Gap assessment of labour rooms in Sagar district of Madhya Pradesh

By:
Richa Banzal
Second Year MBA Health Management (Health)
Batch 2014-2016
Guided by: Dr. Neetu Purohit
Associate Professor, IIHMR University

INTRODUCTION

- The provision of services for delivery care in a health facility generally serves as an important indicator to assess whether the facility is optimally functional or not. The concept of ‘delivery point’ emerges from this presumption.

- The health facilities are designated as L1, L2 and L3 .

- According to the government mandate, these facilities should be the first to be strengthened for providing comprehensive RMNCH services.

- The recent NFHS4 data shows that the institutional delivery is 80.8 percent which has increased from 26.2 percent in NFHS 3 in Madhya Pradesh.

- The main objective of the identification of labour room is as follows:

❑ To increase Institutional delivery at least 90 to 95%.

❑ To reduce Home delivery by focusing on PUSH & PULL factors.

❑ To reduce Inter referral / over burden of Tertiary care centre.

❑ To prevent maternal death.

Literature Review

- A program based on managing third stage of labour reported that most deaths occur in developing countries where women may receive inappropriate care during labour, delivery or during the postpartum period.
- According to the special survey of deaths conducted by the Registrar General of India (RGI), the major cause of maternal deaths in India in 2001–03 was haemorrhage (38%), which was followed by other conditions (33%). Other causes of maternal deaths were sepsis (11%), abortion (8%), hypertensive disorders (5%) and obstructed labour (5%).
- Research has shown that using the partograph can be highly effective in reducing maternal complications caused by prolonged labour such as postpartum haemorrhage, sepsis, uterine rupture and infant complications such as anoxia, infections, and death. The use of a partograph has also shown to reduce the need for operative interventions.
- A based on predictors of maternal death revealed that postpartum haemorrhage was the chief cause of maternal death and alone accounted for one fourth of the total maternal deaths and it can be prevented by appropriate management during labour.

Rationale of the Assessment

- To improve the coverage of institutional delivery, the prime activities would be improving the functionality of the labour room in terms of infrastructure, manpower, equipment, protocols and drugs etc. And to do that the gap analysis of the labour room is most essential.

- Therefore the assessment was done to highlight the identified gaps so that the implementer can take the proper initiative to fully functionality of the labour room.

Objective

- The overall objective of the initiative is to improve the status and functioning of labour rooms and facility based new born care in the district of Sagar, Madhya Pradesh.

The objective of the assessment was -

1. To gather baseline data of all functional labour rooms of the district in relation to Government of India stipulated norms using standard tool.
2. To conduct physical assessment of all functional labour rooms of the district by team visits.
3. To analyse data gathered from the assessment and find the gaps that exist in labour rooms.
4. To develop detailed and focussed action plans for each facility that would address gaps and help take preventive action to enhance the quality of services provided in labour rooms

Methodology

- The gap assessment has been based through standard tool in relation to Government of India stipulated norms . The districts comprises of 32 delivery points. Assessment was based on physical verifications and observations of 15 delivery points which comprises of the following:

- 1 District Hospital
- 1 Civil Hospital
- 10 CHC out of 12 CHC
- 3 PHC out of 26 PHC

- The analysis was done broadly of facility based services of L3 (Cemoc centres), L2 (FRU, CHC and 24*7 PHC), L1 (24*7 PHC Non FRU)

- Study design: Descriptive Study Design
- Study area: delivery points of 11 blocks of Sagar district
- Study duration: 8th February to 7th May (3months)
- Data collection method: primary data was collected through physical variation and observation
- Sample size : 15 facilities surveyed of Sagar district which included
  - 1 District Hospital(L3)
  - 1 Civil Hospital(L3)
  - 10 CHC out of 12 CHC(L2)
  - 3 PHC out of 18 PHC(L1)
- Data collection tool: Standard tool in relation to Government of India stipulated norms .
- Data analysis: Analysis was done through Ms Excel and SPSS 16.0 version and the result was done in Ms Word

DISRTICT MAP OF THE DELIVERY POINTS

- District Hospital
- Bina
- Banda
- Khurai
- Malthon
- Rahatgarh
- Garhakota
- Jaisinagar
- Kesli
- Deori
- Shahgarh
- Rehli
- Jaruwakheda
- Shahpur
- Bandri

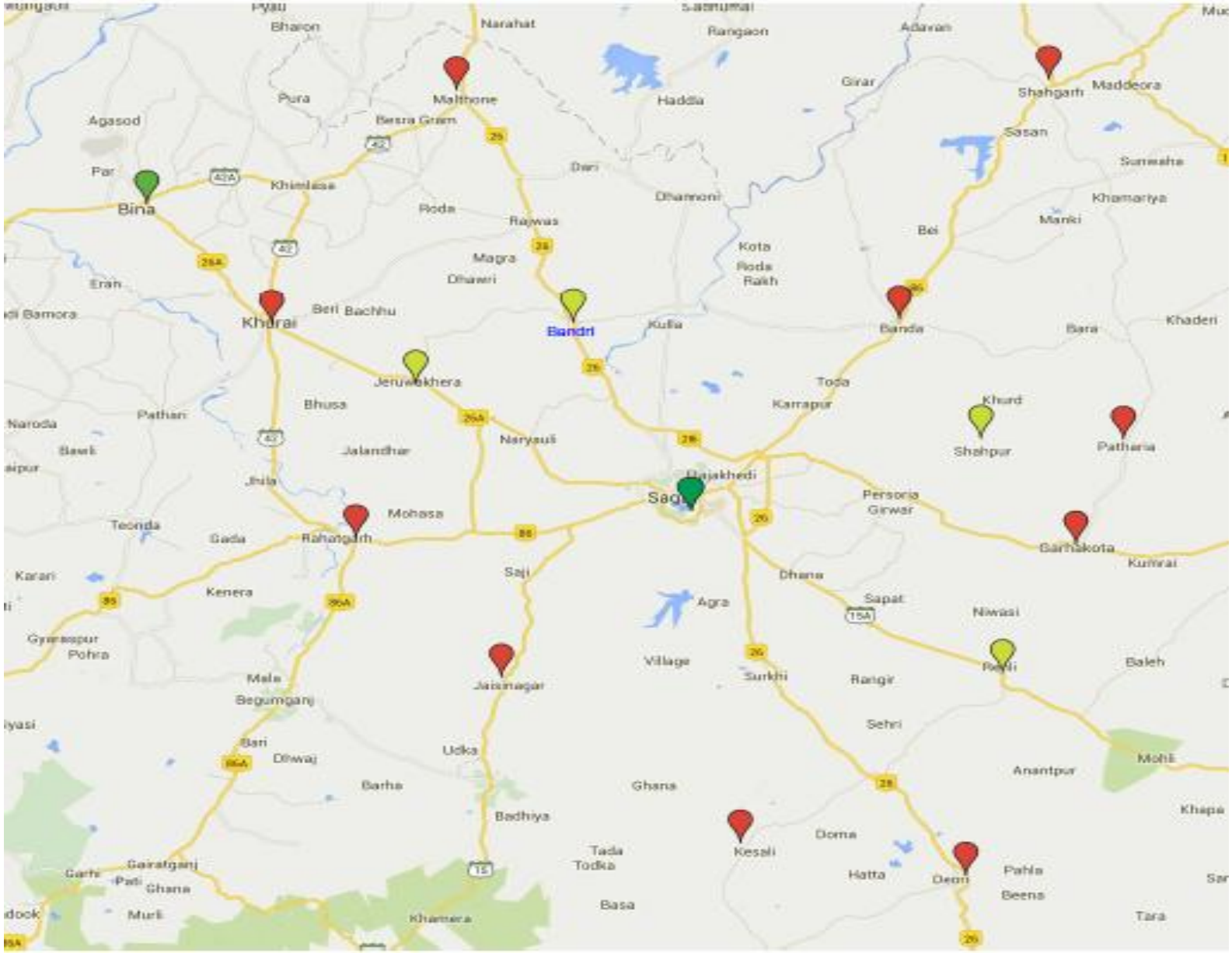


Table 1:

RESULTS

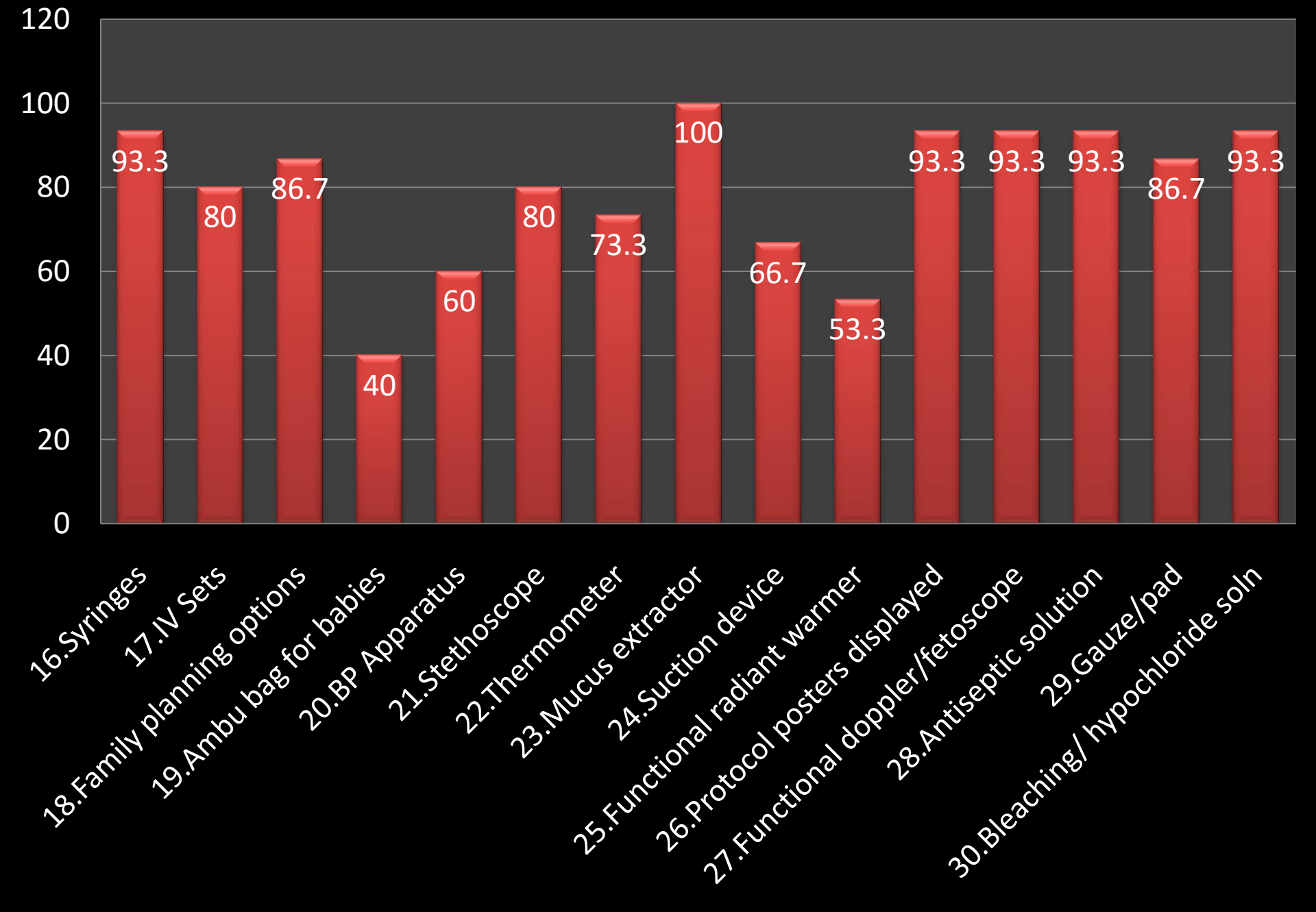
FACILITY NAME	Total number of deliveries	Number of vaginal deliveries	Number of assisted vaginal deliveries (Forceps ,Vaccum)	Number of caesarean deliveries	Number of Live birthsof delivereries	Number of Intra Uterine deaths (IUD) + Still births in the facility of deliveries
Banda CHC	2846	2843	0	0	2846	20
Bina CH	2141	2140	0	8	2108	32
Jaisinagar CHC	845	1273	0	0	823	22
Khurai CHC	2054	2050	0	0	2054	36
Rahatgarh CHC	1831	1831	0	0	1776	59
Shahgarh CHC	1913	1913	0	0	1871	52
Sagar DH	8292	6899	0	1393	8073	277
Bandri PHC	978	131	0	0	976	2
Deori CHC	1650	187	0	0	1643	7
Garhakota CHC	1586	174	0	0	1585	1
Jaruakheda PHC	676	740	0	0	666	10
Kesli CHC	1009	107	0	0	1006	1
Rehli CHC	1586	178	0	0	1584	2
Shahpur(S) PHC	959	1776	0	0	930	29
Malthoan CHC	1049	1049	0	0	1031	18

Table 2:

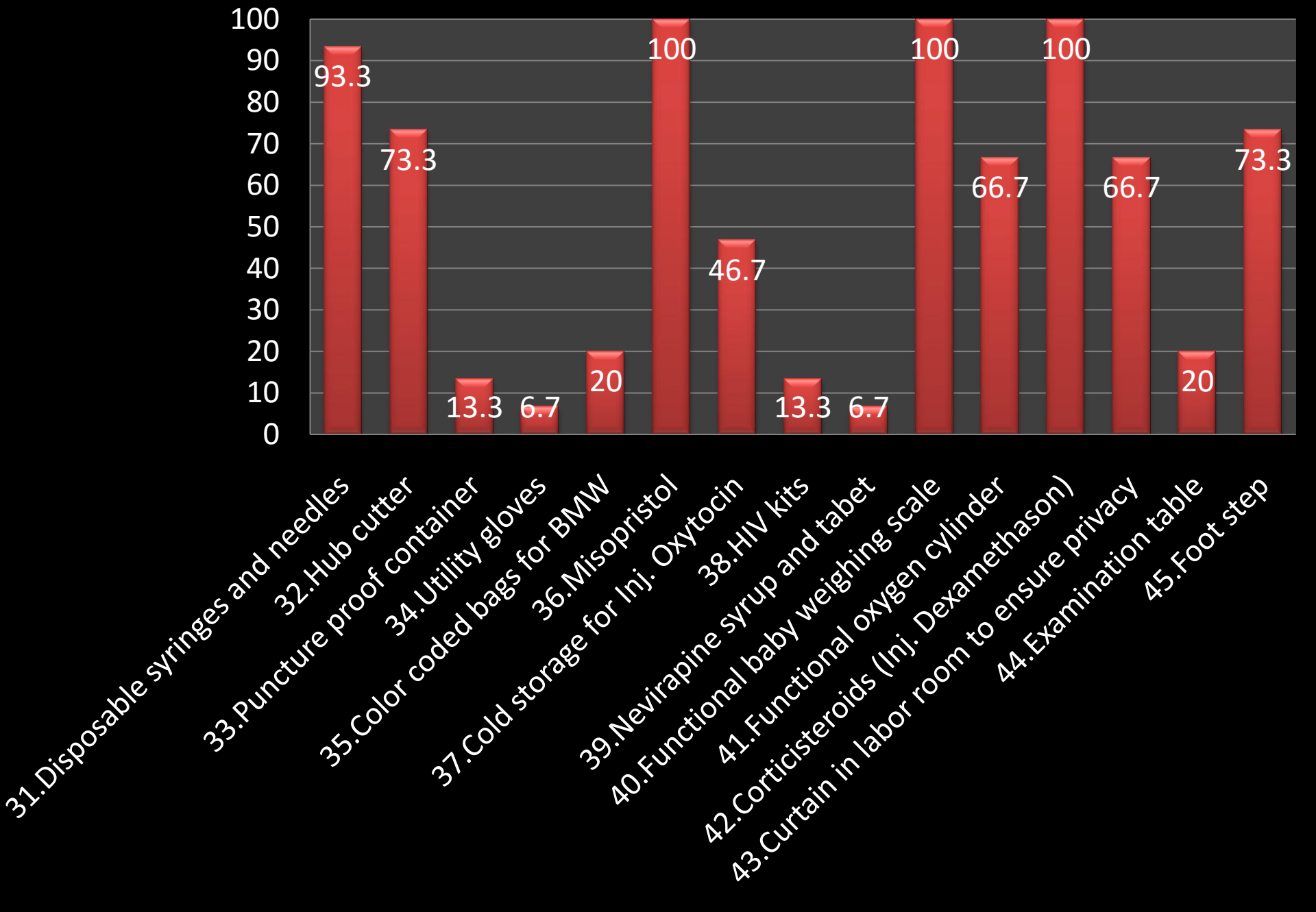
FACILITY NAME	Number of Maternal deaths in the facility	Numbers of Mothers with post-partum hemorrhage	Mothers with Sepsis	Mothers with Severe Pre-eclampsia/eclampsia	Mothers with obstructed labor	Newborn with asphyxia	Number of newborn with sepsis	Number of newborn who were premature births	Number of newborn who were Low Birth Weight
Banda CHC	0	0	0	0	0	2	0	0	6
Bina CH	3	1	2	1	2	3	1	0	24
Jaisinagar CHC	0	0	1	0	0	1	0	1	3
Khurai CHC	1	0	1	3	1	4	1	1	2
Rahatgarh CHC	0	0	0	0	0	0	0	0	4
Shahgarh CHC	0	0	1	0	0	1	0	0	54
Sagar DH	15	4	0	9	8	37	87	533	729
Bandri PHC	0	0	0	2	3	0	1	0	3
Deori CHC	0	7	1	1	2	1	0	3	1
Garhakota CHC	0	1	0	0	5	5	0	0	0
Jaruakheda PHC	0	4	0	0	0	0	0	0	6
Kesli CHC	0	2	2	7	1	1	0	1	0
Rehli CHC	0	0	0	0	0	2	1	2	1
Shahpur(S) PHC	0	0	0	0	0	0	0	0	5
Malthoan CHC	0	7	7	1	1	0	0	1	6


Percentage Available Resources
100
90
80
70
60
50
40
30
20
10
0
66.7
86.7
86.7
93.7
86.7
93.3
26.7
66.7
73.3
46.7
80
80
86.7
73.3
60
1.Magnesium Sulphate
2.Antibiotics for mother
3.Antibiotics for baby
4.Oxytocin (5/10 IU per ml)
5.Vitamin K (1mg/ml or 1 mg/0.5 ml)
6.IV Fluids
7.Antiretrovirals
8.Soap & Running water
9.Gloves
10.Uristick
11.Partograph
12.Cord clamps
13.Sterile scissors
14.Pads
15.Towels for receiving newborns

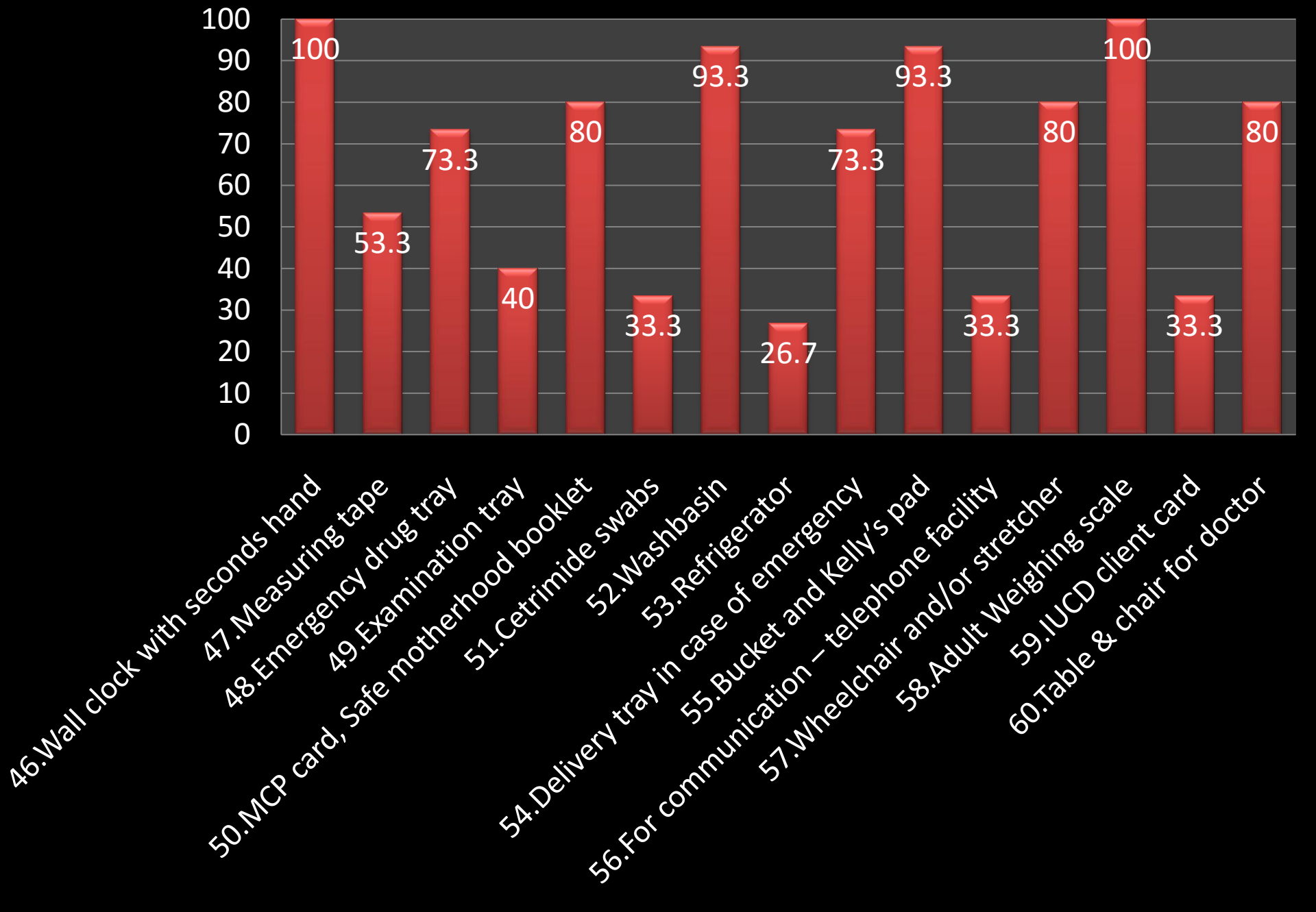
PERCENTAGE AVAILABLE RESOURCES



PERCENTAGE AVAILABLE RESOURCES



PERCENTAGE AVAILABLE RESOUCES



HUMAN RESOURCE AND TRAINING STATUS OF LEVEL 3 FACILITIES IN THE DISTRICT

FACILITY L3 HR			Sagar DH	Bina CH	Khurai CHC	Deori CHC
		DELIVERIES PER MONT	562	167	314	147
	REGULAR	SANCTIONED	2	1	1	1
		POSTED	2	1	0	1
	CONTRACTUAL	SANCTIONED	0	0	0	0
		POSTED	0	0	0	0
	BONDED		0	0	0	0
ANAESTHESIAN		LSAS TRAINED	0	0	1	0
	REGULAR	SANCTIONED	4	1	2	1
		POSTED	3	2	2	1
	CONTRACTUAL	SANCTIONED	1	0	0	0
		POSTED	1	0	0	0
	BONDED		0	0	0	0
GYNAECOLOGIST		EMOC TRAINED	0	0	0	0
	REGULAR	SANCTIONED	5	0	0	0
		POSTED	5	0	0	0
	CONTRACTUAL	SANCTIONED	3	0	0	0
		POSTED	0	0	0	0
	BONDED		0	0	0	0
MEDICAL OFFICERS		BEMOC TRAINED	0	0	0	0

HUMAN RESOURCE AND TRAINING STATUS OF LEVEL 2 AND LEVEL 1 FACILITIES IN THE DISTRICT

FACILITY L2 AND L1			Banda	Rahatgarh	Malthone	Jaisinagar	Shahgarh	Kesli CHC	Gadakota	Rehli CHC	Jaruakhed	Bhandri	Shahpur
MEDICAL OFFICERS		DEL. PER MONTH	262	178	95	72	165	89	133	140	67	104	80
	REGULAR	SANCTIONED	2	2	2	2	2	2	2	2	2	2	2
		POSTED	2	0	2	2	1	3	3	2	1	2	2
	CONTRACTUAL	SANCTIONED	1	0	1	0	0	0	2	1	0	0	1
		POSTED	0	0	1	0	0	0	2	1	0	0	0
	BONDED		0	0	0	0	0	0	0	0	0	0	0
		BEMOC TRAINED	0	0	0	0	0	0	0	0	0	0	0

STATUS OF STAFF NURSES OF MATRENITY WING

		REGULAR MATERNITY WING SN	SBA,DAKSHATA,SKILL LAB TRAINED (Y/N)	CONTRACTUAL MW SN SANCTONED	CONTRACTUAL SN IN MW POSTED	SBA,DAKSHATA,SKILL LAB TRAINED (Y/N)
Urban Sagar	Sagar	12	YES	3	2	YES
Bina	Bina	15	YES	0	0	0
Khurai	Khurai	18	YES	0	0	0
Deori	Deori	6	Yes	1	1	YES
Banda	Banda	5	yes	0	0	0
Rahatgarh	Rahatgarh	1	YES	0	0	NO
Malthone	Malthone	3	yes	3	0	NO
Jaisinagar	Jaisinagar	5	yes	0	0	0
Shahgarh	Shahgarh	2	yes	1	1	YES
Kesli	Kesli	4	YES	0	0	0
Rehli	Gadakota	4	YES	0	0	0
Rehli	Rehli	4	YES	0	0	0
Rahatgarh	Jaruakheda				0	
Malthone	Bhandri					
Shahpur (Rural Sagar)	Shahpur	0	NO	0	0	0

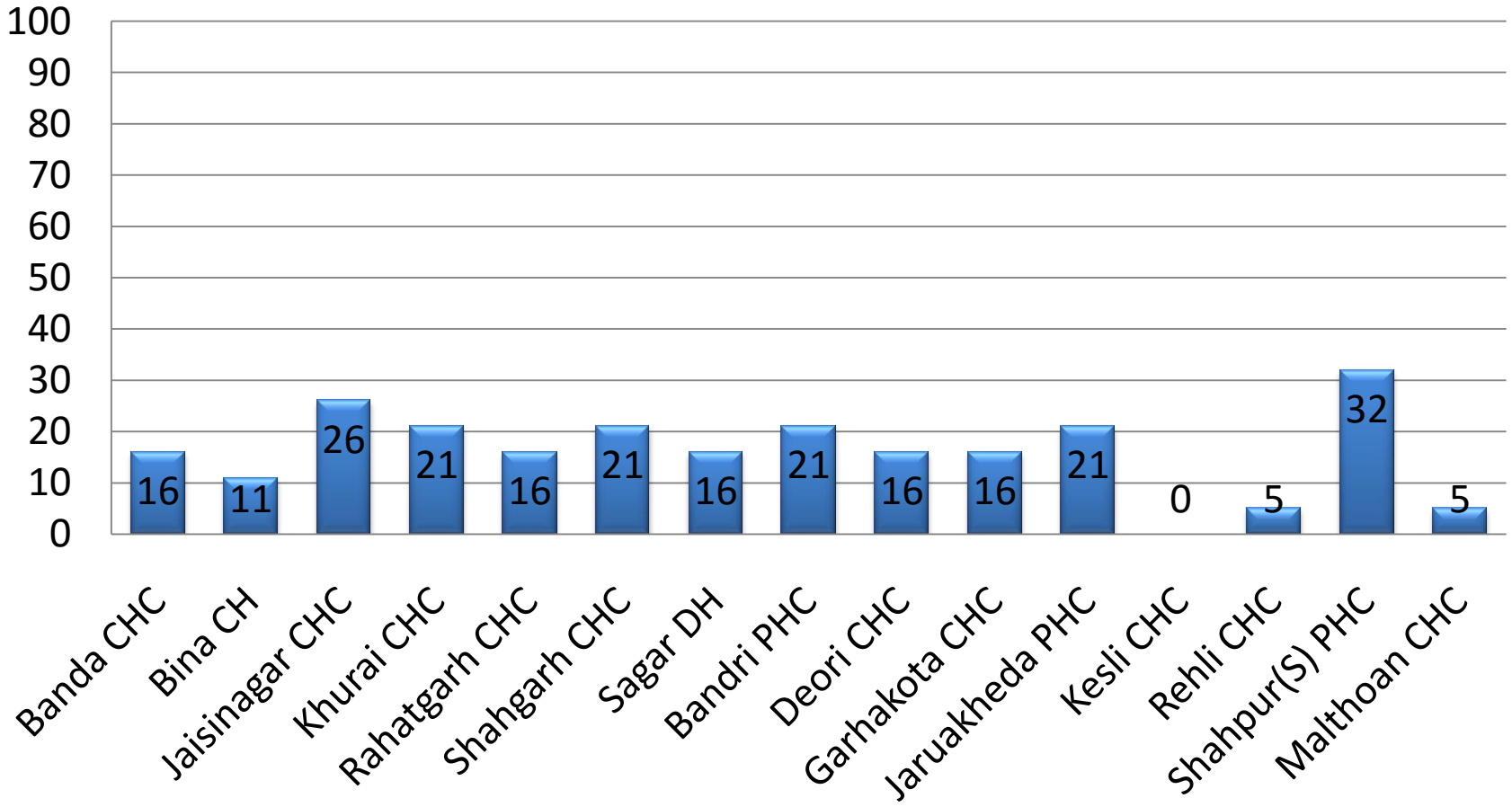
Assessment of Protocols Standards

- There are 19 protocols standards which need to be practiced in the labor room.
- The 19 protocols have various sections which have a verification criteria
- The total score of each standard is marked as 1 if all the verification criteria are met and 0 if even one of the criteria is unmet.
- Thus overall achievement is assessed based on the overall standard response of the 19 protocols.

For example

S. No	Standard	response (yes/no)	Verification criteria No.	Verification criteria	response yes/no
5	Provider identifies conditions leading to preterm delivery and facilitates preventive care				
5.1	Provider does a correct estimation of gestational age			5.1.1 Correctly estimates gestational age to confirm that labour is	
	to confirm that labour is pre term			pre term through fundal height/LMP/USG (if available)	
5.2	Provider identifies conditions that may lead to pre			5.2.1 Identifies condition that may lead to pre term delivery	
	term delivery			(severe Pre-eclampsia, Eclampsia, APH, Pre term Pre labour Rupture Of Membrane) and records them,	
5.3	Provider gives correct regimen of corticosteroid			5.3.1 Corticosteroids (Inj Dexamethasone) is available	
				5.3.2 Assesses appropriateness of administration of antenatal	
				corticosteroids to mothers	
5.4	Provider ensures specialist attention			5.4.1 Ensures specialist attention (care by Pediatrician)	
	Total Score				

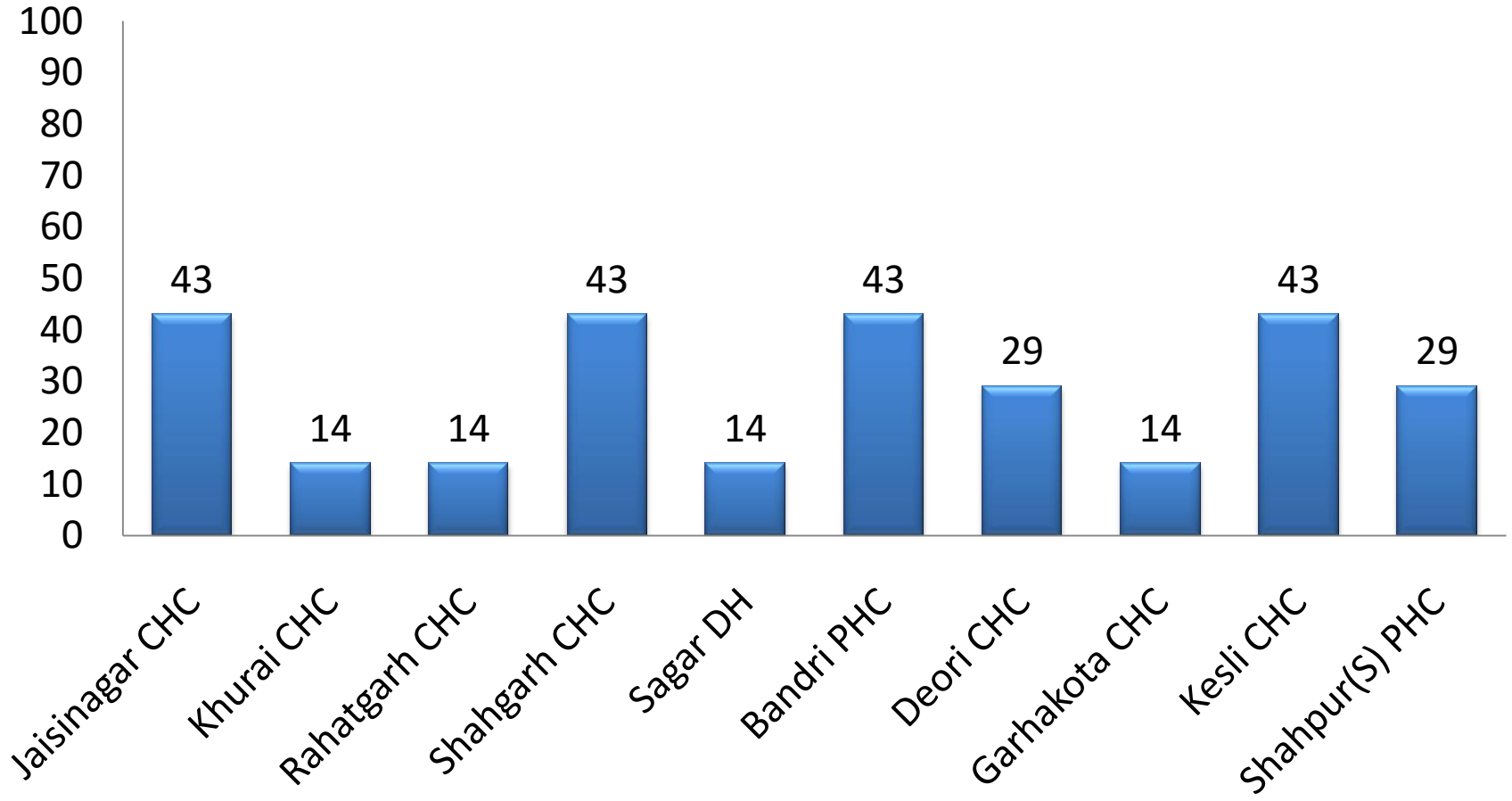
Overall Standard Achievement (%) out of 19 Protocols Standards



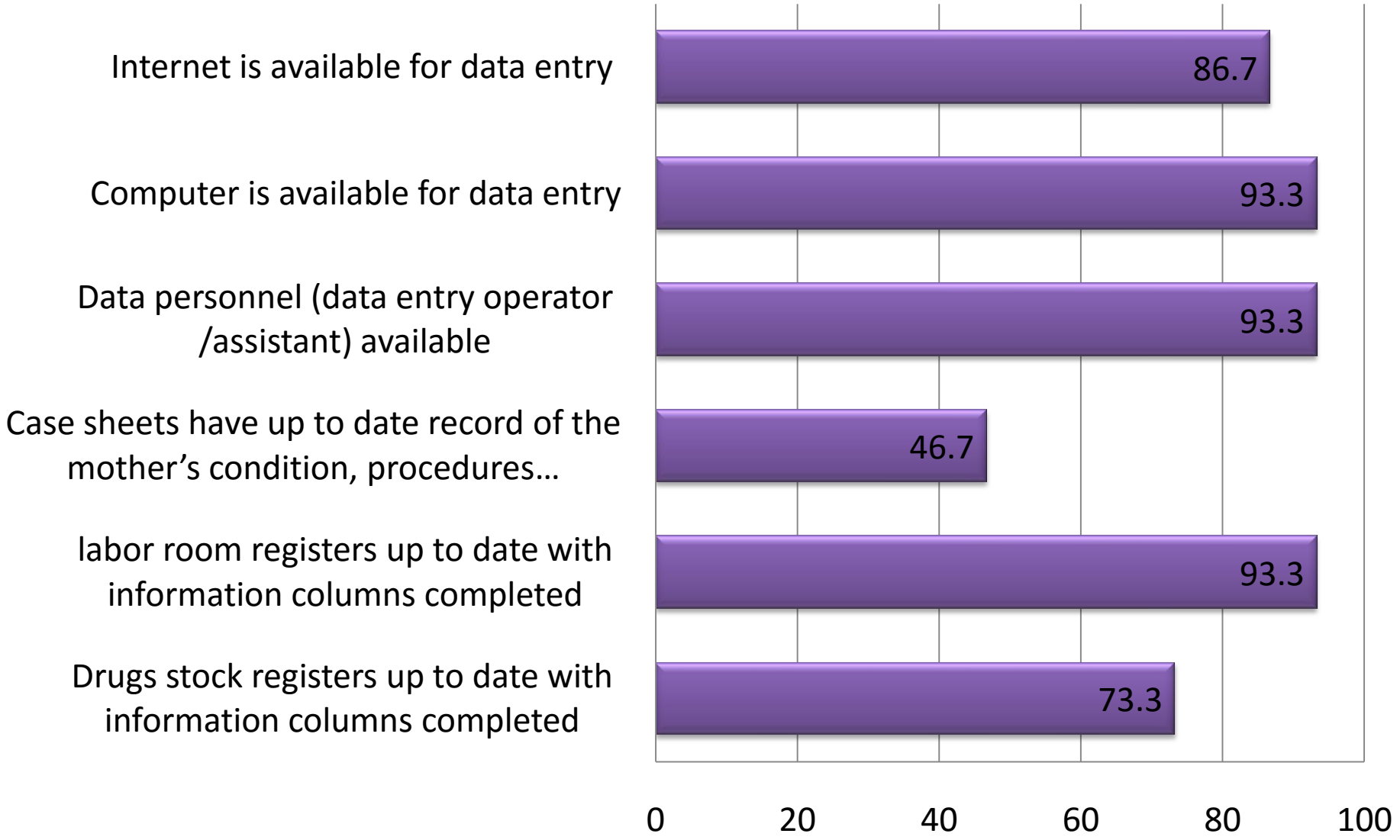
Assessment of labor room standards

Sr. No.	Labor room Standards	Response
1	The facility has adequate provision for privacy of the clients in the labor room	
1.1	Entry to the labor room is not direct	
1.2	Window and door glass are frosted	
1.3	Windows have curtains of light color	
1.4	Each labor table has provision for cover on three sides (by screens or curtains)	
	Total Score	
2	The labor room has a good ambience	
2.1	All windows and doors are in proper condition	
2.2	Floor of the labor room is constructed of anti-skid vitrified tiles/ natural stone/ equivalent, with seamless joints, preferably of white/ ivory color	
2.3	Walls of labor room have wall tiles of white color with seamless joints extending up to the height of door of the room	
	Total Score	

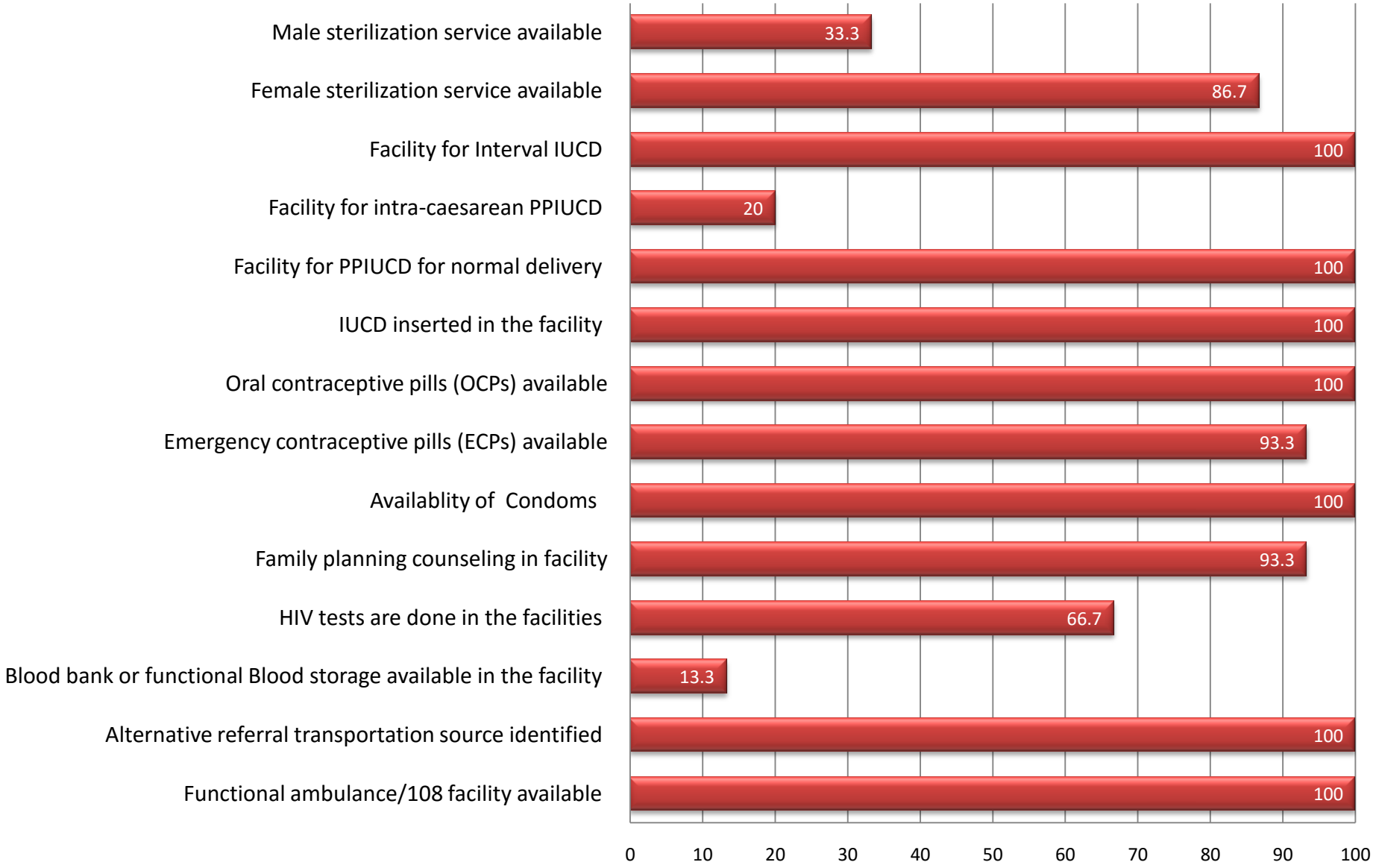
Percentage of Labour room infrastructure met Standards



Percentage of Data recording / Database system



Percentage of Communication/Referrals/Services/Practices



Suggestions

Prioritization Activity : Help set the priority actions for each facility, on practices which are easily achievable- placed in the lower most section (LOW HANGING FRUITS), practices which will require some level of effort and time for improvement- placed in the middle section (MID HANGING FRUITS) and practices which will require extra effort and are not so easy to achieve- placed in the upper most section (HIGH HANGING FRUITS).

1. The selected facilities are conducting pleasing number of deliveries per month.
2. The selected ideal labour rooms fairly satisfy the availability of the different essential items but still there are rooms for improvements. These gaps are minimal gaps and easily can be filled up.
3. All facilities have sufficient number of delivery tables. But it needs to be equipped with mattress, sheet, Macintosh, foot rest and Kellys pad wherever needed.
4. Leakage was observed in 5 labour rooms which need to be immediately repaired.
5. 2 Labour rooms do not have the NBCC and four NBCC are outside the labour room which should be made ideally within the labour room.
6. There is scope of rationalization of manpower.
7. Training of manpower is a foremost issue which should be looked in.
8. Shortage of gloves was observed at many facilities which need to be immediately solved.
9. Most of the protocols are not placed at right places. It needs to be placed at right place.
10. Standard uniform printed delivery register should be supplied to the labour room.

Suggestions

1. Creating Quality-enabling Environment at the Facility Levels

2. Making essential supplies available

3. Empowering nurses for life-saving practices such as newborn resuscitation, administration of $MgSO_4$, and antenatal corticosteroids, etc.

4. Non-rotation of trained staff from labour rooms

5. All-staff meetings to review quality status

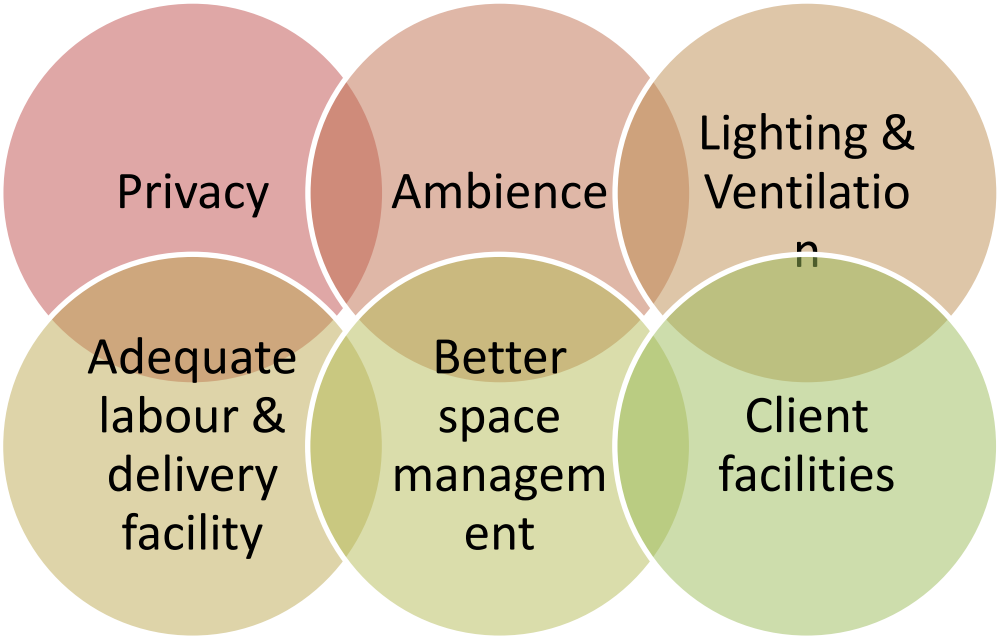
6. Review of dashboard of indicators

7. District level reviews:
   - Task force/ stand alone review/ part of DHS
   - Dashboard of indicators
   - Status of adherence to standards

8. Labour room up gradation plans:
    - In line with the MNH toolkit/ labour room guidelines
    - Well-planned activity
    - Prioritize high delivery load facilities

9. Regular sharing of experience between facilities

Improve Organization Of Labour Room



Key steps to ensure Provision of Comprehensive RMNCH Services at all delivery points are -

- Performance Monitoring of all Delivery Points
- Capacity Building and Rational Deployment of HR.
- Strict adherence to quality Protocols at Delivery Points
- Record maintenance for Referral-In and Referral-Out.
- Ensure JSSK Entitlements.
- Supportive supervision & mentoring.
- Functional grievance redressal system
- Assessing client satisfaction periodically

Conclusion

- Comparing the findings of the assessment with standard guidelines we see many gaps regarding infrastructure, availability of equipments, availability of drugs & consumables. Record and registers are not being maintained. Ensuring biomedical waste management and infection control practices needs special focus & must be adhered to.
- At baseline, the rapid assessment tells that the condition of labour rooms appears to be a major obstacle to the success of maternal and child health programmes in Sagar.
- The findings from the assessment provide a wealth of information on the aspects that need improvement and need to be taken into consideration in action plans

THANK YOU.