"Understanding and strengthening the 24/7 BHU initiative"
Research Policy Briefing 3 (May 2022) - PROVISIONAL findings

Project Goal

To support the Primary and Secondary Healthcare Department in improving access to skilled and respectful birth attendance and emergency obstetric care for all women, particularly disadvantaged women in remote, rural Punjab.

Project Objectives

1) Generate new knowledge on how to increase the amount and quality of maternity care being provided at 24/7 BHUs - what is working well? what is working less well and why?

2) Find out what can be done to improve functioning of 24/7 BHUs

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

What We Have Done So Far

- Understanding more about the aims of 24/7 BHUs (Phase 1) *[status: completed]*
    - Interviewed 45 people currently or recently working at BHU, district or provincial levels; reviewed policy and monitoring documents
- Understanding patterns of maternity care performance across BHUs and districts (Phase 2) *[status: COVID-19 pause for 5 months; data collection completed; analysis underway]*
    - 24 female clinical researchers recruited to collect detailed quality of obstetric care (quantitative) data in random sample of 50 BHUs in 10 districts (5 southern districts, 5 central and northern districts)
    - Data collection involved detailed descriptions of 50 BHUs (e.g. resources, staffing, physical infrastructure); 1,906 direct labour and delivery observations of women from point of entry to exit; 1,729 labour and delivery exit interviews with the same women done about 2 weeks after delivery; 1,678 antenatal care exit interviews with women and 338 staff interviews.
- An institutional ethnography to explore in-depth to understand how and why BHUs provide the care they do with the objective to identify of strengths, weaknesses and areas for improvement (Phase 3) *[status: underway]*
    - We are conducting in-depth observations and interviews with: (1) front-line staff and patients in 3 districts and their sampled BHU's (15 BHUs); (2) health care managers in District Health Authorities and district IRMNCH offices; and (3) Provincial policymakers in the Primary Secondary Healthcare Department.

Collaborative Working with the Primary and Secondary Healthcare Department

- A one-day project launch workshop was held in February 2020 in Lahore with Special Secretary Health (Mr. Ajmal Bhatti), DG Health office representative, Chief of the National Institute of Health (General Amir), HISDU leadership (Mr. Ahmer), IRMNCH leadership (Dr. Akhter Rashid) and parliamentarians (Dr. Nisar Cheema, MNA and co-Chair of the National Steering Committee on Health). The group created a Policy and Programming Stakeholder Group and approved data collection plans, and data collection tools.
- A one-day 24/7 BHU Program Theory Development workshop was held in PSPU offices, Lahore with 24/7 BHU Program designers and managers. The participants selected the sample for the study in the spirit of transparency and validity.

- Ongoing, regular one-to-one and small group meetings have been held regularly with government stakeholders of PPSG, as well as government partners (including ACASUS, World Bank Human Capital Investment Project) to share our ongoing learning and project findings. This has also involved providing feedback on the government's designs for new BHU buildings to esnure people-friendly design.

- To date 4 Policy Briefs have been shared with the Primary and Secondary Health Care Department and the Policy and Programming Stakeholder Group (PPSG).

Emerging Learning and Issues for Further Investigation

(1) Physical Infrastructure

- BHU-level data analysis demonstrates important improvements to BHU outlook, buildings and utilities. However, electricity was found non-functional in 11/50 (22%) BHUs and back-up power supply was non-functional in 18/50 (36%) BHUs across all 10 Districts. Water supply was non-functional in 8/50 (16%) BHUs across 4 Districts.

- Quality of patient toilet facilities varied across districts and was less than 'good' in 21/50 BHUs.

- It would be useful to cross-check these findings with MEA reports for the same time periods to see whether tests of functionality are routinely being carried out by MEAs.

- The on-going ethnographic fieldwork aims to identify why these types of infrastructure failings continue despite the the work that has been done to date.

(2) Staffing and Access to BHU Services 24/7

- New LHV staff have been successfully hired and deployed to BHUs to provide care to women during the night. However, in 18/50 BHUs (36%) availability of Skilled Birth Attendants was considered inadequate by senior staff, and in half of these cases sanctioned posts remained vacant.

- Observational data confirm that night-time births are happening in most BHUs. 50% of BHUs were fully staffed (SBA, helper and guard available) on all three night-time spot checks, and a further 20% were fully staffed on at least one night-time spot check. Only two BHUs were found never staffed at night checks. Patterns of staff presence or absence are complex and we are looking into this in more detail in our quantitative data analysis and current in-depth work.

- There are indications that a wide range of women are accessing BHU services. Across all Districts, women pregnant for the first time, as well as those in their second or higher pregnancy, sought antenatal care at BHUs. Among BHU ANC users in the North, around 45% reported no schooling, while this figure was around 65% for ANC users in the South; and among women attending for delivery these figures were even higher. We have collected data on employment, socioeconomic status and caste which will be analysed to give a clearer picture of whether the most marginalised women are accessing BHU services.

- Hiring of LHVs and other staff on three different contract types (regular government service, PHFMC, IRMNCH) produces supervisory challenges and affects relationships between staff within BHUs, with some negative implications for teamwork. For instance, in some BHUs IRMNCH evening and night staff do not have access to the same resources as day staff, with night staff being treated as 'outsiders'.

- Respondents to the staff survey frequently identified the need for improvements to staffing, staff conditions and staff performance. IRMNCH staff in particular have reported issues with receiving timely salary payments, access to annual leave and uncertainty of contract renewal.

- There is high turnover of MOs/WMOs. These staff often do not have an active role in overseeing ANC, labour and delivery services and team-working with longer-standing BHU staff members is not always strong.

- We are currently exploring the role of district staff and district-level variability in managing and supervising BHUs, addressing issues (e.g. with supplies, medicines) and supporting learning and staff development - this includes exploration of similarities and differences in government-run and PHFMC-run BHUs.

- Field observations confirm that when poor practice is identified the staff members responsible are transferred to another BHU rather than the incidents being investigated to draw out learning, instigate changes and, where appropriate, terminate employment contracts. Recent observations have revealed that this occurs even where very serious malpractice endangering the lives of women and babies has occurred.

(3) Equipment, Drugs and Supplies

- Efforts to improve BHU supplies have made some positive differences to BHUs. The local budgets available to BHUs (e.g. Health Councils) allow staff some scope to address small day-to-day matters including for cleaning, provision of non-medical supplies, and to improve BHU outlook. In contrast to government-run BHUs, PHFMC BHUs have access to separate budgets for cleaning and the purchase of medicines - we are currently exploring these differences and how it affects the way BHUs in government and PHFMC districts can provide care.

- Processes for allocating local budgets (e.g. Health Council budgets, PHFMC local purchase budgets) lack clarity in many BHUs. Staff members who are responsible for maternity care are not members of the Health Council, raising questions about whether this element of BHU care is adequately considered by Health Councils. In some BHUs, we observed discrepancies between what supplies are written down as being purchased in Health Council records and what supplies are present at the BHU.

- We have found some variability in the functionality of essential labour and delivery equipment across BHUs: the delivery light was non-functional in 5/50 BHUs; the delivery table was only non-functional in 1/50 BHUs; and non-functional BP equipment was found in 8/50 labour rooms and 7/50 outpatient areas.

- Processes for monitoring, forecasting and ordering medicines is not flexible or responsive to BHU activity levels. BHU staff with responsibility for ensuring availability of medicines do not have the authority to influence ordering and delivery systems to the BHU. Purchasing decisions are overseen at district -level and are based on historical volumes of medicines used rather than recent levels of need/use. Women and their families are often asked to purchase medicines themselves.

- Strict MEA monitoring of drug and supplies availability in BHUs has been found to discourage staff from actually using supplies on hand (i.e. drugs and supplies are kept in stock to show availability to MEA monitors). Patients are asked to source and pay for their own supplies during periods when staff are worried about not having supplies in place during a monitoring visit.

- Respondents to the staff survey frequently identified the need for improvements to facilities and equipment.

(4) Quality and Safety of Care

- Early insights from our data suggest LHVs and other birth attendants (midwives and ayahs) are often not adhering to best clinical practices (e.g. of management of normal vaginal birth, the identification and management of assisted birth, management of postpartum haemorrhage, emotional support, interpersonal communication, neonatal resuscitation, infection control). Obstacles to quality care practices appear to be due to poor knowledge, local cultures of care and a complete absence of performance management systems. Analysis of our 1,906 formal labour and delivery observations will begin in more detail shortly to identify priority areas to improve.

(5) Maternal and Neonatal Deaths

- in one six-week period of data collection, our field team has unfortunately identified 3 maternal and 2 neonatal deaths. There is currently no functioning system for investigating and following up maternal and neonatal deaths at BHU or District: no maternal deaths audits or verbal autopsies have been carried out. This means that no action is being taken to identify or address poor quality care or staff practices (e.g. cases of negligence).

- The recording and reporting of maternal and neonatal deaths appears to be inconsistent and haphazard (including in cases where a woman may die during referral). In some cases, BHU staff appear concerned to ensure that deaths are <u>not</u> recorded at BHU-level.

(6) Women's Experiences of Care

- There are some positive emerging findings in relation to some aspects of women's experiences of care, but these are culturally-based and go against evidence-based good quality practices. For eg. exit survey data shows high proportions of women report satisfaction with length of stay at the BHU. All these women were discharged within 30mins of birth, which is highly dangerous practice and goes against the requirement to observe the mother for 6 hours after birth. On the other hand, high proportions of women report being attended to promptly on arrival at the BHU for delivery (less than 5% having to wait more than 15 minutes). Some behaviours to maintain privacy during delivery were reported by the large majority of women, and less than 8% of women reported dissatisfaction with the level of privacy maintained.

- Preliminary analysis suggests that the percentage of women reporting some element of mistreatment during labour and delivery ranged from 6% to 38% across Districts. Women's reports of their care experiences are complex and we are currently investigating these in more detail.

- Fewer than half of women attending for delivery were aware of their right to complain if care was inadequate, and even fewer knew how to lodge such a complaint.

- Women and families are having to make informal out-of-pocket payments in order to access BHU care (e.g. for medicine and to use 1034 ambulance. It is also normal practice for families to provide a khushi/mithai payment to the BHU staff member who delivered the baby. While this is often presented as the patients wish, in reality the providers exert significant pressure to extract the 'khushi'.

(7) Monitoring and Information Systems

- Digital information systems have been introduced to capture key elements of service delivery. Clear knock-down criteria and MEA monitoring practices related to these have contributed to equipment and supplies being in place in BHUs. As reported above however, although equipment and supplies may be in place in BHUs, they are not always *used* by staff due to concerns about performance monitoring (e.g. labour room trays and medicines are maintained for monitoring purposes, rather than to meet patient needs).

- There are major concerns about the reliability of electronic data captured, including birth check in and out. Earlier in our fieldwork, when the SMS system of registration was supposed to be working, we noted the staff only 'checked women in' after a safe delivery had occurred. This practice was a way for staff members to protect themselves in the event there are adverse outcomes. However, SMS birth check in and out system no longer exists. Lack of guidance from the central IT services and unreliable access to the internet due to the non-availability of service as well as internet packages led to the collapse of the digital SMS system.

- Male staff (e.g. MEAs, district monitors) are unable to monitor and check services, including the availability and use of supplies in labour and delivery areas of BHUs. There is no monitoring focus on quality of care.

Next Steps

- We are currently looking in-depth at how BHUs provide care, including the role of Districts in shaping practices and performance, with a view to identifying strengths, weaknesses and areas for improvement. Our aim is to identify 'change ideas' that can be considered for implementation at different levels of the maternal health care system during the final phase of the project.

- Ongoing collaborative engagement with our stakeholders are essential to discuss findings, direct future analyses and identify the priority' change ideas' for implementation and testing. The next Policy and Programming Stakeholder Group meeting will be scheduled shortly.

Project details: The project idea was originally developed by Professor Zubia Mumtaz (University of Alberta, Canada), Afshan Bhatti (Real Medicine Foundation, Pakistan), Dr Nadeem Zaka (then Director Technical PSPU), and Professor Sarah Salway (University of Sheffield, UK). Other team members: Professor Jeremy Dawson, Dr Amy Barnes, James Gilbert, Mark Tomlinson (University of Sheffield) and Gian Jhangri (University of Alberta).

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