

Study on Challenges in Implementation and Functioning of Swasthya ATM in Madhya Pradesh

By

Rajeshwari Yadav

*Dissertation submitted in partial fulfillment of the requirements of the degree
MBA Hospital and Health Management*

Academic year, 2017-2019



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TO WHOMSOEVER MAY CONCERN

This is to certify that Rajeshwari Yadav, student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at LEHS/WISH, MADHYA PRADESH from 1st Feb'19 to 30th April'19.

The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish her all success in all his future endeavours.



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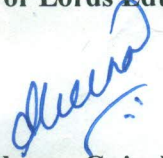
Date: April 30, 2019

To whomsoever it may concern

This is to certify that **Rajeshwari Yadav**, has completed her internship at the **Lords Education and Health Society**, under its flagship program, **Wadhvani Initiative for Sustainable Healthcare (WISH)** from **February 01, 2019 to April 30, 2019**. She worked under the **SCALE MP** project.

We wish her all the success for her future endeavors.

For Lords Education and Health Society


Sheena Gujral
Head of Human Resource and OD



THE IIMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **study on challenges in implementation and functioning of swasthyaatm in madhyapradesh** and submitted by **Rajeshwari Yadav** **Enrolment No 0639** under the supervision of **Mrs. Shweta Aggarwal** for award of MBA in Hospital and Health Management in Health and Hospitals of the University carried out during the period from 01st Feb'19 to 30st April'19 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.



Signature

Rajeshwari Yadav

Acknowledgement

At this juncture of the completion of my dissertation, first I would like to thank the almighty for showering his blessings on me. I would like to sincerely thank The IIHMR University for giving me this platform of learning and making me a part of this memorable journey.

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Rajeshwari Yadav

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LIST OF ABBREVIATIONS

ANM – Auxiliary Nurse Midwife

ASHA- Accredited Social Health Activist

ECG- Electro Cardio Graph

GNM- General Nurse Midwifery

LT- Laboratory Technician

GNM- General Nurse Midwifery

MO- Medical Officer

CMHO- Chief Medical Health Officer

DPM-District Programme Manger

PHC- Primary Health Centre

OPD- Out Patient Department

NHM- National Health Mission

NA- Not Available

BP- Blood Pressure

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

SWASTHYA ATM

Health ATM is not merely telemedicine, it's a concept few notches higher. Health ATM covers 3 important health related components for beneficiaries. It's a comprehensive process which provide diagnostic, consultation and medicines all services at a single place and free of cost. Thereby reducing the out of pocket expenditure, travelling time, reducing time taken to avail each of the services and makes specialist from urban cities available to rural population. And ultimately reduces the patient load at higher facilities. Health ATMs are installed and being taken care by WISH foundation in various districts of Rajasthan and Madhya Pradesh. A teleconsultation unit comprises of a screen from where the doctor can see the patient and talk to them. For diagnostic services thermometer, Blood pressure, torch, weighing machine is installed. To assist the process one GNM is appointed at each centre. After consulting the Doctor writes prescription which is then scanned and printed by the printer. Each medicine has a code, the code when scanned with the ATM drops the prescribed medicine.

1.2 Problem Statement

“When health care is needed but is delayed or not obtained, people's health worsens, which in turn leads to lost income and higher health care costs, both of which contribute to poverty”(David Peters,2008). Even after 70 years of independence India still faces many challenges in the health front. “The health status of Indians is a cause for grave concern, especially that of the rural population. This is reflected in the life expectancy (63 years), infant mortality rate (80/1000 live births), maternal mortality rate (438/100 000 live births)”(A V Patil,2002). Apart from inequitable distribution of resources, geographical hardships, unavailability, financial accessibility and acceptability of services are yet most important factors which are putting the health statistics in a bad shape. From Bhore Committee (1946), Mukherji Committee (1965,1966), Kartar Singh Committee (1973) India has formulated many committees, programmes to promote the health of its citizens. Many different approaches are shown to improve access to the poor, using targeted or universal approaches, engaging government, nongovernmental, or commercial organizations, and pursuing a wide variety of strategies to finance and organize services. Government's three tier healthcare delivery system was planned to provide equitable health services to all. Despite the model being idealistic it couldn't fetch the desired results. Incompetent facilities, weak inputs of health professionals, absenteeism, inadequate supply of drugs and ineffective health administration being some of the reasons. Most of the specialist work in urban areas and are reluctant to serve in rural areas. And the challenge to reach out the rural population remains same. With technological advancements in the field of health has tried to bridge the gap of manpower shortage, unavailability of medicine, weak management and non-functional centres at remote areas. But as Earl Nightengale said, “*Everything begins with an idea*”. One such remarkable idea was of telemedicine and e-health. A technology with which the hard to reach population can have access to specialist care and enhance their living conditions. And

then with the engagement of government, nongovernmental organisations or commercial segment this innovative idea started to roll out in various segment of the country. But ideas are not executed merely by dreaming of.

1.3 RATIONALE OF THE STUDY

Despite teleconsultation being capable of doing wonders it still hasn't been so popular, its rate of growth is slow. And there are various cases when they couldn't perform in the expected way. Various stakeholders are involved in this circle of service delivery. Physicians, beneficiaries, administrators, provider company, government (support) and GNM are the major stakeholders. Doctors and GNMs are in direct contact with the beneficiaries. However, a large chunk of financial investment is done by provider company. Provider encounters numerous challenges while implementing it. This study is aimed to find out the challenges which a provider company face. From arranging doctors till providing quality care to patient a lot must be taken care of. The purpose is to find out the reasons and steps they take to increase the footfall of patient and smooth functioning of teleconsultations.

CHAPTER -2

REVIEW OF LITERATURE

The European Commission's definition of telemedicine is “rapid access to shared and remote medical expertise by means of telecommunication and information technologies, no matter where the patient or relevant information is located”. However, “E-health refers to internet-based health care delivery characterized by the movement away from tele-medicine and tele-health. Using the internet and related technologies, e-health seeks to improve health services locally, regionally and worldwide”⁽¹⁾(Eysenbach G,2001)

“According to the South African social rights activist and Archbishop Emeritus, Desmond Tutu, *e-health is a ray of light on the horizon for the health and equity challenges that plague humanity*”.

“Telemedicine has special significance to India considering its vast geographical spread and predominant rural population. Adoption of health information technology has been one of the major options for more efficient delivery of healthcare for rural and geographically distant populations spread across India”⁽²⁾. (Pal A,2004)

Several reasons have spurred the rapid growth of telemedicine in India. The country is geographically large with many towns and villages located in remote rural areas. Few medical facilities exist to serve the large population that resides in the villages. “India has 80% of its main healthcare centers located in cities that host only 30% of the population. These percentages reveal a dismal health-care scenario where only 20% of India’s quality health-care facilities cater to 70% of Indians confined to rural communities”.⁽³⁾(Doktor D,2004). “Thus rural health care scene is characterized by: paucity of qualified doctors, almost non-availability of specialists and specialist care, several patients being serviced by unqualified practitioners, late discovery of ailment and delay in institution of appropriate treatment due also to greater time required for transport to urban/ district healthcare facilities and provision of healthcare by inexperienced primary healthcare service providers”.⁽⁴⁾(Sood,2002) According to Moffatt J, Eley D study on “The reported benefits of telehealth for rural Australians” . “Patients in rural and remote locations in Australia are reported to benefit from telehealth by increased access to health services and up-skilled health professionals. The review findings suggest that one strategy, the increased use of telehealth, has the potential to reduce the inequitable access to health services and the poorer health status that many rural Australians experience, and contribute to addressing the on-going problem of the recruitment and retention of the rural health workforce”⁽⁵⁾(Moffatt J,2010). According to the study of Margolis S, Ypinazar V on Tele-pharmacy. “Telehealth, a key component of remote health care embraces both consultation and provision of other services, including tele-pharmacy. The RFDS Medical Chest Program is a successful large-scale provider of medications to those living in remote Australia, enabling early access to medications for both emergencies and definitive care, while minimising the need for mail-order pharmacy or patient travel. This model of care provides an important template for those

designing service delivery models in other remote locations”⁽⁶⁾(Margolis S and Ypinazar V,2008).

“Despite its promise, telemedicine is not an appropriate model of care for all medical conditions.”⁽⁷⁾(Miler T,2002). There are many studies in which e-health has done remarkably good. But some sheds light on its failure too.”“Telemedicine seems more like a failure than a success. In case after case, soon after the implementation of telemedicine, the utilization and interest curves skate downhill - sometimes to the point where the system remains unused”⁽⁸⁾(Scott R,2014). “For example, telemedicine is inappropriate for encounters when a hands-on physical examination is crucial or critical data can be gleaned only through direct physical contact. More broadly, telemedicine is *not* the preferred when the technology does not allow physicians to meet established clinical standards”⁽⁹⁾(Chaet D, Clearfield R,2017). “More than 19,500 languages or dialects are spoken in India as mother tongues, and thus the language barrier is real”⁽¹⁰⁾ (The Indian Express, May 17,2019)

CHAPTER -3

METHODOLOGY

RESEARCH OBJECTIVE

- 1) To study the challenges in implementation of Swasthya ATM among health care providers in Madhya Pradesh?
- 2) To study the challenges in functioning of Swasthya ATM among health care providers in Madhya Pradesh?
- 3) To suggest steps if any, that can increase the footfall of patients?

RESEARCH QUESTION

- 1) What are the challenges in implementation and functioning of health ATM from provider's perspective?

STUDY DESIGN

Qualitative (Exploratory) and Quantitative study

SAMPLING DESIGN

Sample size

All the 10 facilities where swasthya ATM are established were included in the sample. Centres are located in Jabalpur, Vidisha and Bhopal district of Madhya Pradesh. GNMs of all the 10 centres were included in this sample.

WISH MP Scale team consists of 7 members who had been looking after all the centres from the initiation of the project.

METHODS AND TOOLS OF DATA COLLECTION

Semi structured questionnaire was used for face to face interviews. Primary data was collected by face to face interviews.

LIMITATIONS OF THE STUDY

This study is focused on challenges faced by provider company and GNM who facilitates the teleconsultation and not on beneficiary's viewpoint. However, to understand the challenges better few patients were interviewed, and their experiences are recorded.

FINDINGS

Provider's Perspective

WISH's MP SCALE TEAM

To implement this idea numerous challenges were faced by the team. The first step started with the advocacy of idea to the MP government as health is a matter of state. *“apko government ko convince karnapadtahaiki ye idea kaisekaamkarsktahai”*. We proposed it as a pilot project. A viability analysis was performed. That predicted the sustainability of the project. And how continuum of care will be planned. After that presentation of the plan to government took place. And the plan finally got approval and instruction letter from government. And this took a lot of struggle and paperwork. *“and this was not even half of the battle”*. While hunting for the site of installation infrastructure, basic facilities of water and electricity were also a question so we collaborated with the government and asked them for space in the already running PHC. Once the site of installation were identified then technological challenges were answered. *“sabse important component hotahai internet and that too of high speed and good network coverage, and it's a continuous requirement”*. Internet forms the backbone of teleconsultation. Any problem with the server can put a halt to the functioning of teleconsultation. So we had to arrange for wi-fi and net packages.

From team had experiences of Rajasthan so they knew how important the acceptance of staff towards the unit is. If there is not much investment from the government side, then they will not consider it something useful it will be merely a machine to them. *“unke lie to ye bas ek foreign body jaisahoga”*. We had to develop a sense of authority from government too. So, we already had planned that internet and medicines will be provided from government side. And this is necessary for the sustainability of the project too.

Moffatt JAcceptance of staff and beneficiaries is crucial in such projects. Without the acceptance of staff, they won't propagate it to patients. They may not take care of the machine, the sweepers might not agree to clean the room, or they show a very lax attitude toward the unit. Acceptance of beneficiaries is important because they are our consumers. If they refuse to use the technology, then it will be a failure. *“wo machine ko koi harm nakare, devices ko absence mein touch nakarein”*. And their acceptance is largely dependant on the acceptance of staff who will make sure the patient doesn't try to manhandle it.

Daily challenges are mostly operation based. Technical snag being a major issue.

- Technical snag related to software and hardware. System update, bug, virus all hampers the teleconsultation process. Hardware snag like fault in medicine vending machine, printing issue, faulty readings of diagnostic test etc demands urgent attention. As they effects the process of teleconsultation badly.
- Internet issue includes recurrent loss of signals and slow internet speed. One of the major troubles is internet. With every loss of signal, the consultation failure takes place. In case where the recharge is needed, you have to push the MO and DPM to get it done. Sometimes it takes multiple reminders.
- Any brake in electricity can shut the centre any time. Without electricity nothing can happen. *“ isliehumne invertors ka provision kia”*.

- Absenteeism among GNMs also halts the functioning of units. GNM facilitates the whole consultation process. In case where she is absent, no consultation takes place.
- Waiting time for consultation also is a problem. If doctor is busy providing consultation at the other centre, then a long waiting period is observed by other patient.

Minimum requirements for swastya ATM are

- Infrastructure – a 10*10 sized room, well ventilated and a mini storage box/drawer to keep equipments
- Manpower- GNM to assist consultation and Doctors to provide the consultation
- Drugs and equipment- medicines with buffer stock, weighing machine, glucometer, thermometer and BP apparatus.
- High speed internet, electricity (with backup) and few sockets for plugging the machine

Government support can definitely help us to deliver better.

- By spreading awareness (through ASHA, ANMs) in common public about the teleconsultation and its benefits
- Motivate the staff to adopt this concept and help them to expand their services
- Scale it up to other centers after seeing its positive impact
- IEC, BCC can increase its acceptability in community
- Train their staff nurse to assist in teleconsultation
- By creating state specific hub of doctors. It will break the language barrier which the beneficiaries faces as the doctors are from Rajasthan.

GNTs Perspective

Day to day challenges

“Sabse bada problem internet hai agar server down ho jaye to sab band ho jata hai. Phir wo buffer hota rehta hai”. “Internet ma'am par iska koi bharosana hai. Kabhi kabhi bhutachalta hai aur kabhi kabhi pure din nahichalta”.

Patient has to sit for 30-45 minutes. Electricity and internet are two basic necessities for teleconsultation. Any glitch in any of these services can shake the whole process of consultation. And patient then complains about the process being time taking.

"Ma'am waiting jayada ho jati hai kabhi kabhi". In cases where doctor is busy with other consultation it takes more time. Each consultation with optimum internet speed and no hindrance takes approx. 15-18 minutes. If two- three patients are already waiting for the doctor, then waiting time increases upto three folds especially in cases of skin diseases. "Itni der patient baithta nah hai ". Increased waiting time is a well-known reason for decrease in patient footfall.

Sometimes there are instances of consultation failure then they have to repeat the whole process of registration in their tab. Ma'am fail ho jata hai to sab double se karna padta hai, temperature b dobara lo, bp b dobara lo.

This was all related to software. But sometimes hardware also causes trouble. Example if printer doesn't function properly then also no consultation takes place. As prescriptions are printed for documentation in printer. However, the team makes sure it is resolved within 24 hours. "ma'am medicine nahi fall kar rahi thi ATM se to same day theek karwa di thi".

"logo ko jankari nah hai iske bare mein". Less awareness among beneficiaries. "patients ko jake bta de hai ki humare pas ye scheme hai, apko specialist dekhege". Even People from the health staff don't know about the machine. And ASHAs attached to the PHC don't know about the practice of teleconsultation. If there is no awareness about the service then how will patients turn up to the centre.

GNTs feel that if the staff supports and promotes the concept then consultations can increase to greater extent. ASHA and ANM can spread the message in community. And it will attract more patients to the centre. One of the GNT told that during GOI visits in her facility swasthya ATM is not discussed. ***“wo government of india ki visits mein bhi humare bare mein nahibate. Officer khud puche to batade hai ki ha wo bhi hota hai”***

Shortage of medicine also breakdown the zeal of patients to visit frequently. Government generally faces shortage of medicinal supplies. In such cases patient has to purchase medicines from outside which leads to out of pocket expenditure of patients.

Patient considers the technology too high-tech and feels it is not suitable to them. “TV mein dikha nahai lagta”. The language barrier too makes them uncomfortable. Although GNT facilitates the whole consultation and translates wherever necessary but they become less expressive. Which makes them visit the MO afterwards. “unko lagta hai TV pe

ilajsahinahihota, vo log yahaaaneke bad doctor ke pas jaatehaikabhikabhi. Unkoshaantinahipadi”.

FINDINGS

1. Fluctuations in internet connectivity

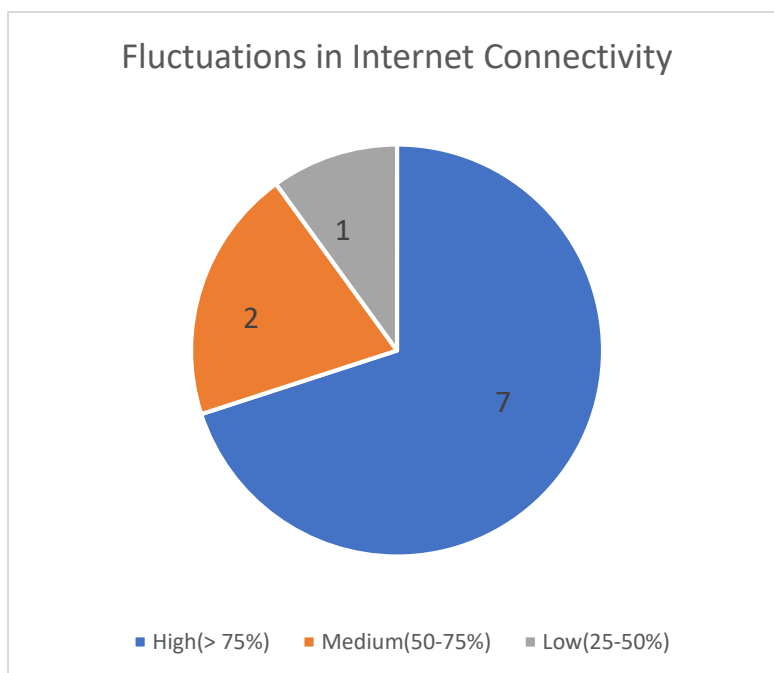


Fig No.1 –shows the fluctuation of the internet. 7 out of 10 GNM feels that there is high fluctuations in internet speed.

Acceptability by the community

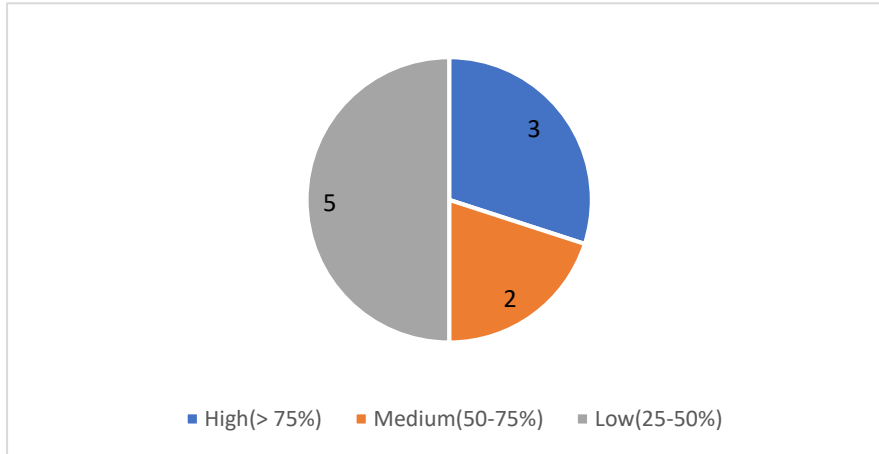


Fig No. 2- 5 out of 10 GNM reported that they feel community has not accepted them.

2. Language barrier

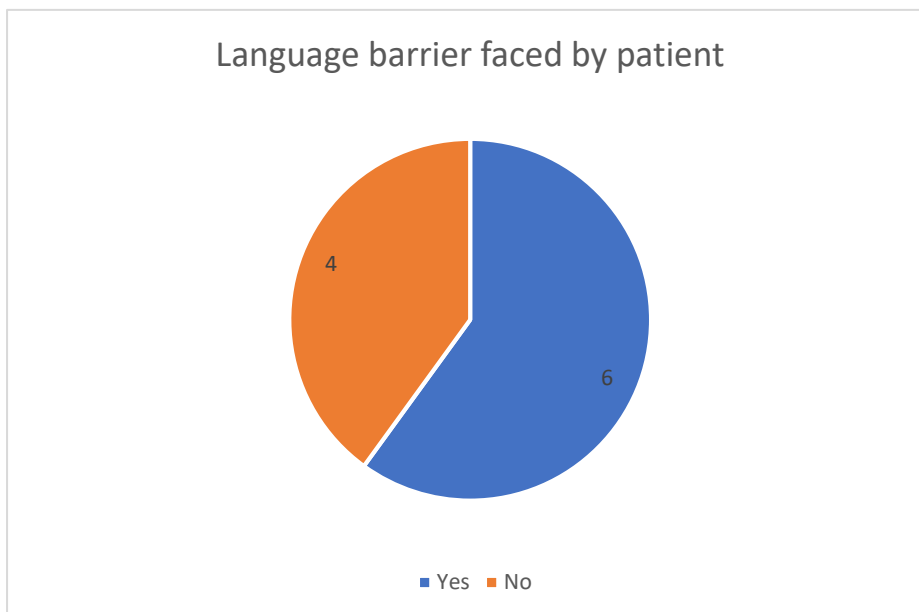


Fig No.3- 6 out of 10 GNMs feel that language barrier is faced by patients during consultations

Software Snags

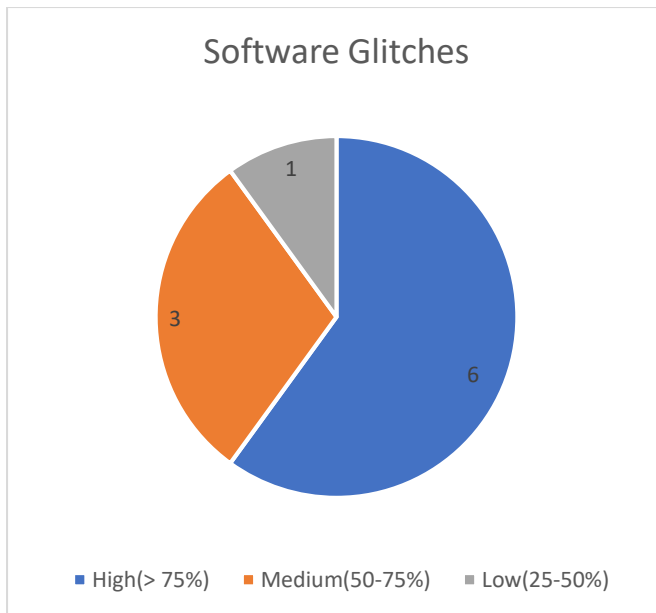


Fig No 4- 6 out of 10 GNMs feel that the software snags causes high troubles to them.

Challenges faced by WISH foundation perspectives.

1. Absenteeism of GNM

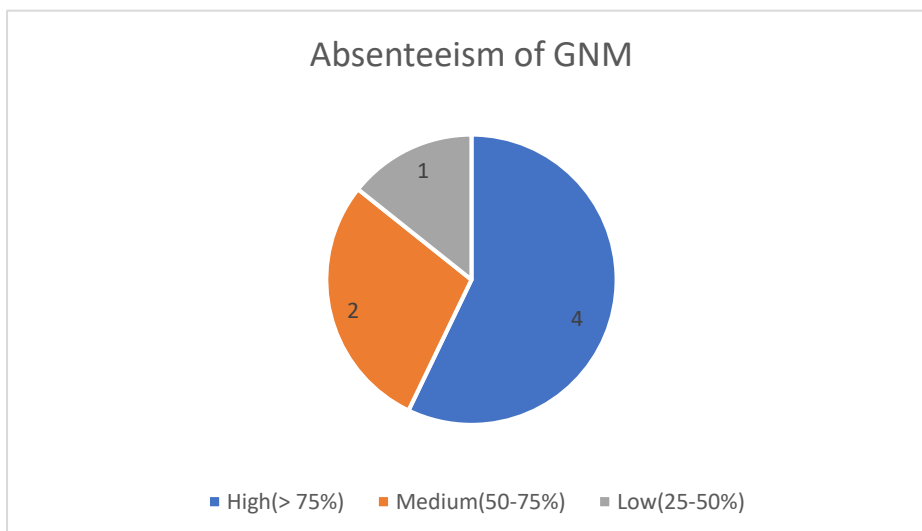


Fig No. 5- 7 out of 4 team members feel that absenteeism among GNMs is a major challenge.

6. Government Support

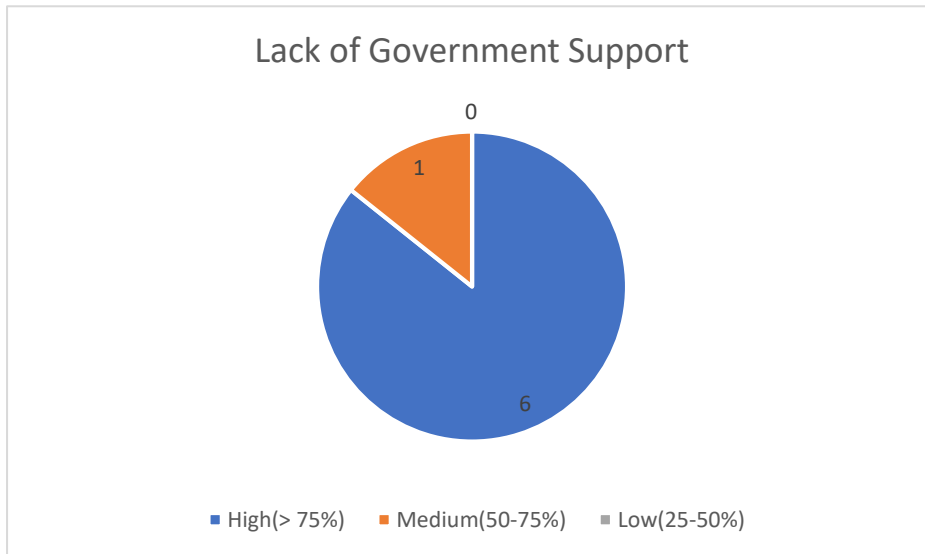


Fig No 6- 6 members feels that if government support get better than patient footfall would increase

7. Technical Snags

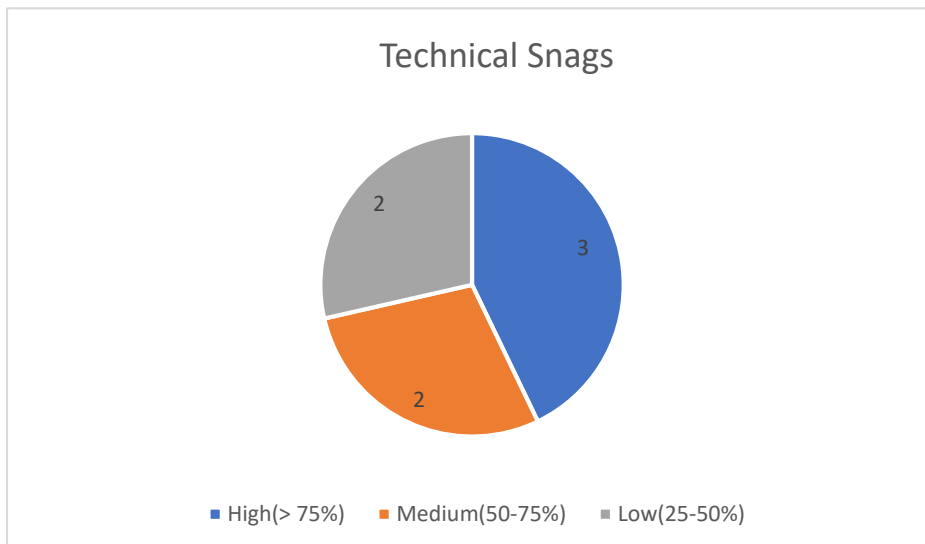


Fig No 7- only 3 feels that technical snag is a major problem

PATIENT'S PERSPECTIVE

The patients who came to take teleconsultation were happy with the service. During interview they recorded “*humesheharke doctor dekhtehai, dawaiyabhimuftmeinmiltihai*”. When asked about the loopholes almost all of them said “time bahutlagtahai”. Each consultation with optimum internet speed takes 15-18 minutes. In cases where doctor is busy with other consultation, it increases largely. If there is a waiting of 3-4 patients, the waiting time extends upto 3-4 folds.

Visiting a doctor reduces suffering not only physically but mentally too. This physical touch in which a doctor just checks the pulse of the patient satisfies the patient emotionally. Patient misses this touch in teleconsultation. “*doctor sahib binadekhe, hath lagayekaiseilaajkarege*”.

Another important factor in the less acceptability towards teleconsultation is low trust in technology. People don't understand much about technology. Patients are not technologically competent to understand such high tech machinery. “*ye TV se ilajhumenahibhaata*”

However, those who use Swasthya ATM frequently they appreciate the service. Just like two sides of a coin, some beneficiaries do appreciate the time they spend during consultation with the doctor. They are of a opinion that doctor gives enough time to each case whereas MO of the facility who give 2-3 minutes to an average patient. “*doctor pura time lagake, ache se jaanchkephirdawaiyalikhytehai*”.

PERSONAL OBSERVATION

In my observation few of the challenges I observed include

- Government officials are not ready to take up the additional responsibility to maintain the health ATM. They consider this as a machine and don't regard the wonderful benefits it can do. Rather than conserving and propagating the hospital staff treats it as an unwanted burden.
- Inauguration of Swasthya ATM was not talked much. Even the staff working at CMHO office don't know much about it. Awareness is low in regard of this unit. In community only those who are referred by MO or the ones who have used it in the past comes or visit the ATM.
- ASHAs the important component which connects health to the community. And due to less knowledge among ASHAs about telemedicine, community is not well aware about it.
- Internet is a major issue. With each time the server is down functioning of the unit gets hampered.
- Maximum of the serving population indulges in farming practices. With each important farming process patient footfall decrease

RECOMMENDATIONS

- Acceptance by the community
 - 1) educate the community about the working of telemedicine
 - 2) few exemplary stories and nukkadnatak will place them in their mind
 - 3) take the help of ASHAs and ANMs to spread the message
- Internet
 - 1) Check for the better provider in the area
 - 2) Look out for better plans and services
 - 3) Use broadband with an enhanced speed rather than dounge connection
- Include government support-
 1. In finance
Include the financial investment from government in various forms
 2. In HR-
Include government by asking them to provide pool of doctors from MP, this will in turn resolve the language barrier
 3. In training and capacity building
Government can provide Training to staff nurses to assist in teleconsultation so that even they add to the service.
 4. In spreading the message
ASHAs and AWW can be used to spread the message about teleconsultation to community.
- Electricity
For uninterrupted supply of electricity installation of solar panel can be done.
- Acceptance of the staff
 - 1) Organise Games and activities which promote change in culture among staff workers
 - 2) Developing good organisation culture such as having lunch together

SEMI-STRUCTURED QUESTIONNAIRE

QUESTIONNAIRE FOR THE PROVIDER

Name

Age and Sex

Contact no.

- 1) What challenges did you face while implementing this swasthya ATM?
- 2) What are the daily challenges you face to run this swasthya ATM?
- 3) What are the minimum needs to be fulfilled for functioning of swasthya ATM?
- 4) What kind of governmental support can make you deliver better?

QUESTIONNAIRE FOR THE GNM AT THE CENTER

Name

Age

Contact no.

- 1) What are the daily challenges you face to run this swasthya ATM?
- 2) What can make you do better consultations?
- 3) What can be the reason for less patient footfall?
- 4) What kind of support (from government and headquarter) can make you deliver better?

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