Task shifting approach led by general practitioners to improve maternal and reproductive health care: Experience of rural Nepal

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ABSTRACT

Task shifting approaches have been the key strategies around the world to reduce maternal, neonatal, and reproductive morbidity as well as mortality. In resource-limited settings, access to those care is severely constrained by the unavailability of trained human resources. General practitioners (GPs) are the cornerstone of peripheral hospitals in Nepal to deliver accessible required basic health care including life-saving surgeries. The analysis identifies task shifting activities like anesthesia, antenatal ultrasonography, safe abortion services, collaborative mental health care, and handling of complicated vaginal delivery led by GPs to midwives, doctors, and paramedics at district-level hospitals to improve maternal and reproductive care. Findings indicated improved access to maternal and reproductive health services without compromising outcomes. However, several barriers were found to better support their practice.

Keywords: general practitioners, maternal health, morbidity and mortality, reproductive health, task shifting

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INTRODUCTION

Task shifting defines a deliberate process, whereby tasks are to be shifted to others with delicate strategies accompanied by training, certification, and support. Task shifting has been identified as an important strategy to optimize health worker performance and provide the right mix of skills required for the service.[1]

The main idea of task shifting is to bring services closer to the population and increase the health system efficiencies. This idea builds on the assumption that less specialized health workers can take some of the responsibilities of more specialized workers in a cost-effective manner without sacrificing the quality of care.[2] Access to overall health care in rural Nepal is poor due to greater concentrations of specialists located in urban areas and within the private healthcare sectors.[3]

General practitioners are recognized as a cornerstone in Nepali rural healthcare to meet the needs of rural communities where access to specialists is limited.[4]

Key services in maternal and reproductive health care led by GPs include Comprehensive Abortion Care (CAC), Medical abortion, handling of complicated vaginal deliveries including breech delivery, vacuum delivery, neonatal resuscitations, third-trimester ultrasonography, caesarian section, anesthesia for cesarean section, Non-scalpel vasectomy, post-abortion IUCD insertion, cervical cancer screening and major clinical decision making, collaborative mental health care for post-partum mental issues and Continuing Medical Education (CME) focused on maternal and reproductive health services.

This study describes major tasks or skills shifted to MBBS doctors, Nurses, and paramedics related to maternal and reproductive health care led by GPs at Charikot Hospital.

Key components of selected task-shifting examples in maternal and reproductive health care at Charikot Hospital

Table 1 shows the key components of selected task-shifting examples led by GPs at Charikot Hospital.

Table 1: Selected task-shifting examples

Major tasks or skills	Lead by	Task shifted to
Comprehensive Abortion Care (CAC)	GPs	MBBS, Nurses
Complicated vaginal delivery handling- Breech delivery, Vaginal Birth after C-Section, Vacuum delivery	GPs	MBBS doctors, Nurses
Third-trimester Ultrasonography (USG)	GPs	MBBS, Nurses
Neonatal Resuscitation	GPs	MBBS, Nurses, Paramedics
Medical Abortion	GPs	MBBS, Nurses
Caesarian Section	GPs	MBBS doctors
Collaborative mental health care for post-partum psychiatric issues	GPs	MBBS, Psychosocial counselors
Continuing Medical Education (CME) focused on maternal and reproductive services	GPs	MBBS, Nurses, paramedics
Cervical cancer screening including VIA and clinical decision making	GPs	Nurses
Non-Scalpel Vasectomy (NSV)	GPs	MBBS doctors
Post-abortion IUCD insertion	GPs	Nurses
Anesthesia for C-Section	GPs	MBBS doctors

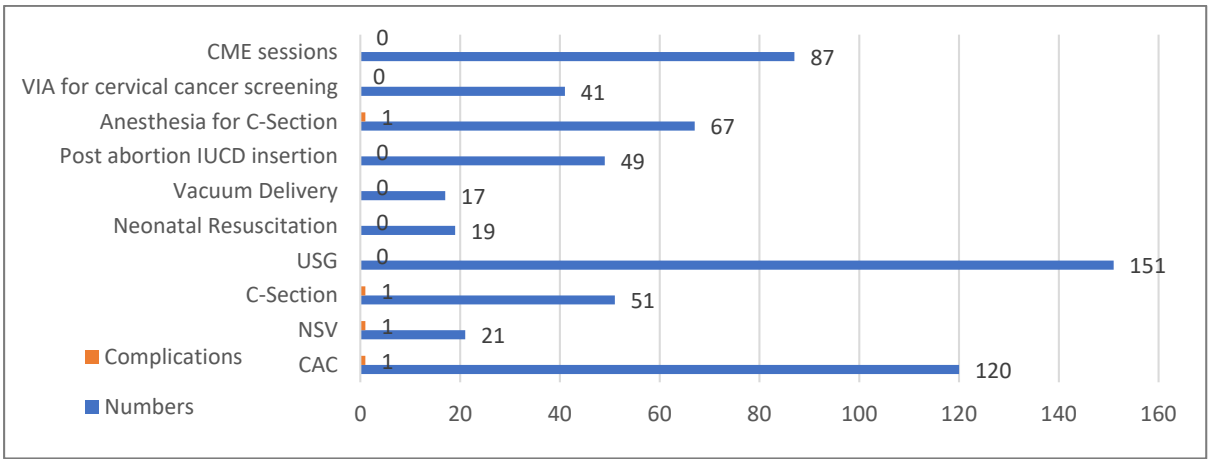

Figure 1. Procedures performed by clinical staff with task shifting approach (2020 Dec-2021 Nov)

Process, roles, and service delivery:

General practitioners working at Charikot Hospital were trained with government accredited programs like Comprehensive Abortion Care (CAC), non-scalpel vasectomy (NSV), mental health Gap Action Program (mhGAP), and WHO's collaborative care model, cervical cancer screening, and basic neonatal care. They had separate international level training on Basic Obstetric Ultrasound. They scheduled CME sessions on each service and procedures included in Table 1. Then, a trained senior GP of Charikot Hospital explained all the steps of the procedures during real case handling. With a couple of cases observations, clinical staff listed in table 1 were given chances to perform those procedures under the assistance and supervision of GPs. Regular learning sessions via CMEs were conducted to the clinical staff for those procedures ensuring consistent guidelines for practice. The overall number of procedures/skills performed by clinical staff is given in Fig-graph 1. Searching for the literature review in similar studies showed that 657 deliveries were conducted by community health extension workers (CHEWs) who were trained by an obstetrician in Nigeria[5] and another study shows that GPs led caesarian sections were found to be much cost-effective as compared to Obstetrician lead Caesarian section.[6] However, there are no studies done comparing outcomes and procedures led by GPs.

Management and quality assurance:

The task shifting approach requires a lot of motivation and some rewards for taking on new tasks to reduce attrition.[5] In our experience, most of the staff were motivated to learn things, and incentives provided by the Nepal government on the specific program were divided among providers at the end of the fiscal year. There was no significant compromise on quality as can be seen in Fig 1-Graph 1 with minimal complication in a few procedures like 1 case of patchy block after spinal anesthesia among 67 cases, 1 case of surgical site infection among 51 C-sections performed, 1 case of scrotal hematoma among 21 vasectomies and 1 case of incomplete abortion among 120 Comprehensive Abortion Care (CAC) with the supervision of GPs. Considering only the surgical procedures (C-section, CAC, and NSV), our study shows 1.5% of major complications but the complication rate mentioned after the general surgeries is reported to be 7-15% in some studies.[7]

Barriers/Challenges:

The example of Charikot Hospital has shown some promising results with increased access to maternal and reproductive health services but it has some significant challenges. Expanding access to lifesaving maternal and reproductive health care ensures the needs of the community, but sustainable implementation requires complex interplay between different components: Trained GP's availability at each district level hospital, staff motivation, political interest, education, and regular training, supervision, and accreditation. In our case, there was frequent staff turnover, staff was concerned for skill accreditation for government adaptation to internal training, unavailability of space and infrastructure as per minimum service standard (MSS) to manage maternal and reproductive health cases, lack of adequate trained human resources allocation to district level hospital, lack of incentives for each procedure, and fear among clinical providers for complications and legal issues. Since GPs are covered by other managerial work of district-level hospitals, they have difficulties organizing structured regular training and monitoring/ supervision among care providers. This is the first task-shifting study done in Nepal led by GPs in resource-limited settings. It needs broader level supervision and structured training programs to utilize the human resources at the best with a cost-effective strategy.

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