"Understanding and strengthening the 24/7 BHU initiative"

Research Policy Briefing 2 - December 2020

Project Goal

To support the Primary 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 we can do better to improve functioning at 24/7 BHUs - for example, how we can provide greater security for Lady Health Visitors working a nightshift in a remote BHU.

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

- Phase 1 (understanding more about the aims of 24/7 BHUs) [*completed*]: interviewed 45 people currently or recently working at BHU, district and provincial levels and reviewed policy and monitoring documents
- Phase 2 (patterns of maternity care performance across BHUs and districts) [*ongoing until April 2021*]:
    - 24 female clinical researchers recruited to collect detailed quantitative data in our random sample of 50 BHUs across 10 districts (5 southern districts, 5 central and northern districts)
    - Data collection completed in southern Punjab: 26 BHUs assessed; 1241 observations of birth, 1143 exit interviews with women on their experiences of care during labour, 948 exit interviews with women following antenatal care, 168 surveys of staff skills, knowledge and experience.
    - Next Steps: Data collection to start in central and northern Punjab districts and should be completed by May 2021. Preliminary analysis of southern Punjab data to start in January 2021.

Emerging findings

(1) Impact of COVID-19 in BHUs

Remote rural BHUs have not had to deal with many COVID-19 cases. In some areas, BHU staff have reported reductions in women attending for antenatal care and labour during May to June, 2020. There appear to have been some negative impacts on staff attendance and on routine data collection and monitoring in some BHUs because of the interruption in MEA visits and instruction to stop biometric attendance recording as a COVID SOP.

(2) Physical infrastructure

Promising indications: As previously reported, important improvements to buildings and utilities have been achieved, with BHU facilities generally well-maintained.

Issues for further investigation:

- Labour room cleanliness and use of sterile equipment inadequate in some BHUs. Routine monitoring practices do not effectively identify these gaps as male MEAs can be excluded from this zone and sterile equipment can be presented as available, but is not actually used.

(3) Staffing

Promising indications: New staff have been hired and deployed successfully to BHUs. BHUs are mostly well-staffed (few unfilled vacancies) across all cadres.

Issues for further investigation:

- The 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 between day and IRMNCH evening and night staff in particular (e.g. in some BHUs IRMNCH evening and night staff do not have access to the same resources as day staff and night staff are treated as 'outsiders')
- Staff competency needs more attention. LHVs and WO/WMOs care often not adhering to best clinical practices of management of normal, vaginal birth, identification and management of assisted birth, management of postpartum haemmorhage, emotional support, interpersonal communication, neonatal resuscitation, infection control). Obstacles to good practice are not solely due to poor knowledge but also linked to cultures of care and performance management systems.
- There is high turnover of MOs/WMOs. These staff often do not have an active role in overseeing ANC, labour and delivery services and there can be issues with team-working alongside longer-standing BHU staff members.
- IRMNCH staff have reported issues with receiving timely salary payments, access to annual leave and uncertainty of contract renewal.

(4) Equipment, drugs and supplies

Promising indications: As previously reported, efforts to improve BHU supplies have made some positive difference. Local Health Councils with local budgets allow staff some scope to address small day-to-day matters essential for the smooth functioning of facilities, including for cleaning, provision of non-medical supplies, and to improve the BHU outlook.

Issues for further investigation:

- Processes for allocating Health Council Budgets are unclear 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.
- Processes for monitoring, forecasting and ordering medicines appear to be insufficiently flexible and responsive to BHU activity levels. Purchasing decisions are based on historical volumes of medicines used and do not respond to more recent experience of patient need. Women/families were asked to purchase 'out of pocket' themselves).
- Strict MEA monitoring of drug and supplies availability in BHUs discourages staff from using supplies on hand (as drugs and supplies are kept in stock to show availability to MEA monitors). Patients are subsequently being asked to source and pay for their own supplies. BHU staff with responsibility for ensuring availability of medicines and supplies do not have the authority to influence ordering and delivery to the BHU.

(5) Access to BHU services around-the-clock

Promising indications: Monitoring data continues to suggest a rise in numbers of childbirth deliveries in BHUs. Our observational data is confirming that night-time births are happening in BHUs.

Issues for further investigation:

- Our forthcoming data analysis will explore if there are any differences in patterns of access to BHU services around-the-clock in different BHUs and districts.

(6) Quality and safety of care

Promising indications: Field data is confirming our initial report of progress in terms of infrastructure, medicine and supplies and transport (1034 ambulance) as key building blocks for high quality and safe maternal health care.

Issues for further investigation:

- Birth observations are suggesting poor adherence to evidence-based clinical practices (e.g. poor monitoring of vital signs during labour and birth, too many vaginal examinations, unnecessary and harmful fundal pressure, poor infection control in labour room).
- Birth observations also highlight poor adherence to guidelines on respectful care (e.g. mistreatment during labour; extreme absence of privacy).

- Our quantitative data will provide more detail about priority areas to understand and improve.
- Women and families are having to make informal out-of-pocket payments in order to access BHU care (e.g. payment for ultrasound, to use 1034 ambulance, to access medicines, to pay BHU staff to deliver in a facility)

(7) Maternal and neonatal deaths

Issues for further investigation:

- In the last 2 months, our field team have 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 issues with quality of care or with staff practices (e.g. cases of negligence).
- It is unclear where and how maternal and neonatal deaths are being recorded or reported (including in cases where a woman may die during referral). BHU staff appear concerned to ensure that deaths are not recorded at BHU-level.

(8) Monitoring and Information systems

Promising indications: 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.

Issues for further investigation:

- Although equipment/supplies are in place they are not always available for use. Staff concerns about performance monitoring mean that supplies (e.g. labour room trays, medicines) are maintained for monitoring purposes rather than to meet patient needs.
- There are concerns about the reliability of electronic data captured, including birth check in/out. In some BHUs, staff do not follow the protocols but rather only check women in after a safe delivery has occurred. This practice seems to be a way for staff members to protect themselves in the event there are adverse outcomes.
- Unreliable access to the internet due to the non-availability of service as well as internet packages is another hurdle in capturing reliable electronic data.
- Male staff (e.g. MEAs, district monitors) are unable to monitor/check services, including the availability and use of supplies in labour and delivery areas of BHUs, and there is no monitoring focus on quality of care.

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 (University of Sheffield) and Gian Jhangri (University of Alberta).

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