Scaling up the 24/7 BHU strategy to provide round the clock care in Punjab, Pakistan: A theory-driven, co-produced implementation study

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Project Objectives

1. Find out what can be done to improve functioning of 24/7 BHUs

2. Provide suggestions for things the government can do, so that more people use BHU services for childbirth rather than giving birth at home.

Theoretical Goals

1. Understand and document the scale-up of the '24/7 BHU' initiative to generate a detailed understanding of how the initiative is unfolding on the ground across Punjab and to identify promising avenues for refinement going forward

2. Contribute to the body of knowledge on scale-ups which can be used globally, both in other low and high income countries.

Module 1

Understand 24/7 BHU program design

❖ Interviewed 45 people working at BHU, district and provincial levels (April 2019 – October 2019)

❖ Conducted a launch and a 24/7 Program Theory development workshop (April 9, 2019 in PSPU offices).
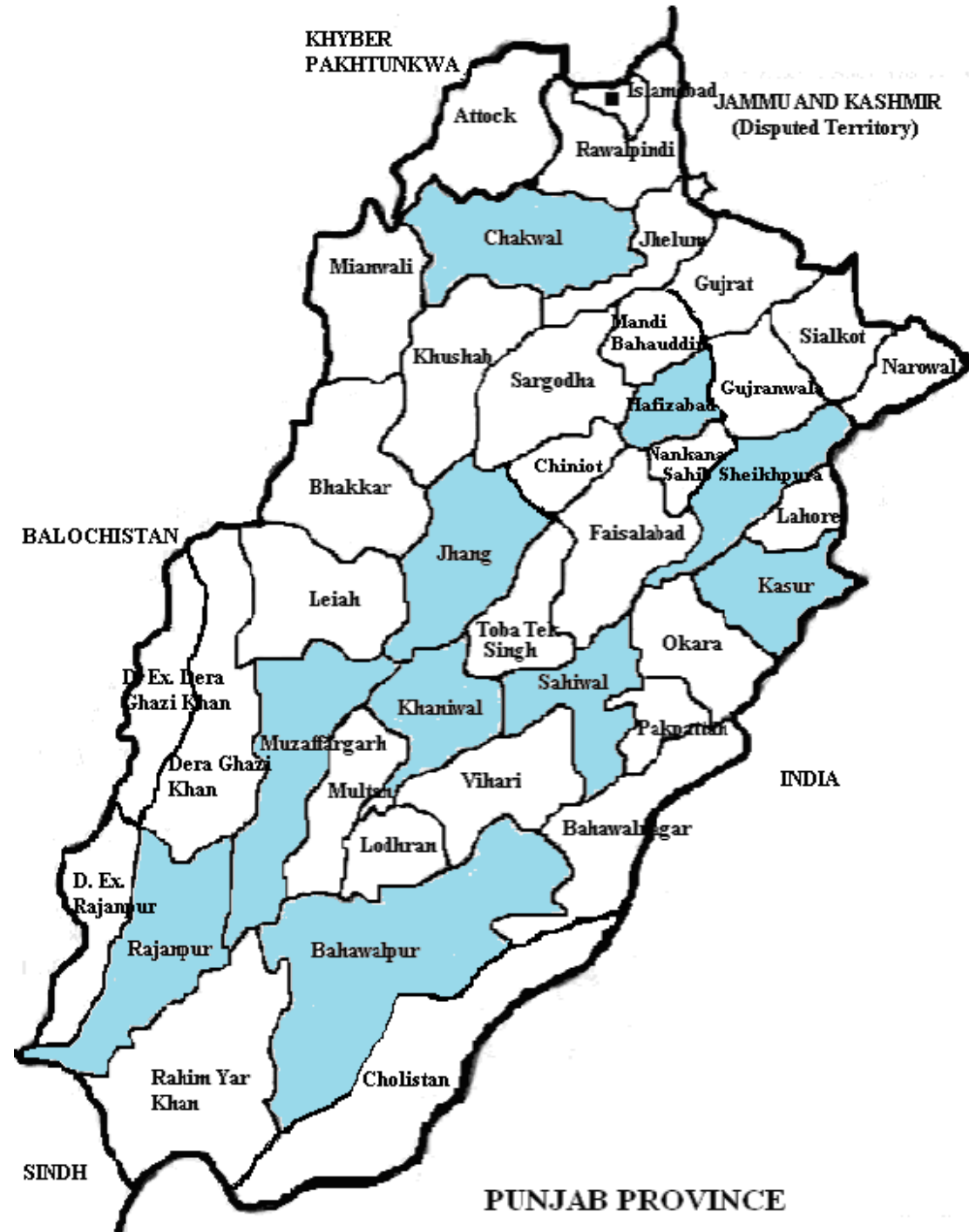
▪ IRMNCH program managers.

Module 2

Understand 24/7 BHU performance

- Random sample of 50 BHUs in 10 districts

Sample of 10 randomly selected districts

BHU Muzzafargarh

Write a description for your map.

Legend
- 🔖 BHU
- ✈ Feature 1
- • Feature 2
- △ Mizri Ghar
- 🄳 Muzaffargarh

Dera Ghāzi Khān

BHU Lundi Pitafi
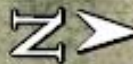
Project Tounsa Barrage
Project Tounsa Barrage

BHU Marian

Layyah

BHU Jaggat Pur Muzaffargarh

BHU Fateh Pur Jonobi

Google Earth

© 2018 Google
US Dept of State Geographer
Image Landsat / Copernicus

Multan

Bahawalpur

60 mi

Collected quantitative data: Jan 2020- June 2021

- Detailed descriptions of BHUs – physical infrastructure; staffing, drugs and other resources

- Quality of Clinical Care: 1,906 direct childbirth observations of women from point of entry to exit

- 1,729 childbirth exit interviews with same women

- 1,678 antenatal care exit interviews with women

- 338 staff interviews

Data Collection Tools

5 Questionnaires

1) Facility Assessment tool
2) Quality of Labor and Delivery Care observation tool
3) Exit interviews – Antenatal care,
4) Exit interviews – Labor and Delivery
5) Staff survey

Module 3

Explore what system processes are supporting or undermining successful scale up

- Conducted an Institutional ethnography in 3 districts- Sheikhupura, Sahiwal and Bahawalpur – March – December 2022. 4-6 months in each district.

Results

BHU characteristics

1) BHU location:
   - Rural - 41
   - Peri-urban – 8
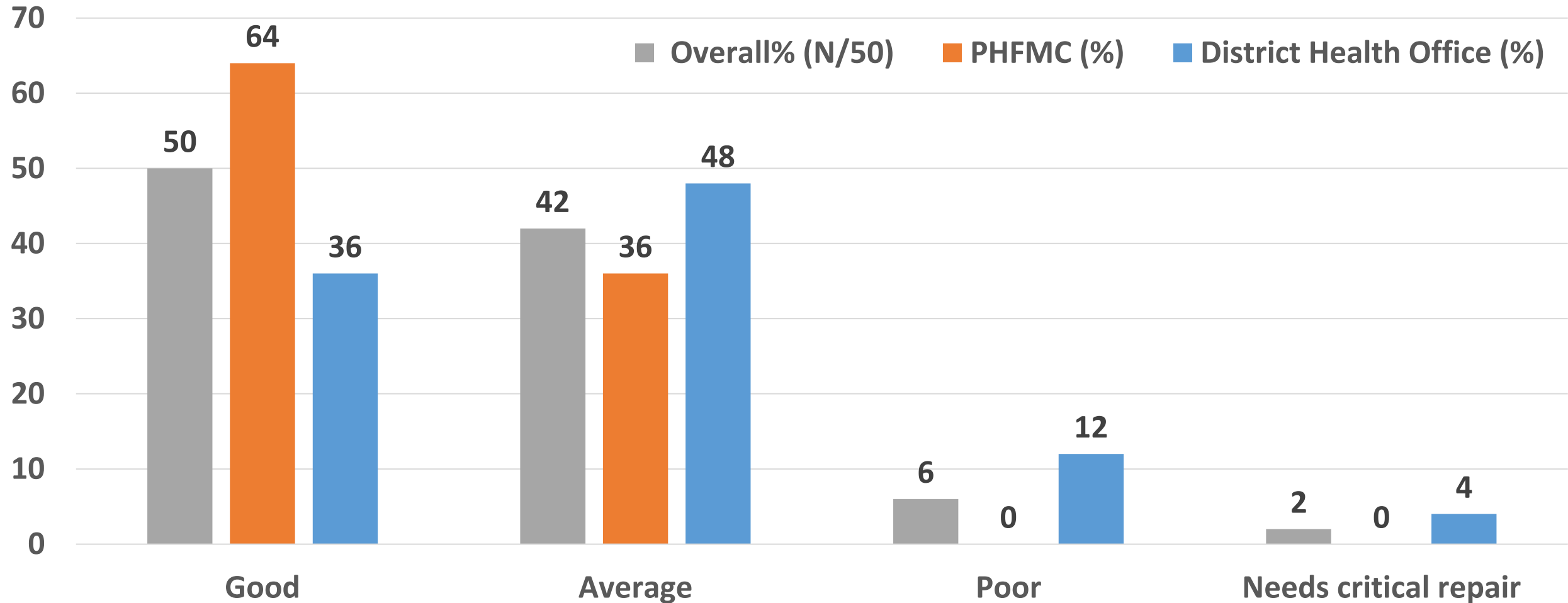   - Urban -1

Organisation responsible for BHU management

	N	%
PHFMC	25	50
Punjab Health Department	25	50
Total	**50**	**100**

District	Average no. of births/BHU/month	As % of total births in district
Bahawalpur	28	26%
Muzafargarh	28	19%
Rajanpur	44	48%
Jhang	23	33%
Hafizabad	12	9%
Kasur	27	40%
Sheikhupura	15	8%
Khanewal	21	17%
Chakwal	13	12%
Sahiwal	36	23%
District Average	**25 (0-68)**	**24%**

Number of births by management structure

Overall Total	Health	PHFMC
1906	894	1012

Important improvements in outlook and buildings

KDC 1: Functional Toilet

	Functional Good	Functional Average	Non-functional
Overall % (N/50)	58	24	18
PHFMC (%)	64	20	16
District Health Office (%)	52	28	20
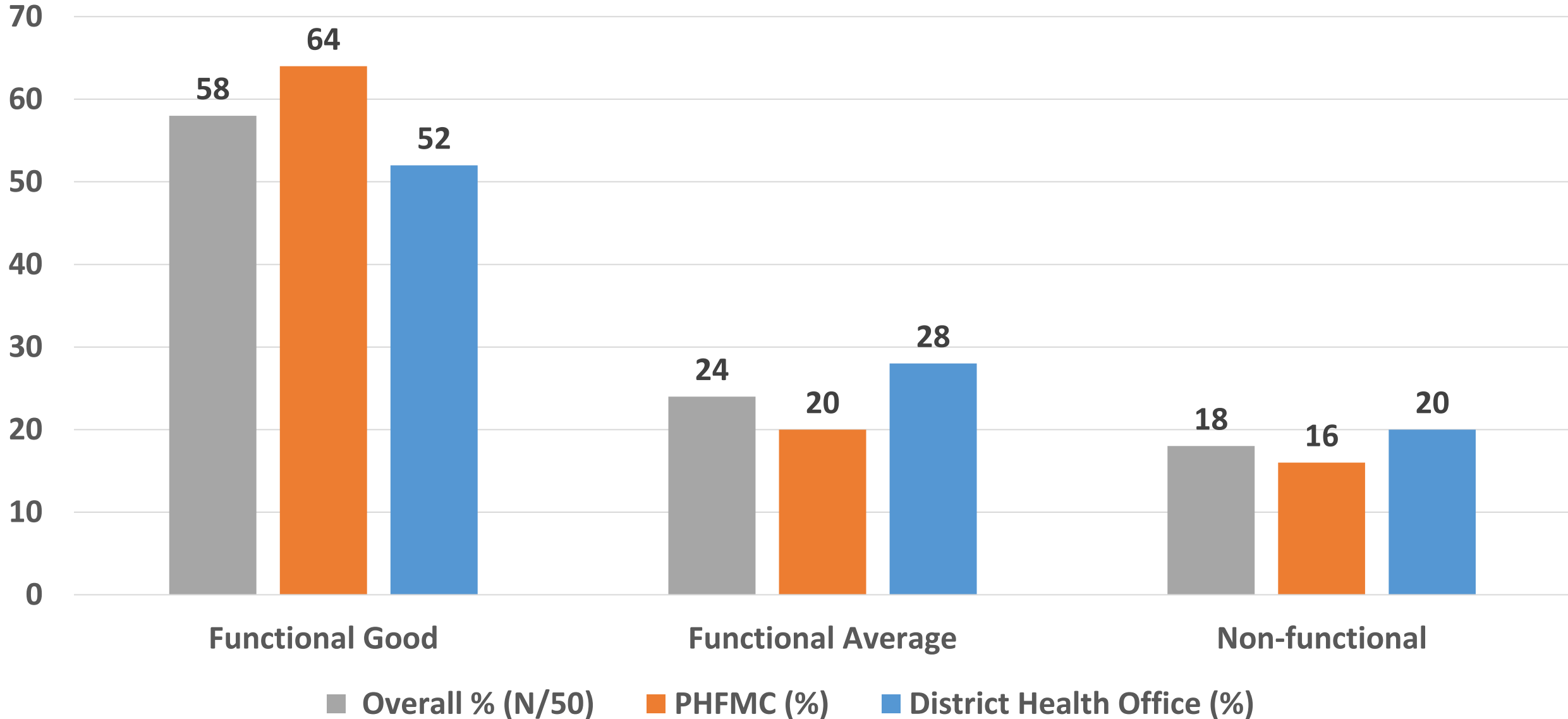
KDC 2: Morning staffing
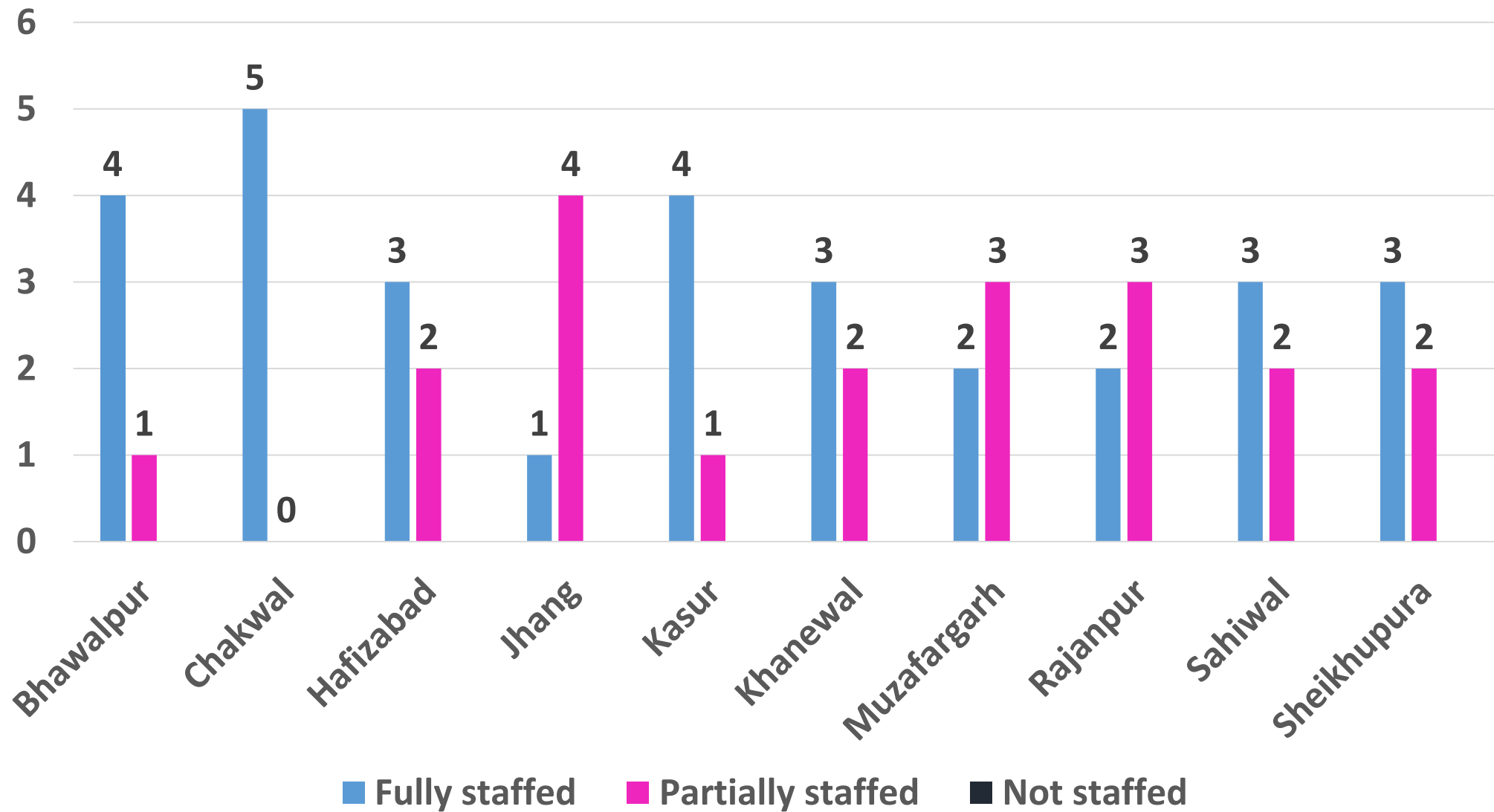
Fully staffed 64%

Partially staffed 36%

Never staffed 0%

■ Fully staffed   ■ Partially staffed   ■ Not staffed

KDC 2: Evening staffing

Fully staffed
24%

Partially staffed
74%

Never staffed
2%

■ Fully staffed   ■ Partially staffed   ■ Not staffed

KDC 2: Night staffing

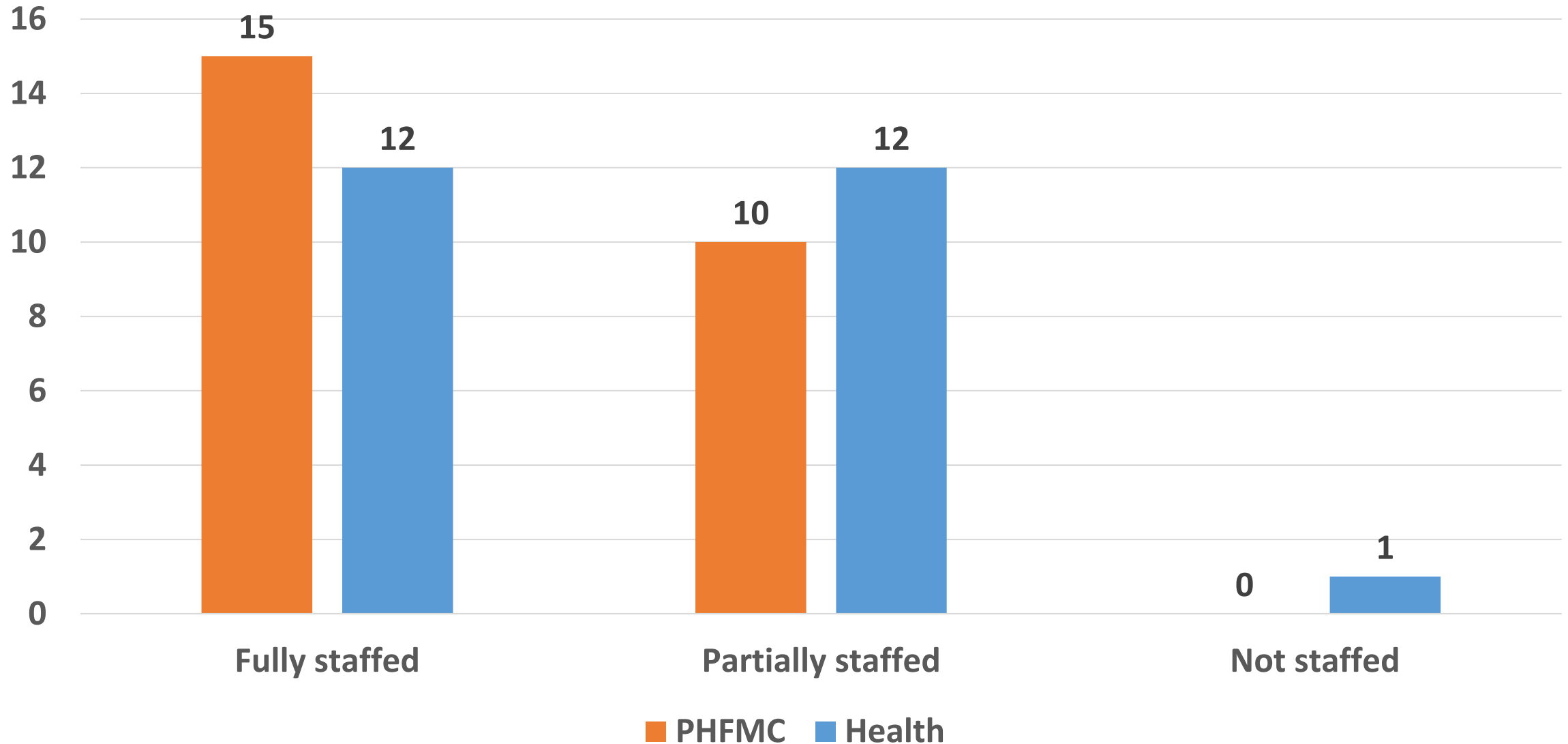| District	Fully staffed	Partially staffed	Not staffed
Bhawalpur	1	4	
Chakwal	3	2	
Hafizabad	4	1	
Jhang	3	2	
Kasur	1	4	
Khanewal	2	3	
Muzafargarh	3	2	
Rajanpur	4	1	
Sahiwal	3	2	
Sheikhupura	3	1	1
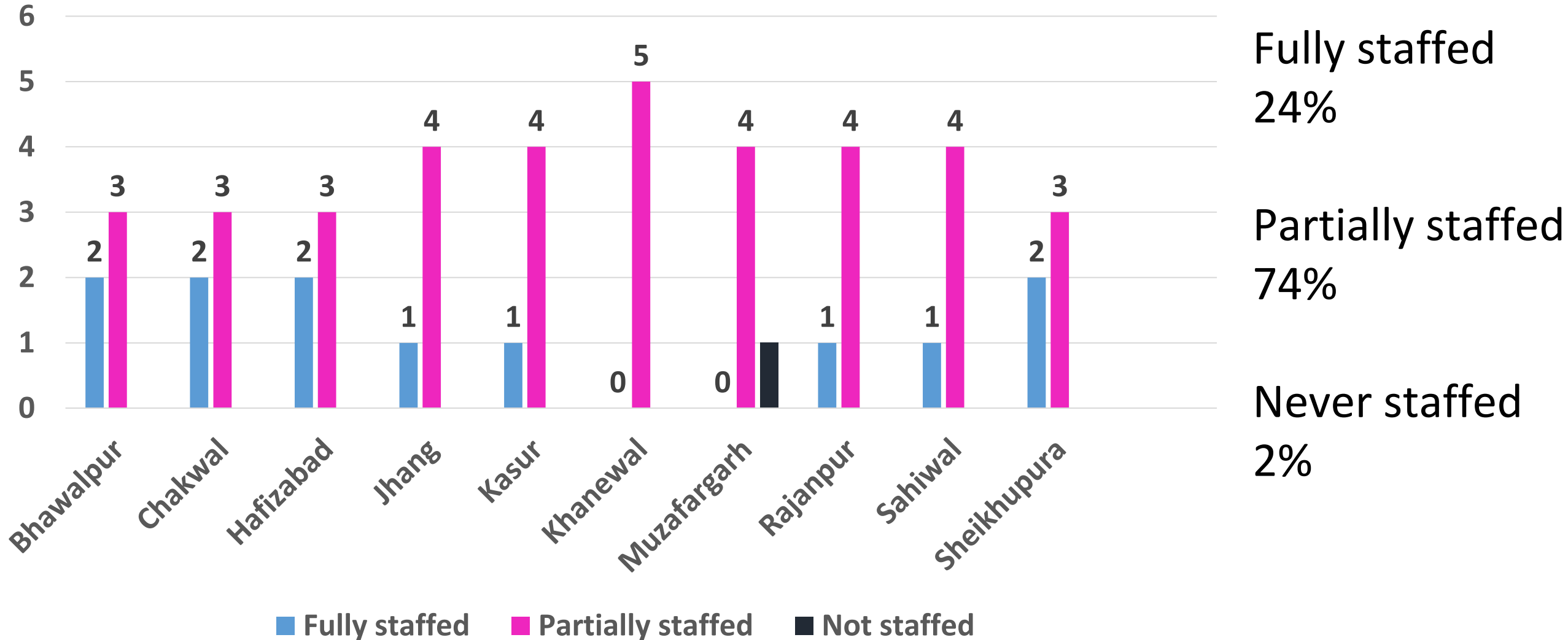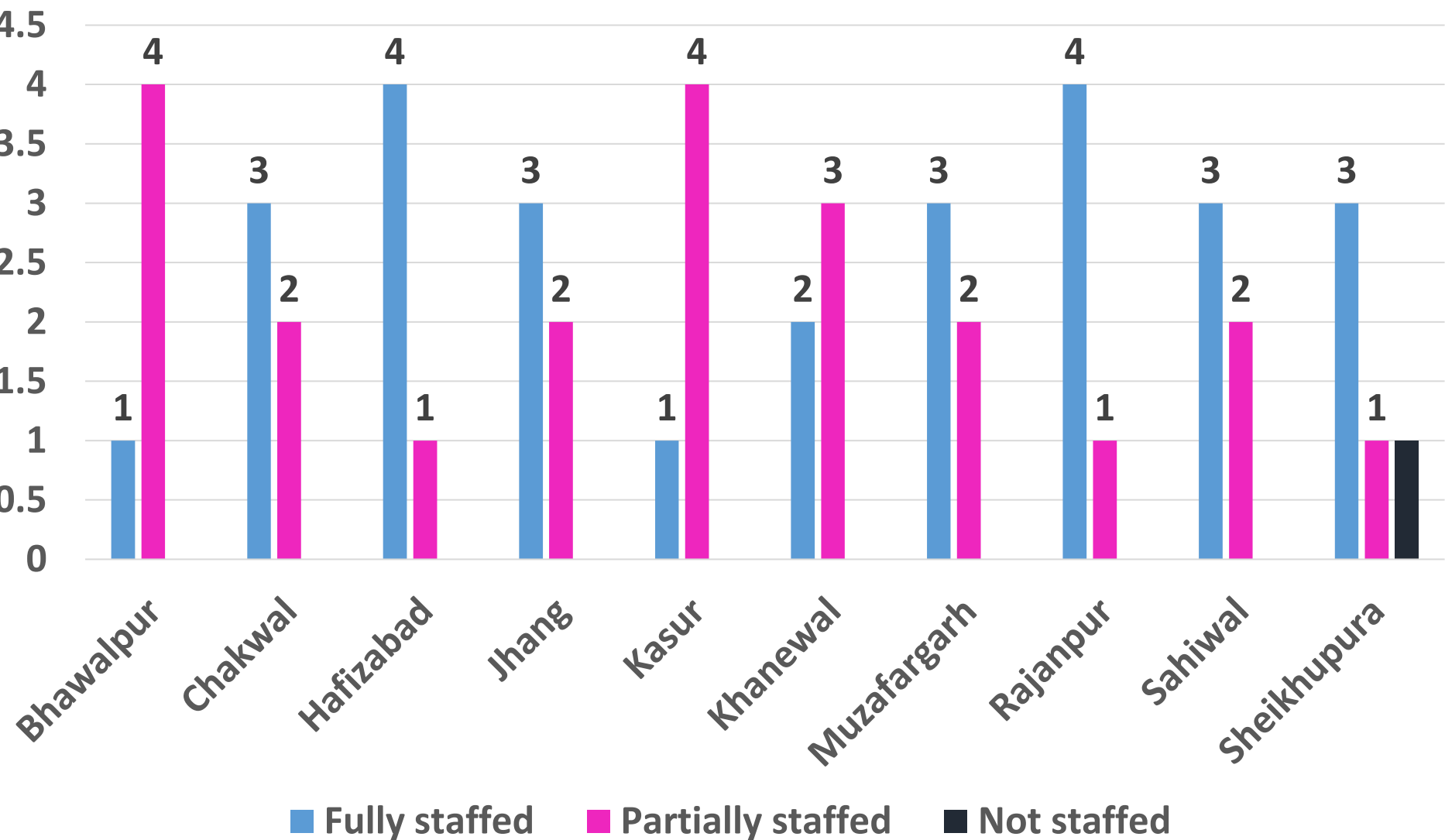
Fully staffed 54%
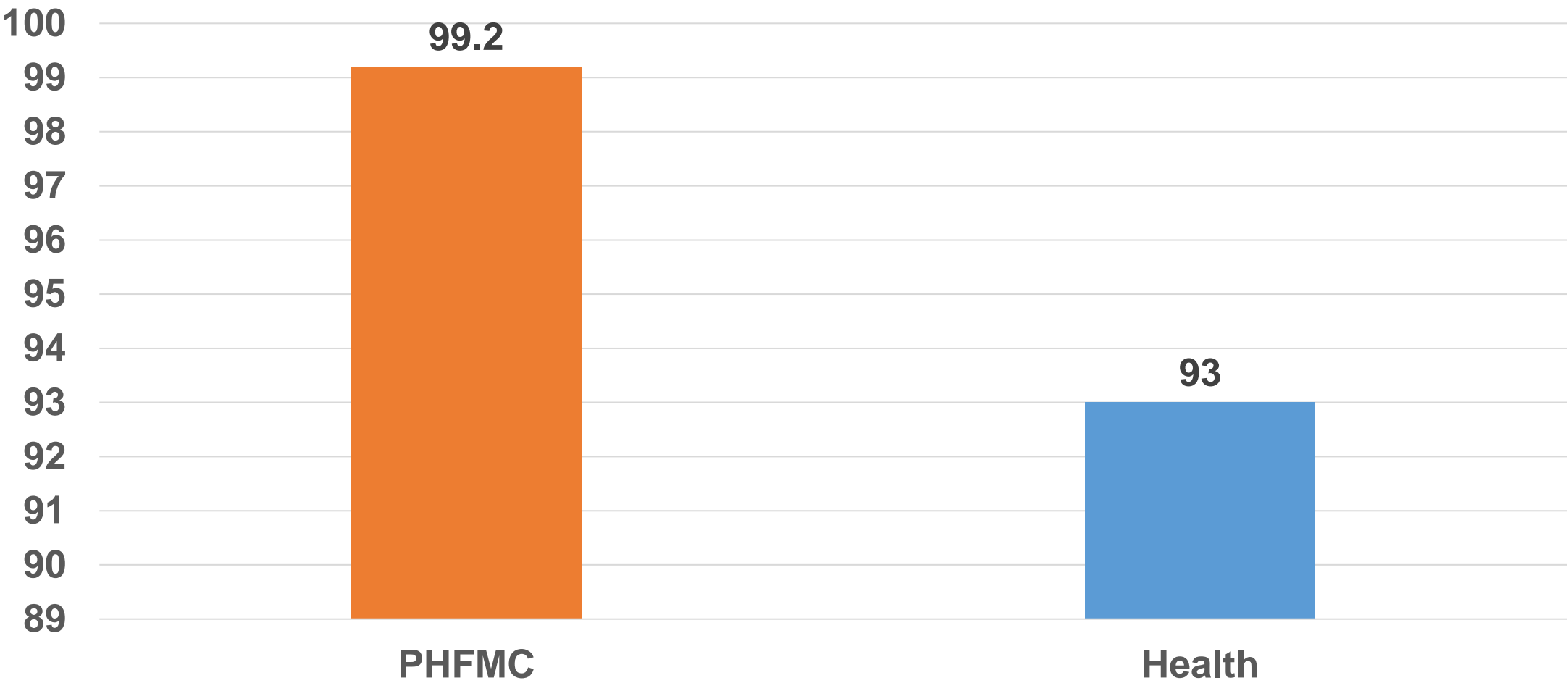
Partially staffed 44%

Never staffed 2%

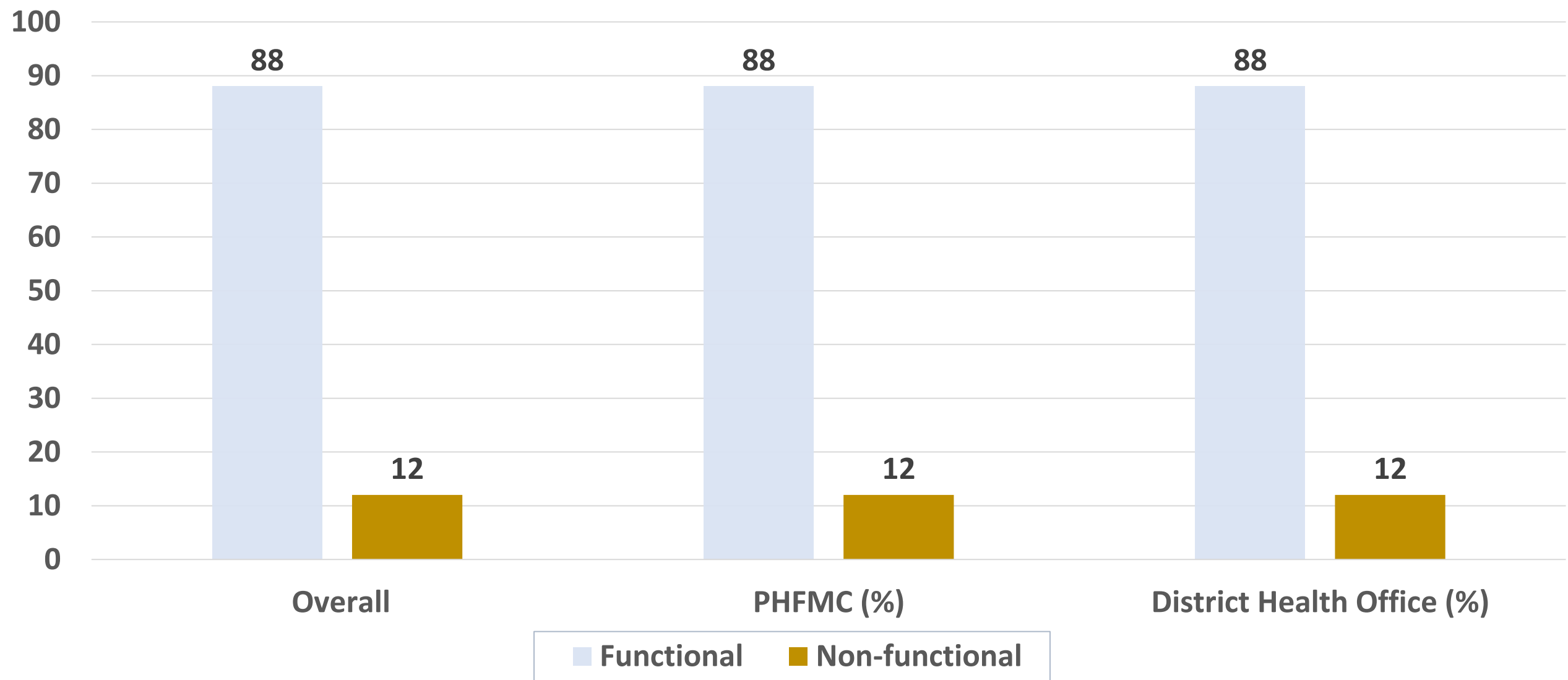■ Fully staffed ■ Partially staffed ■ Not staffed

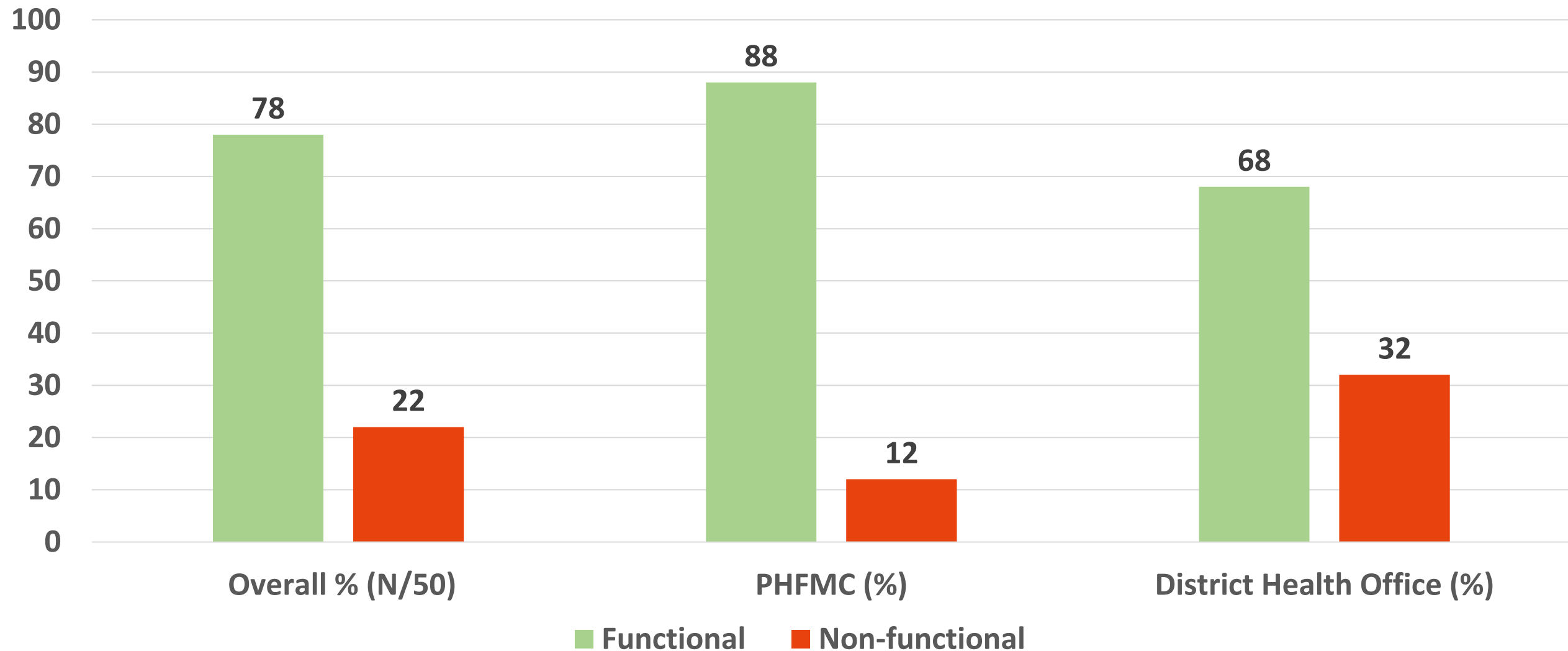Eg: Night staffing by Management Structure

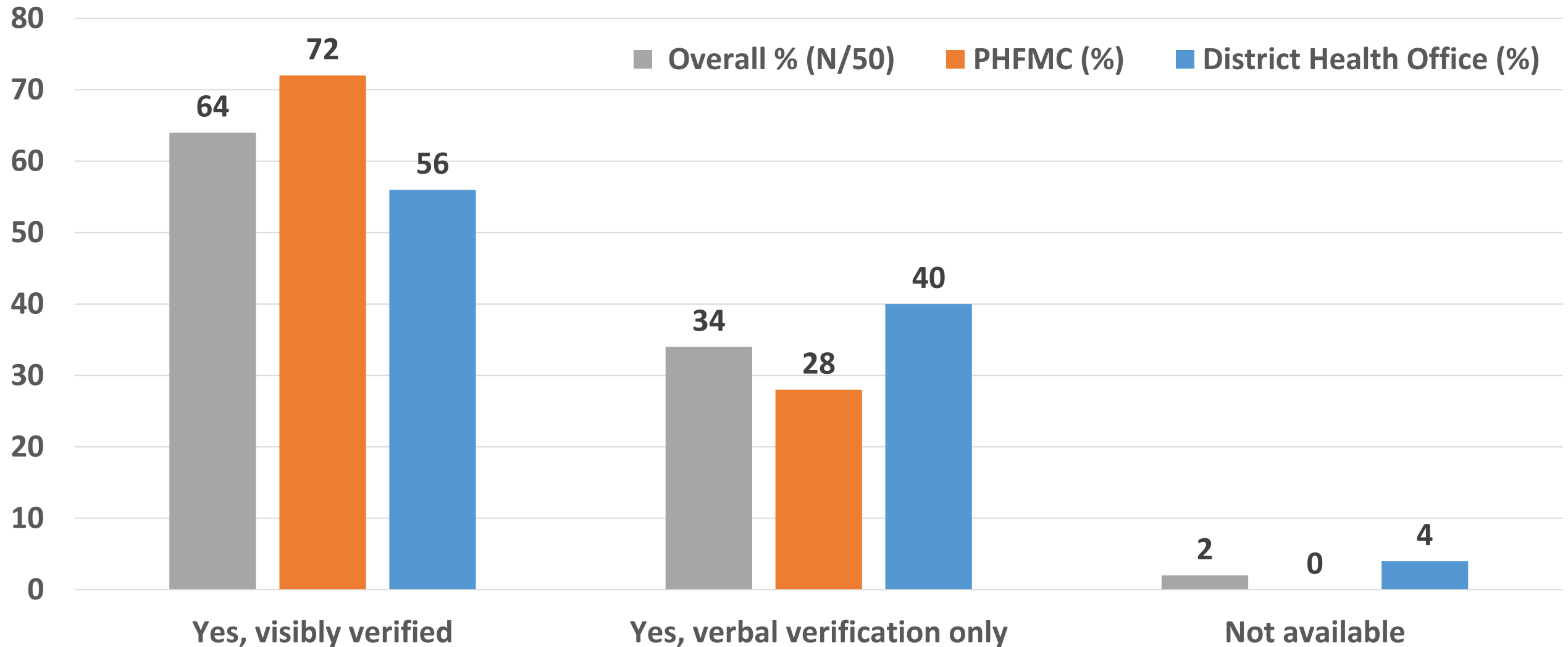# KDC 3: Average % emergency tray availability

KDC 7: Functional water supply

KDC 9: Functional electricity

Ambulance Access

Quality of care

Good building conditions, and presence of an SBA are necessary but not sufficient for they do not guarantee the quality or content of clinical care provided during childbirth.

The 2018 Lancet Global Health Commission states that poor quality care resulted in 82 deaths/100,000 people.

High quality care could save 8 million lives each year.

WHO QUALITY OF CARE STANDARDS (2018)

Quality of Care during childbirth can be measured using 5 dimensions:

- Technical
- Interpersonal
- Screening and monitoring
- Infection prevention/control
- Avoidance of harmful/non-indicated procedures

Type of provider attending births

Type of provider	Examined woman at point of entry	Examined woman in labor room	Attended childbirth
LHV	70.4	73.4	71.3
Midwife	21	20	15.6
Doctor	0	0.5	0.5
Ayah	8.1	4.7	1.8
Other	0.1	1.5*	10.8*

Technical domains

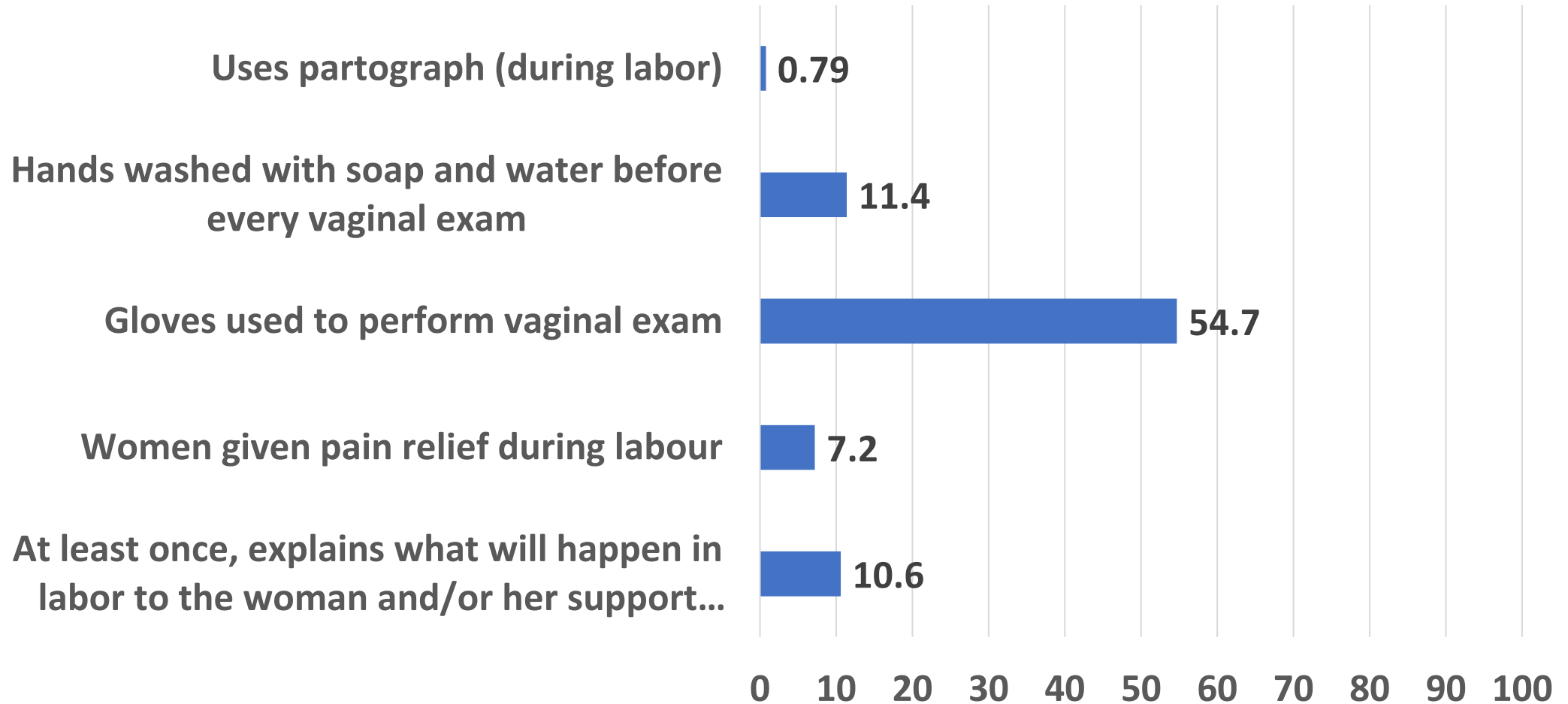| |
|---|
| **History taking** – to ensure timely recognition of danger signs, to decide if referral is best option before serious complications arise. |
| **Clinical examination** – to ensure timely recognition of danger signs; to decide if referral is best option before serious complications arise |
| **Provision of care** - provision of evidence-informed interventions shown to reduce the incidence of complications |

Asked important questions in history

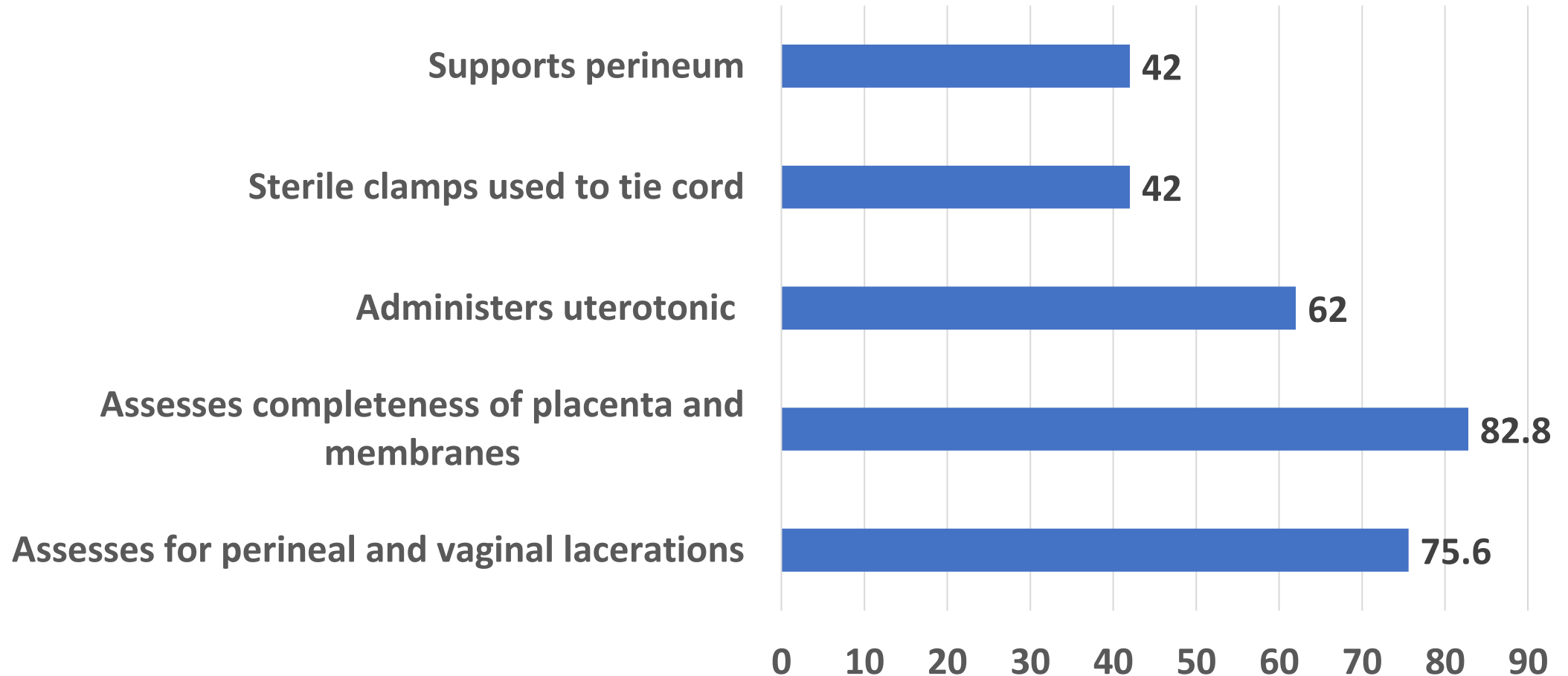| Critical questions: complications in previous pregnancies	% providers asked the question
Heavy bleeding during or after labor	9.7
High blood pressure	12.8
Previous C-section	29.5
Prolonged labour	6.1
Prior still birth	14.3

Asked important questions of current pregnancy

Critical questions of current pregnancy	% providers asked the question
Vaginal bleeding	14.7
Severe headache or blurred vision	2.68
Decrease/stop fetal movements	22.4
Severe abdominal pains	7

First stage of labor

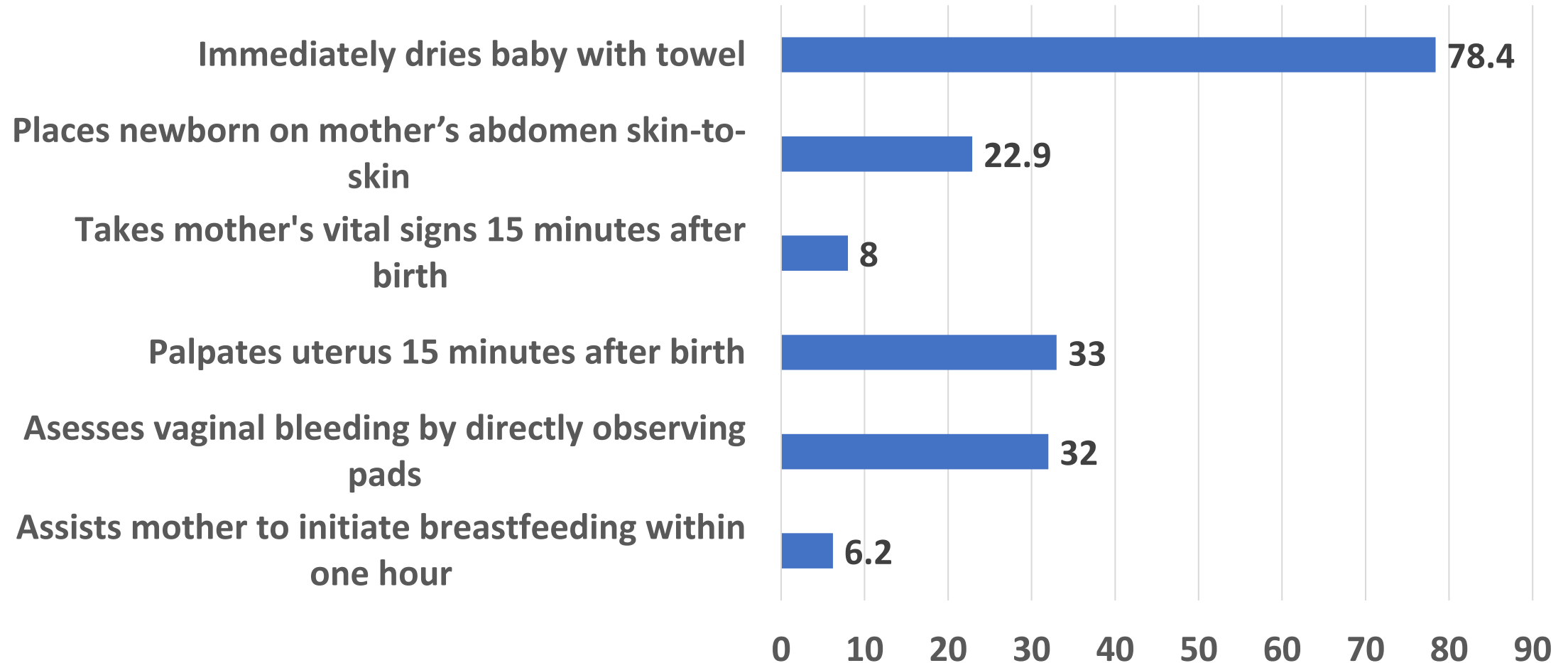| Category	Value
Uses partograph (during labor)	0.79
Hands washed with soap and water before every vaginal exam	11.4
Gloves used to perform vaginal exam	54.7
Women given pain relief during labour	7.2
At least once, explains what will happen in labor to the woman and/or her support...	10.6

Second and third stage of labor

Immediate newborn and postpartum care

Harmful practices

Examination	% providers doing harmful action
Episiotomy	7.7%
Fundal pressure is applied to hasten delivery of baby	42%
Liquid paraffin or anything else is used to lubricate the birth canal	21.3%
Perineum stretched to hasten birth	40%
IV oxytocin administered without clinical indication	64%

Qualitative Data Findings

1. Quality of LHV cadre is poor

    - Recruitment method – IRMNCH and donors

2. Rules and regulations of Government service

    - Constant transfer and postings

3. Corruption

Staffing criteria

Staffing criteria	Morning	Evening	Night
Fully staffed (3/3)	If at least one SBA is present	SBA + Ayah + Security Guard	SBA + Ayah + Security Guard
Partially staffed (1 or 2/3)	SBA present 1 or 2x out of 3 visits	SBA + Ayah/ Security Guard	SBA + Security Guard
Not staffed (0/3)	If no LHV is present	If no LHV is present	If no LHV is present

Options in the 'other category'

- Patient was fully dilated/ baby delivered instantly
- Baby delivered in ambulance or outside the BHU or on the way
- Baby delivered at home and later patient came to BHU
- Came only for placenta removal
- LAMA
- Patient referred (applies only to *)
- Patient not in labour, sent home