.	Does your supervisor support you in your daily activities?	Yes …….. 1 No …… 2	
55.	Do you think that your work is recognized by the department?	Yes ……... 1 No ……..... 2	
56.	Have you been promoted in the last 5 years?	Yes ……. 1 No …….. 2	

57.	Are you given training opportunities to update your knowledge and skills?	Yes ……. 1 No …….. 2 →	Q61.
58.	How often are the trainings given?	Once in 3 months ……... 1 Once in 6 months ……... 2 Yearly …… 3 Not Regular …….. 4	
59.	What is your opinion regarding training?		
60.	Have you ever been reprimanded? Memo/suspension/disciplinary action taken?	Yes …….. 1 No ……... 2 →	Q62.
61.	If yes, describe.		

SECTION- D: PERCEPTION OF THE SOCIAL ENVIRONMENT

62.	How would you rate the community?	Friendly and Supportive ……. 1 Indifferent ……... 2 Unsupportive …….…… 3	
63.	Do you feel safe at your work place, especially at night?	Yes …….. 1 → No ……... 2	Q66.
64.	If no, what are the reasons? Share some instances, if any.		
65.	Have the supervisors taken any measures to solve the problems regarding the safety issues?	Yes ……. 1 No …….. 2	
66.	What is the bus frequency per day to town?	1-2 …… 1 3-5 ……...……. 2 More than 5 ……... 3	
67.	Are the timings of the local transport fixed?	Yes …….. 1 No ……... 2	

68.	How far is the city from your place of residence?	1-30kms …….. 1 31-50ms…….. 2 >50 kms……... 3	
69.	Are the roads well connected to the city?	Yes ……. 1 No …….. 2	
70.	Does your SC/PHC area have a school?	Yes …….. 1 No ……... 2	
71.	Up to what class does it offer education?	Up to 5th (Primary) …….. 1 6-10th (Secondary) …… 2 10th -12th (Higher Secondary) ……... 3	
72.	How far is the secondary/higher secondary school from the SC/PHC area?	0km(in same village) …….. 1 1-3 kms ……... 2 6-10ms ……..... 3 > 11 kms …….. 4	
73.	How do you rate the standard of education provided at the schools in the area?	Poor …… 1 Average……..….. 2 Good ……... 3	
74.	Is your family satisfied with your area of posting?	Yes …… 1 No ……..... 2	
75.	If no, What are the reasons?		
76.	How far is market from your place?	0km (in same village) …….. 1 1-4 kms ……... 2 6-11kms ……... 3 > 11 kms …….. 4	
77.	How good are facilities in your area, water, sanitation, electricity, health facilities?		
78.	Any other comments		

79.	Recommendations/Suggestions		
