Short Communication

Task Shifting: an approach to bridge inadequate skill mix in low and middle income countries

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Introduction

In most developing countries health sector has seen many reforms over the year (1). However, archiving targets towards the Millennium Development Goals was a big challenge mostly due to inadequate human resource for health in low and middle income countries (2). Now that all countries are working towards a new goal to achieve universal health target, one approach that has being use in the past by Low and Middle Income Countries (LMICs) is task shifting to ensure even the most vulnerable communities get access to efficient and equitable service delivery (3).

Task shifting is allocating tasks to health workers by providing customized training, primarily, to provide health care services in minimal cost, without compromising the quality (4). Task shifting can be a strong strategy to downsize the issue of inadequate health workforce and studies intimate that almost 25%-70% work of a general physician can be deputed to health workers (5)

There is massive shortage of health workforce in 57 LMICs with high burden of HIV, maternal and child death etc. for instance, sub-Saharan African countries have only 3% of health workforce to fight with 24% of global diseases (6, p5)where probability of a women dying giving birth is approximately 1 in 7 (7). Around 340000 maternal deaths and 3.1 million neonatal death occurs annually, across the globe and vast majority takes places in LMICs. The main reasons are poor accessibility, compromised quality services and unskilled providers (7).

WHO report suggests that 83 countries has less than 22.8 skilled health workers per 10000 population (8)like in Nepal its 16 (midwives, nurses and doctors)/10,000 population (9). In Bangladesh,skill mix ratio as 1:0.4: 0.24 whereasWHO recommends skill mix ratio to be 1:3:5 for doctors, nurses and paramedics respectively (10). Skill mix is integrating varieties of posts and grades in an organization that can multitask skillfully to deliver services to the population (4). Countries are still struggling to achieve adequate skill mix with skilled health personnel who need to provide quality health services at low cost; task shifting can help mitigate the problem ofhuge human workforce crisis(11, p12) focusing on huge burden of maternal and neonatal health(7,12).

Objective

This study will explore the advantage of adopting task shifting to bridge inadequate skill mix in LMICs in maternal and neonatal health programs.

Methodology

Narrative review done by searching the literatures in Google scholar, Cochrane library, Pub Med, HINARI, using keywords “skill mix”, “task shifting”, “task delegation”, “health workforce”,“Maternal and child health programs”, “LMICs”, “doctors”, “nurses”, “technicians”, “lay health workers”,“skilled birth attendants”,“community health worker”, “maternal mortality”, “neonatal mortality”. From such sources many articles were reviewed and after reviewing 27 articles 19 were used for writing this paper.

Findings

A qualitative review done by Cochrane identifies that tailored training to lay health workers (LHWs) is beneficial in the maternal and child health programs resulting in increased rates of immunization and breast feeding (13). It also described the challenges of LHWs which directly or indirectly affects the interventions, such as differences in quality of services (14), high workload (15) and fear in counseling the community people to use the services who are afraid of paying high cost to trained birth attendant (16).

In Kenya in 2000, there was a huge shortage of doctors in the rural areas as 84% of them served urban population which was only 16% of the total country population. To address this issue task was delegated to midlevel workers to prevent and treat obstetric services after providing customized training “life saving skills”. Main task were to perform manual vacuum aspiration and treat post partum hemorrhage. The neonatal death came down and more skill developing techniques are initiated now (17).

In Nepal, from 2005-2009, an intervention was initiated to prevent postpartum hemorrhage, leading cause of maternal mortality, by giving misoprostol to the pregnant mother, where the task was shifted from skilled birth attendants to female community health volunteers (FCHVs). This meant reaching pregnant mothers in remote areas at right time.The end line coverage was 72% as compared to 10% initially and maternal mortality was found to be low in the pilot area. In 2010, 2011 and 2014 the government of Nepal scaled up the intervention in 4 mountain region, 21 districts and 31 districts, respectively with high involvement of FCHVs (18).

In India Comprehensive Emergency Obstetric and Newborn Care (CEmONC) services which were previously performed by highly qualified obstetricians and gynecologistsdue to lack of professionals these services were delegated to medical students who were given rigorous training. The study was scaled up to 22 states of India with 34 centers for training in which medical doctors provide round the clock services (18).

In 2007,a programwas started in Sylet, Bangladesh where task was shifted from facility based to community based by involving community health workers (CHWs) to provide post partum family planning counseling and contraceptives. Later the program was successful and was scaled up (18). A similar study was done in Sylet, for use of post partum contraception and recommended

to have spacing between births for improved mother and child health. They trained the community health workers accordingly and considered adequate counseling to the mothers will be sufficient but later they added door to door services and referrals also in the program. The CHWs covered 90% of the population of the areas (19).

Conclusions

In LMICs where achieving standard skill mix is difficult, this integrated approach, can help achieve universal health coverage especially in marginalized population, primarily in issues related to maternal and new born health. Still there are gaps in adapting the strategy as many challenges come along with it like quality training, high workload and many more but it is found to be more effective when health cadres are trained for specific health programs such as HIV/AIDS and maternal and neonatal health programs. Even the better quality services can be given with adequate training and supervision that ultimately covers more population; were accessibility is a major issue. Thus, task shifting addresses the pressing issue of human workforce crises.

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