GAP ANALYSIS OF LABOUR ROOM IN FRUs IN NANDURBAR DISTRICT, MAHARASHTRA

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Objectives

- To find the gaps for operationalizing FRUs in Nandurbar district
- To understand challenges in strengthening support to operationalization of FRUs

Rationale

- MMR and IMR are two important indicators of the Nation. Maternal and Child care proves to be the essential care for reduction in mortality by providing quality care at various levels. LaQshya guidelines are very essential and important part in providing quality maternal and child care services. Every Labor room must abide to the LaQshya guidelines for providing quality care to the mother and child.
- Nandurbar district is a hilly region. It is a different setting and it becomes important to identify their problems. Mortality in the past few months has been higher. The basic components of providing quality care i.e. Infrastructure, Services, Manpower, Trainings, Equipment and supplies, Lab and Diagnostics, IEC and Patient Education and Documentation in the District FRUs needs to be assessed.

Implications of the study

- It is a Situation based analysis to understand the current gaps in operationalizing FRU in Nandurbar District. This includes the current problems in the services such as Maternal and Child health, diagnostics, referral services and blood storage.
- Finding gaps will help us to find further challenges with respect to FRUs and help us provide good quality care to the beneficiaries. This will help improve health indicators and increase responsiveness.

Limitations of the study

- There were some participants who were not available or did not participate during the study was being conducted. This study gives a basic outline of the current situation in Nandurbar FRUs in handling the mother and child care during Post-natal care and is limited to PNC and does not involve ANC related data.
- The study is restricted to labour room department only. Some stakeholders were not available during the study while some refrained from participating in the study.

Review of Literature

- In India, the IMR is 34 per 1000 livebirths and MMR is 130 per 1 lakh livebirths which are quite higher considering the 3rd United Nations Sustainable Development Goal. [SRS bulletin,2014-16]
- A study conducted in 613 districts of India reveals that over two thirds of the districts in India would not be able to achieve the global target of reducing deaths to 25 or less per 1,000 live births in under 5-year old children and 12 or less per 1000 livebirths for newborns by 2030. The results indicate that on an average, estimated deaths of under 5 children is double the targeted figure (49.4 against targeted 25 deaths per 1,000 live births) while estimated deaths of newborns is about 2.4 times greater than the targeted one (29.2 against targeted 12 deaths per 1,000 live births) (Shrivastava, 2018).

Review of Literature

- In the period of 2005-2016, India experienced the highest reduction in mortality rate. Therefore, to achieve the SDG-related goals at district level, it needs to intervene more rigorously than ever said Saikia (Saikia, 2018)
- A tool was developed to do the fair assessment of current functionality of each facility by highlighting the operational level of specific areas.
- A framework adopted for the Operationalization of FRUs in Jharkhand, 2009-11 is shown below

Review of Literature

Table-2: Operations research framework adopted for the operationalization of the FRUs, Jharkhand, 2009-11
Planning
1. Organized research group and advisory committee with in PHFI.
2. Determined issues (critical determinants of functionality) to study and framed research question.
3. Developed research proposal to answer the research question.
4. Identified funding source and obtained funding to support the operations research.
5. Planned for capacity building and technical support.
Implementation
6. Monitored project implementation and maintained quality
7. Pre-tested all research tools
8. Established and maintained data management and quality control
9. Enabled FRU functionaries to develop action plans and identify critical monitoring indicators
10. Improved Functional Status of FRUs
11. Facilitated implementation of action plans
12. Monitored progress
13. Explored together with stakeholders interpretations and recommendations arising from the research findings
Follow-Through
14. Disseminated results and recommendations through policy briefs with health department, Government of Jharkhand and other stake holders in the state.

Research Problem

- There are 5 FRUs in Nandurbar district. Out of 5 FRUs, 3 are conducting C-sections while 2 are not. Adding to this, from the recent data collected from the FRUs, it is evident that the Infant deaths are higher. These may be due to gaps in labour room and OT of the FRUs. If these gaps are not narrowed, the infant deaths will continue leading to inappropriate population pyramid and limiting the nation to achieve the SDGs.
- As per NFHS 4, 15% of children in Nandurbar have Severe Acute Malnutrition (SAM), compared to 9.3% in all of Maharashtra. In addition, 40% of the children in Nandurbar have moderate acute malnutrition. However, these children do not have access to quality treatment and a 24x7 facility. The IMR of urban Maharashtra is 13, whereas the IMR of rural Maharashtra is 24 which is very high considering the goals of twelfth five-year plan and sustainable goal of reducing the MMR and IMR.

Research Question

- What are the gaps in labour rooms of FRUs?
- What are the challenges in operationalizing FRUs?

Research Methodology

- **Study Design:**

  It will be a Descriptive design, Cross-sectional study

- **Study Setting:**

  The study will be conducted in 5 FRUs of Nandurbar district of Maharashtra

- **Sample Population:**

  Medical Superintendents, Medical Officers, Staff Nurses and PNC patients in Nandurbar District

Research Methodology

- **Inclusion:** Members of functional PHCs – Medical Superintendent, MO, Staff Nurse, Pharmacist, Lab Technician, MPW. Facility assessment, blood storage, etc.
- **Exclusion:** Members who are not available for the interview during the study.

- **Study Tools:** Questionnaire (open and close ended), Checklist

- **Sampling Technique:**

It will be a Non-probability, convenient sampling. For the study, 4 stakeholders are identified i.e. Medical Superintendents, Medical Officers, Staff Nurses and Beneficiaries. We will try to cover the entire sample size but it may be possible some staff might be not available during the interview.

Research Methodology

- **Data Collection Procedure:**

A checklist would be used for assessment of quality of the 5 FRUs in Nandurbar district. Also a Questionnaire would be used for collecting data through stakeholders.

- **Ethical Considerations:**

Informed consent would be signed by all the study participants. The data will be ensured of the security, privacy and confidentiality.

- **Data Analysis:**

Excel would be used to analyse the data

Results

Personnel	IPHS Norm	SDH, Taloda	SDH, Nawapur	RH, Akkalkuwa	RH, Dhadgaon
Clinical Manpower					
General Surgeon	1	0	0	0	0
Physician	1	0	0	0	0
Obstetrician / Gynaecologist	1	1	1	0	1
Paediatrics	1	0	1	0	0
Anaesthetist	1	1	1	0	0
Public Health Programme Manager	1	0	0	0	0
Eye Surgeon	1	0	0	0	0
Other specialists (if any)		0	0	0	0
General duty officers (Medical Officer)			3	3	4

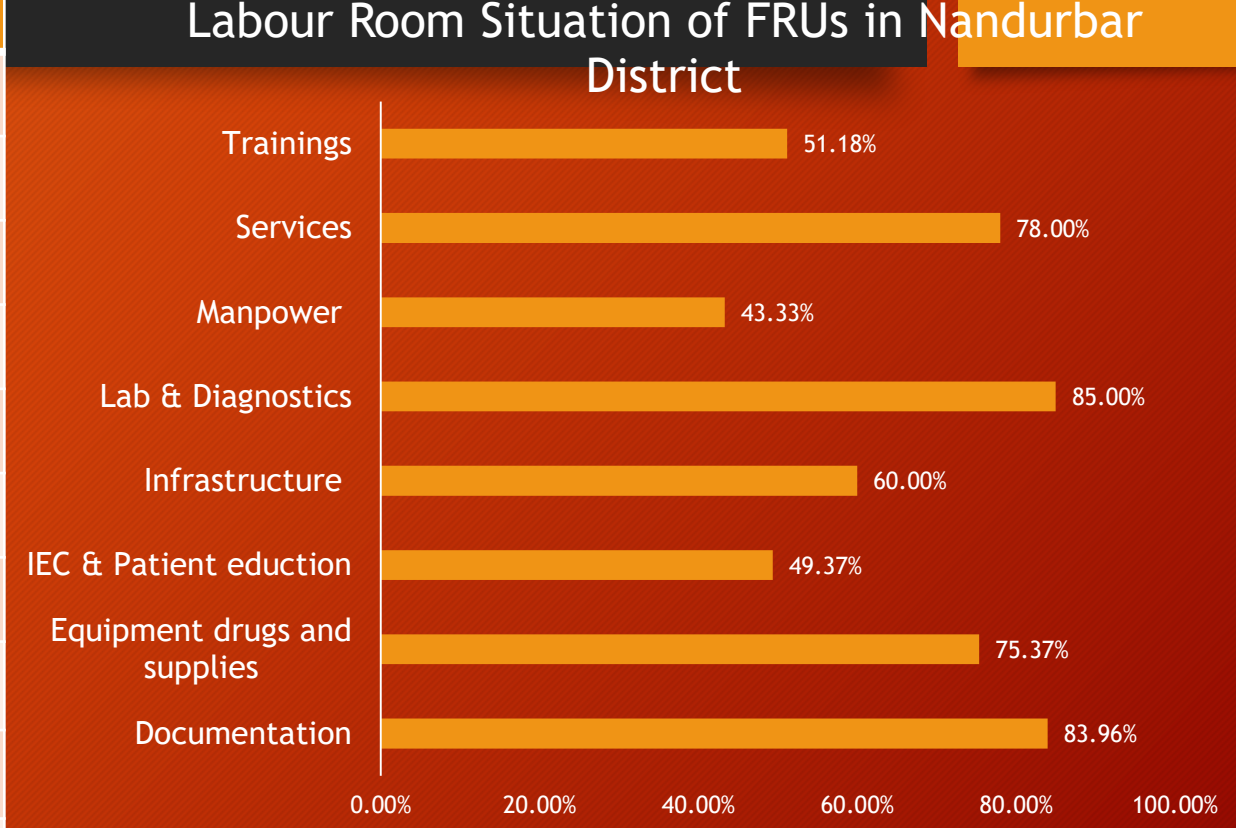
Sub-district/ Rural Hospital Manpower- Medical

Speciality	Desirable (200 beds)	Available
Medicine	2	2
Surgery	2	2
Obstetrics & Gynae	3	5
Paediatrics	3	2
Anaesthesia	2	2
Opthalmology	1	2
Orthopaedics	1	1
Radiology	1	0
Pathology	2	0
ENT	1	1
Dental	1	1
MO	13	12
Dermatology	1	1
Psychiatry	1	1
Microbiology	1	0
Forensic Specialist	1	1
Ayush doctors	1	1
Total	34 + 3 = 37	34

District Hospital, Nandurbar Manpower- Medical

Part I

Labour Room Score Card	
Documentation	83.96%
Equipment drugs and supplies	75.37%
IEC & Patient eduction	49.37%
Infrastructure	60.00%
Lab & Diagnostics	85.00%
Manpower	43.33%
Services	78.00%
Trainings	51.18%
Departmental Score	70.66%

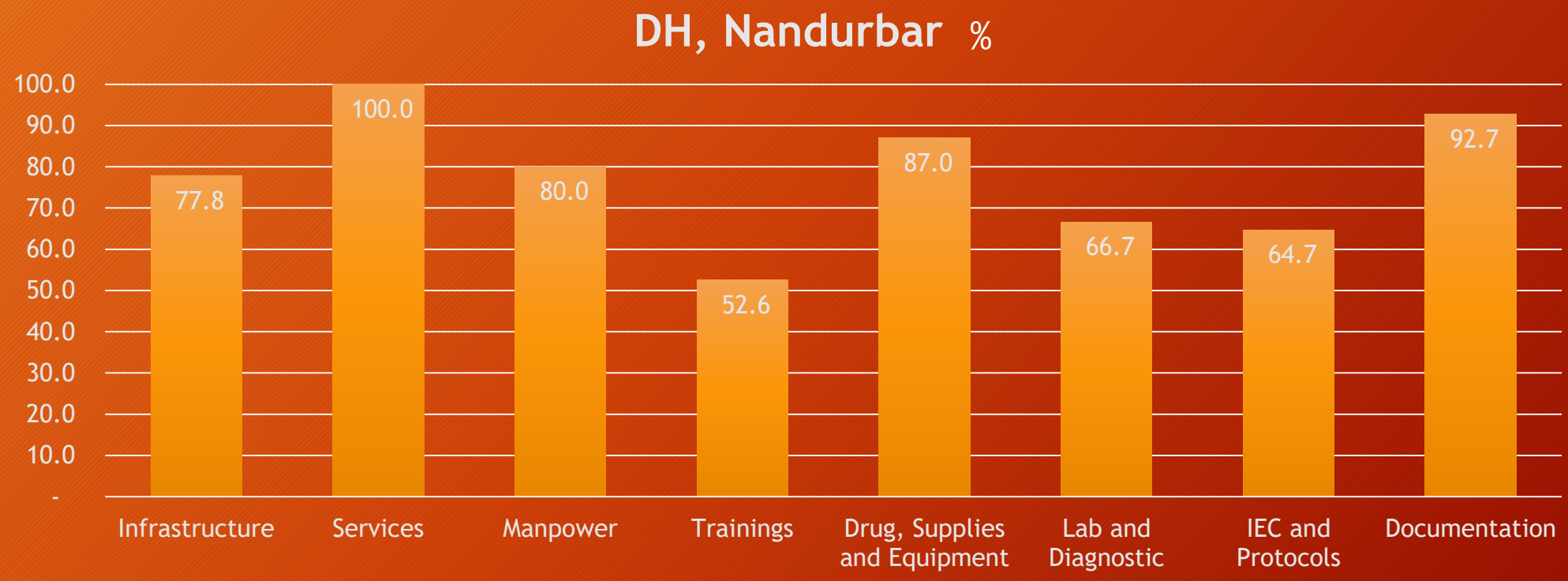


Assessment scoring of Labour Room of FRUs in Nandurbar district

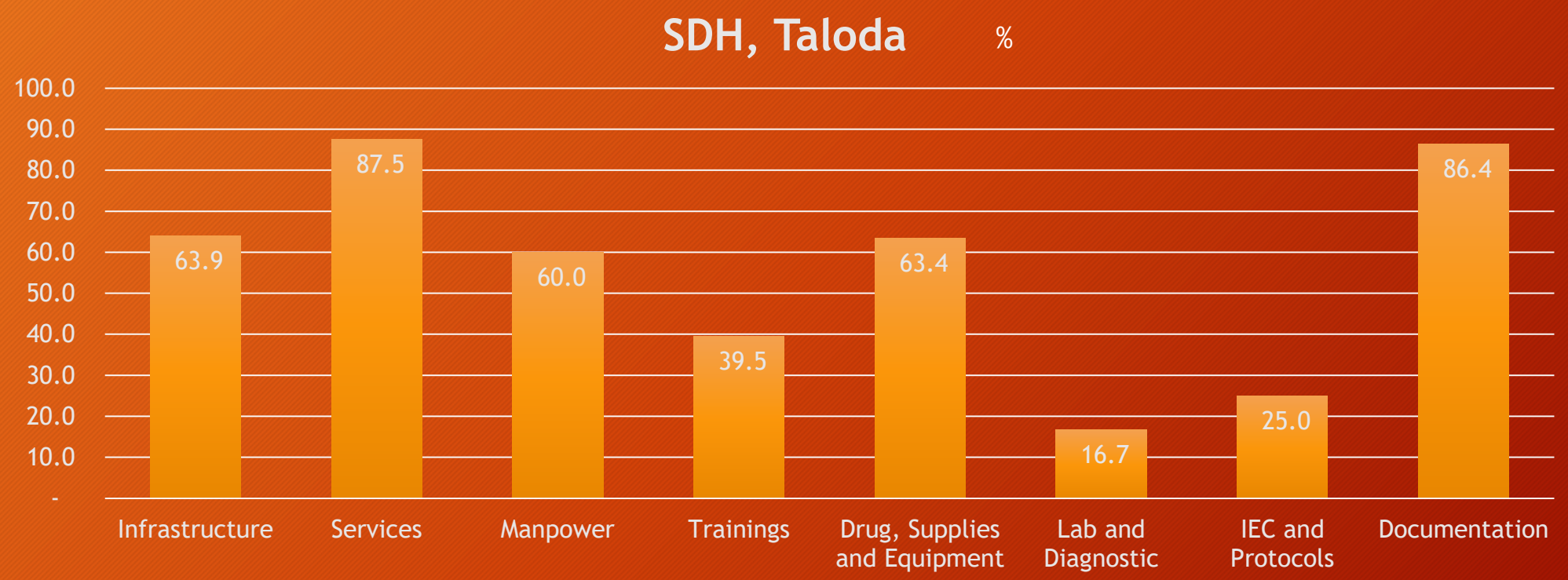
Assessment of Labour room of FRUs

Parameters	DH, Nandurbar	SDH, Taloda	RH, Akkalkuwa	RH, Dhadgaon	SDH, Nawapur
Infrastructure	77.8	63.9	34.7	55.6	65.3
Services	100.0	87.5	50.0	83.3	87.5
Manpower	80.0	60.0	30.0	50.0	80.0
Trainings	52.6	39.5	34.2	34.2	60.5
Drug, Supplies and Equipment	87.0	63.4	71.9	70.2	81.3
Lab and Diagnostic	66.7	16.7	66.7	66.7	100.0
IEC and Protocols	64.7	25.0	33.3	47.2	52.8
Documentation	92.7	86.4	89.1	83.9	91.7

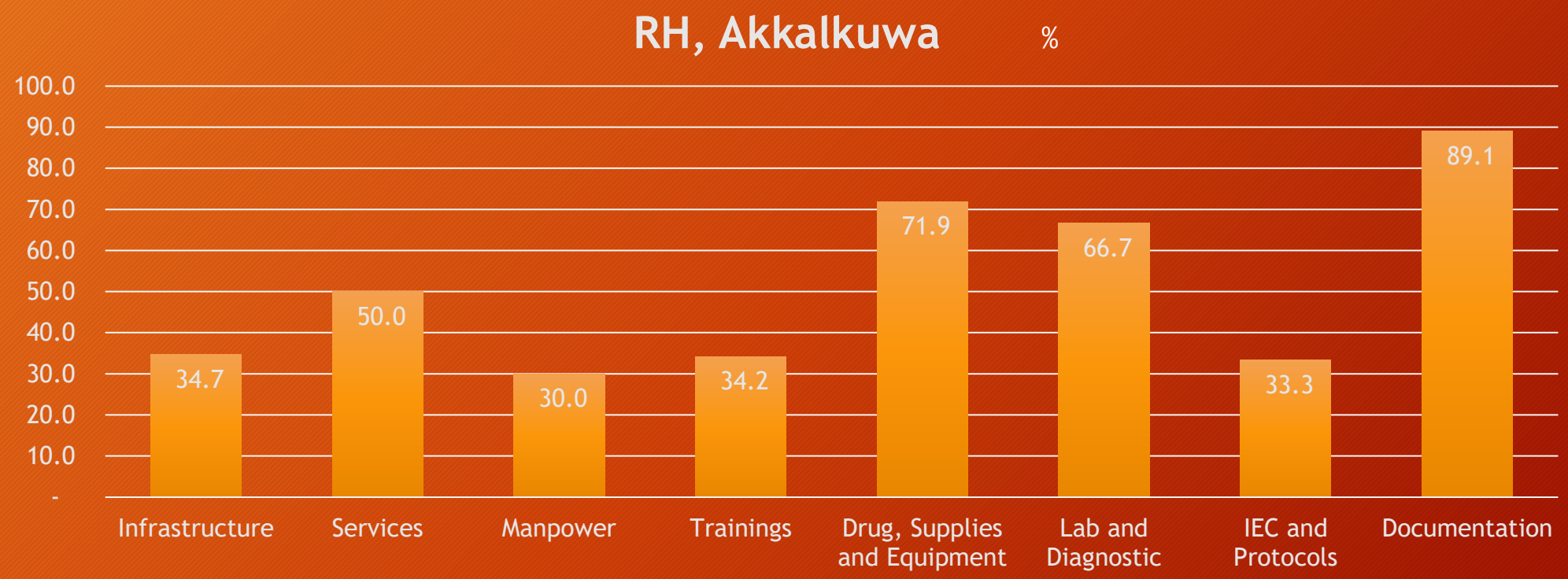
Labour room Assessment of DH, Nandurbar



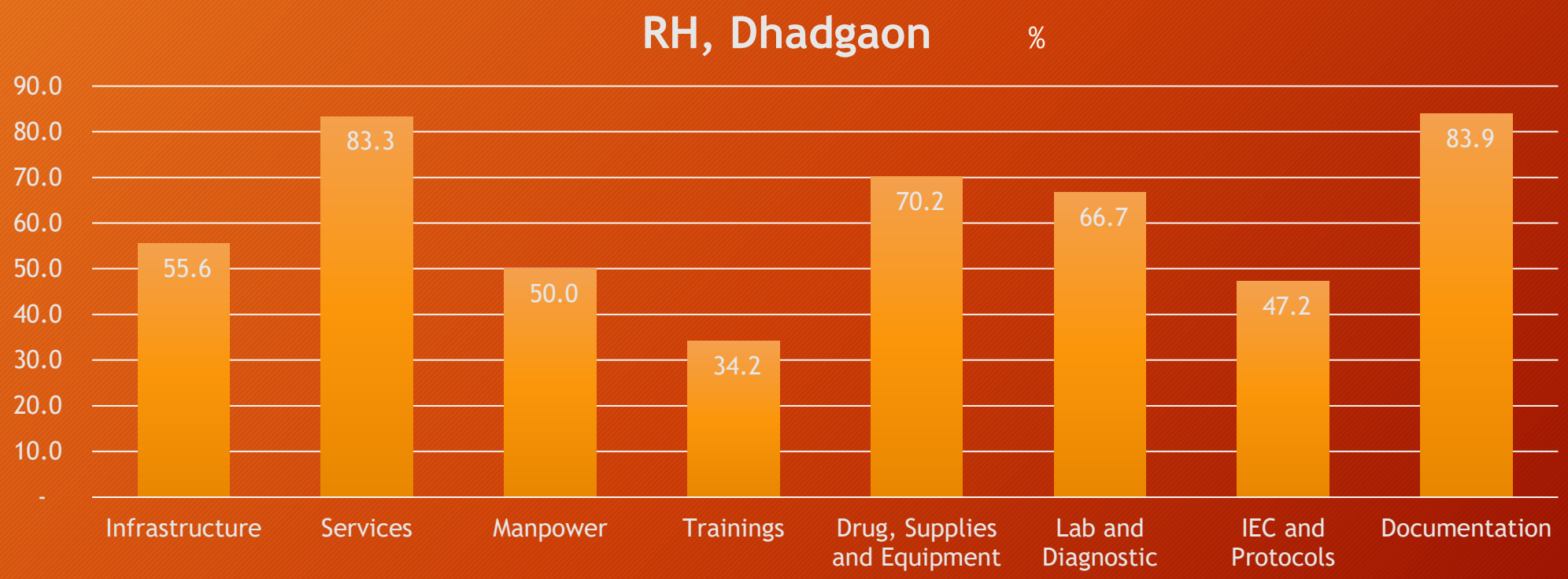
Labour room Assessment of SDH, Taloda



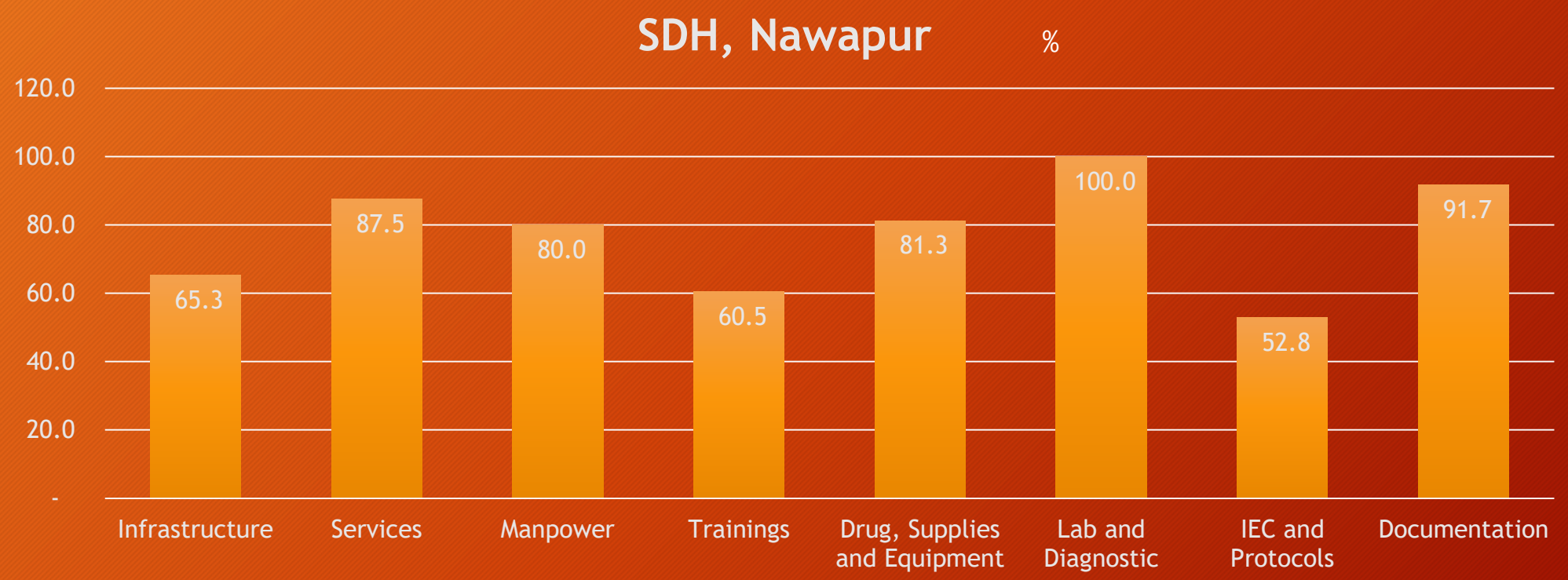
Labour room Assessment of RH, Akkalkuwa

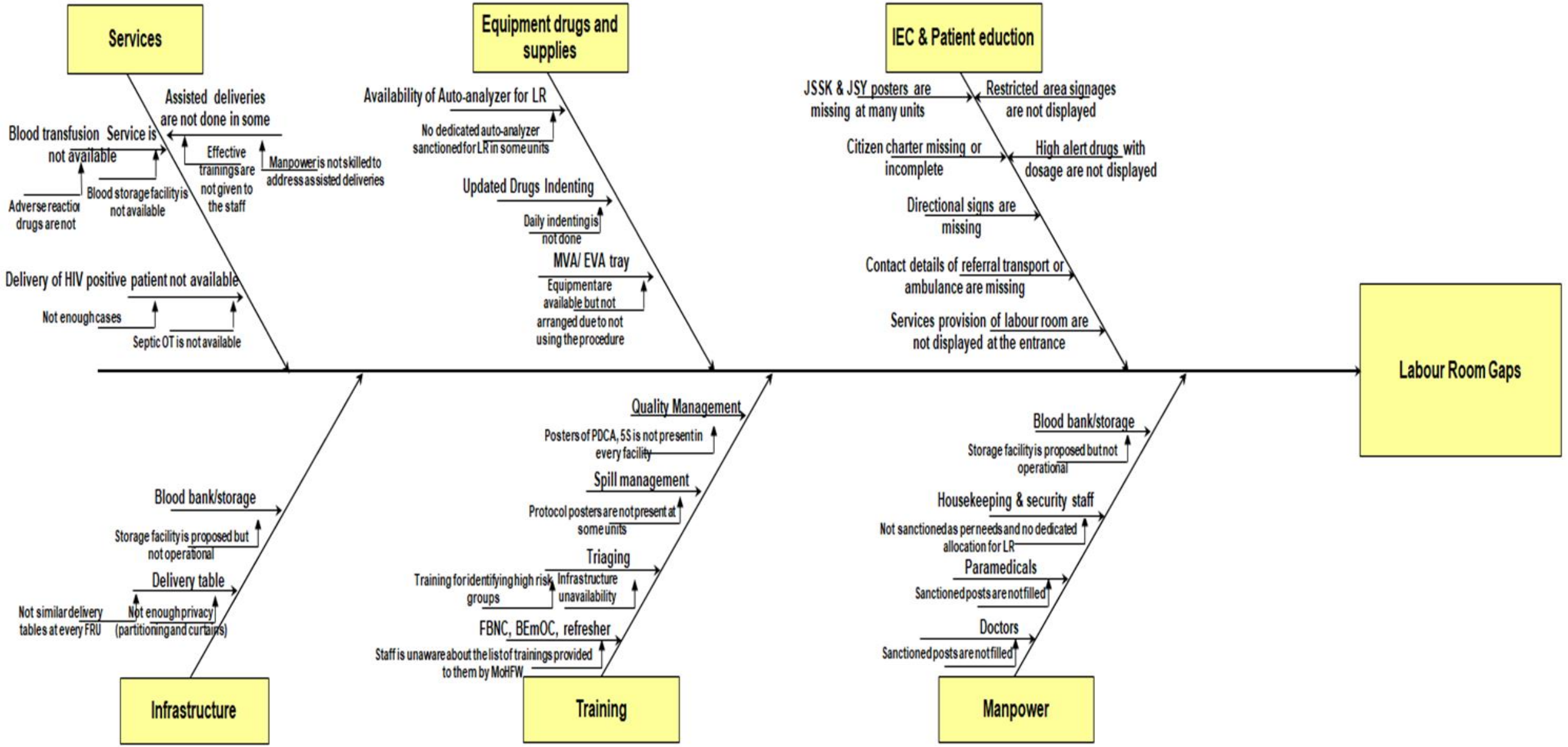


Labour room Assessment of RH, Dhadgaon



Labour room Assessment of SDH, Nawapur





Fishbone analysis of gaps in labour room

Part II

- For finding the challenges in operationalization of FRUs, further interviews were done with 4 stakeholders:

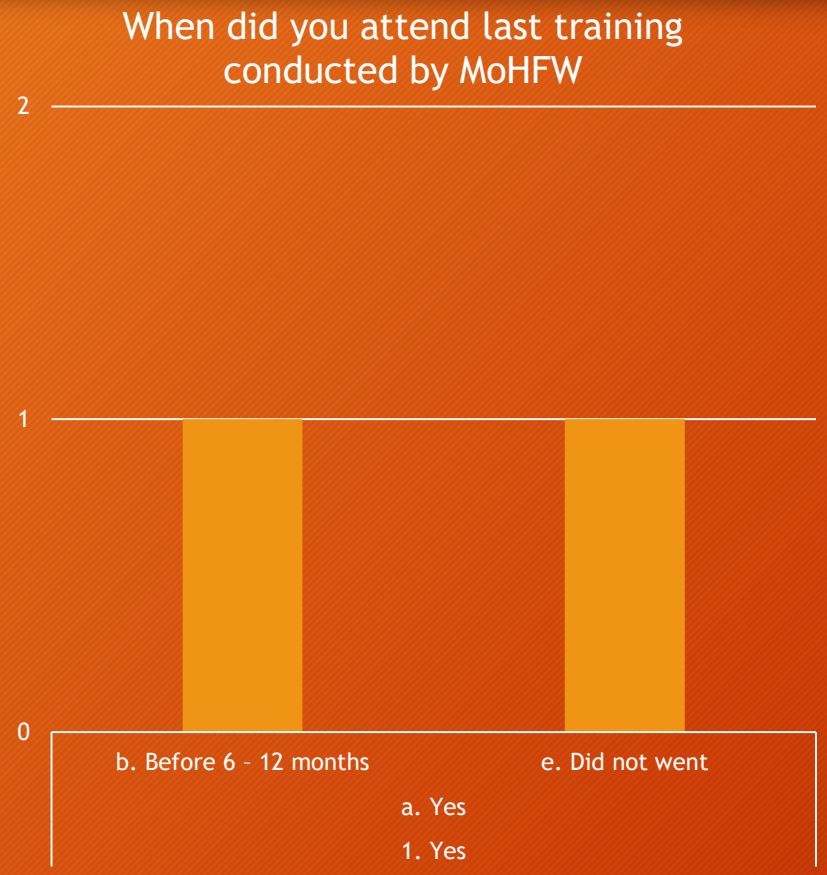
Medical Superintendent, Medical Officers, Staff Nurses and Beneficiaries.

Part II

No. of Medical Officers conducting C-section deliveries in their respective FRUs

It was found that 3 out of 5 MOs were conducting C-section deliveries. The other 2 were not conducting C-section deliveries as the Infrastructure required for the delivery was not adequate or the specialists were not available.

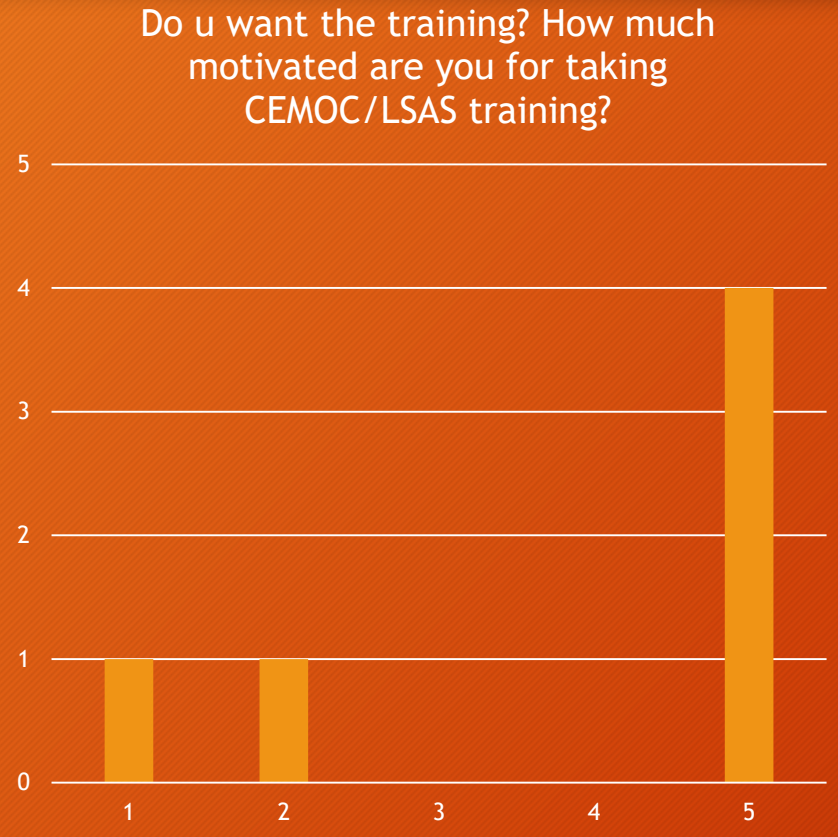
Part II



Span of attending a training organized by MoHFW by Medical Officers conducting C-sections

Out of the 3 MOs, 2 got the opportunity to nominate themselves for the training. Out of which 1 have attended the training before 6- 12 months, while 1 of them did not went because of the personal reasons.

Part II



Level of Motivation of Medical Officers in attending a training organized by MoHFW

It appears that the Medical Officers are less interested for attending training. Only 1 of them was interested in training. While the 2 had less interest and the remaining 2 had no interest.

We tried to understand the common problems of the FRU and we found there were Infrastructure and Transport issues at 2 FRUs. Also, 1 of them felt there was an HR concern.

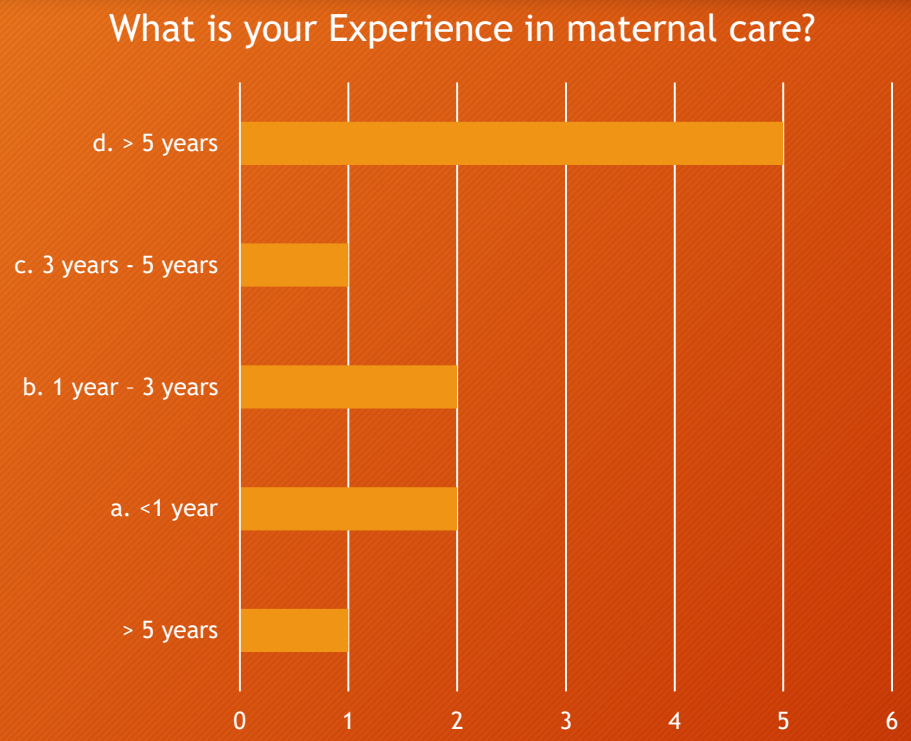
Part II

Suggestions on Improvement	
Infrastructure	5
Manpower	1
Equipment	1

Suggestions on Improvement by Staff Nurses grouped in themes

Drilling down further it was found that Infrastructure improvement was the priority concern for Medical Officers. Also it was found that the security was also less in handling the crowd at most of the times.

Part II



Experience of Staff Nurses in Maternal care

a. SBA	7
b. BEmOC	3
c. FBNC	3
d. IUCD	5
e. PPIUCD	5
f. IMNCI	5
g. MVA/EVA	0
h. Dakshta	7
i. NSSK	6
j. No training	2

No. of trainings SN have attended

Part II

Training	1
Infrastructure	5
Manpower	6
Equipment	2
Transport	2
Security	2

Common problems encountered by Staff Nurses grouped in themes

Satisfaction level of Medical Superintendent working with the Health department

Part II

- This bar chart indicates satisfaction level of the MS working with the health department. It can be understood from the chart that the MS are moderately satisfied working with the district health department.
- Six(12%) out of 50 beneficiaries did not received transportation service to the facility. The beneficiaries are happy about the amenities at the FRUs. They found the drinking water to be adequate and the environment clean for delivery. The diagnostic facility was available in the hospital and no tests have to be done from outside during their PNC.

Part II

Attention needs requiring attention

The above elements were asked to be ranked according to the attention needs, the MS ranked People to be center of attention followed by Strategy, Design Technology, Task and Culture.

Discussion

- It appears that the specialists are not available in RH/ SDH, which is creating barrier for conducting C-sections. The areas are in the outskirts of the districts which is also a major challenge so cold chain and transportation should also be given consideration in handling these challenges. Moreover, private specialists could be employed and given incentives for conducting C-section deliveries successfully. This could enhance the morale of staff in the FRU and would decrease the workload at DH.
- Action plans could be executed in phases so that the deliverables requiring immediate attention could be prioritized.

Discussion

- Technology, being key influencer in today's world. Activity tracker could be developed to keep a check on the current Activity plan so that timely implementation is expected with mutual consent. Further a MIS could be updated for keeping track of staff trainings, patient prescription, Equipment maintenance details, etc.
- Security should be improved by providing dedicated person for labour room. Also, there should be dedicated staff nurses for labour room and OT.

Conclusion

- It is evident from the data we have collected that there are multiple points that requires attention. Infrastructure must be given priority as it is evident that it requires immediate attention and possesses major challenge in operationalization of FRUs. The gaps will help to construct an Action plan for further implementation considering the current challenges.
- Also, it is essential to spread awareness about blood donation to increase the blood availability in district. This initiative could be addressed by collaborating with two or three stakeholders voluntarily by providing effective counselling. Piramal Foundation works on the ground level by effectively monitoring the VHSND at block level. This could be strengthened by selecting a leader amoung the already existing VHSND and conducting VHSND in the areas where it is not been conducted. Special attention should be given to the Nutrition and health of the pregnant lady during ANC.

Recommendations

Some recommendations that are suggested after completing the study and analyzing the results are as follows:

- Action plan should be developed for improving the Infrastructure, organizing trainings for the staff nurses and Medical Officers, Standardized IEC materials should be developed and made available in every FRU.
- IEC and Communication should be improved to raise awareness amoung the rural people about the maternal care and services provided in the government facililty. This could be done by conducting *nukkad nataks*, posters, short films in local language, Announcements by ASHA workers.
- Action plan should be developed and implementation of the same should be done with the use of technology to track progress.

Recommendations

- Considering Piramal foundation has newly entered the health sector in Nandurbar district, collaboration should be done with the third party NGOs working in the maternal and child care and Nutrition sector.
- Trainings should be provided in collaboration with the governmental support for making the process standardized and improving the quality of care being provided.
- HMIS should be improved to keep records of the trainings of the Nursing staff, Maintenance of equipment.
- Technology should be incorporated in the process. Process remapping should be considered based on the flow process of different departments.

Thank You