

# Evidence-informed policy formulation: the case of the voucher scheme for maternal and child health in Myanmar

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## ABSTRACT

**Introduction:** In 2010, with financial support from the Global Alliance for Vaccine and Immunization's Health System Strengthening programme, the Government of Myanmar established a scheme to improve coverage of maternal and child health (MCH) services. Employing qualitative approaches, this article reviews the processes through which this scheme was devised, focusing on evidence generation and the use of such evidence to inform policy formulation. To address the problem of high mortality rates among mothers and infants, collaborative research was conducted by Myanmar's Ministry of Health, the World Health Organization, and a research arm of Thailand's Ministry of Public Health, between March 2010 and September 2011. In the early phase of this study, key barriers to government-provided MCH services were identified. Based on a comprehensive review of the literature, the introduction of a voucher scheme was raised for consideration by ministry of health decision-makers and respective stakeholders. Despite the successful experience of this financing strategy in low-income countries, a series of surveys, an economic evaluation, and focus group discussions were carried out to assess the feasibility and potential health and economic implications of this scheme in the Myanmar context. The research findings were then used to guide the design and adoption of the newly established initiative.

**Key words:** health financing, maternal and child health, Myanmar, voucher scheme

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## INTRODUCTION

Located in South-East Asia with a population of 57.5 million, Myanmar is a low-income country that was rated 149th out of 187 countries on the 2011 United Nations Development Programme (UNDP) Human Development Index.<sup>1</sup> The country spent approximately 454 000 million kyats a year on health in 2007 (475 kyats = 1 international dollar in 2010),<sup>1,2</sup> with 80% of this amount shouldered by households.<sup>3</sup> As a consequence of the underutilization of essential health services, including those for mothers and children, maternal and infant mortality rates were high, at 1.5 (maternal, national) and 30.0 (infant, rural), respectively, per 1000 live births in 2008.<sup>4</sup>

In 2008, to fill the existing gap, and with assistance from the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), the Government of Myanmar developed a proposal to apply for the Health System Strengthening (HSS) grant organized by the Global Alliance for Vaccine and Immunization (GAVI).<sup>5</sup> Approved in July of

the same year, a reform initiative was established, with the aim to improve coverage of essential primary health care, including maternal and child health (MCH) services, through the strengthening of programme coordination, health system planning, and human resources management.<sup>6</sup> WHO played a crucial role in facilitating resource mobilization, including technical support from various sources.<sup>7</sup> In addition to WHO experts, researchers from a research unit under the Ministry of Public Health, Thailand – the Health Intervention and Technology Assessment Program (HITAP) – were invited to provide technical support on health financing, which is one of the three components of the GAVI HSS programme. The other two components include human resource and infrastructure development for MCH services.

By employing qualitative techniques such as document reviews, personal communication and participatory observations, this paper aims to share Myanmar's experience on the development of a voucher scheme to reduce financial barriers to government-provided MCH services. Its emphasis is on evidence generation

through a joint research project conducted by Myanmar's Ministry of Health, WHO and HITAP, and also on the use of research findings to guide policy adoption and scheme design between March 2010 and September 2011. Further details of this research collaboration, research methods, results and related materials are published elsewhere.<sup>8</sup>

## APPROACH OF THE COLLABORATIVE PROJECT

This study begins with a situation analysis, including the identification of key barriers to MCH services and potential solutions. Experiences in low-income countries, especially Bangladesh,<sup>9</sup> Cambodia,<sup>10</sup> and Nepal,<sup>11</sup> were reviewed, in order to explore the effectiveness and drawbacks of different financing modalities to improve the health of pregnant women and infants. A protocol for the MCH voucher scheme in Myanmar was then developed and assessed, based on technical and managerial feasibility, contextual relevance and stakeholder acceptability. In this regard, the research team conducted eight sessions of focus group discussions with 44 stakeholders from two selected townships, Le We and Tatfone. The participants were ministry of health officers, members of the township health committee, township medical officers, midwives and pregnant women. Personal communication was employed to verify the information obtained on some elements.

In addition, a costing study was carried out in 17 health facilities at different levels, to assess perinatal care and delivery costs. A community survey was also conducted by trained ministry of health staff in 25 villages, randomly selected, in the two townships, between September and November 2010, to determine the experiences and household expenses for pregnancy care and child delivery; 215 pregnant women during the study period and 97 new mothers (delivered no more than 30 days before the data collection) who gave consent were interviewed. The results of the costing study and survey were subsequently used as input parameters in an economic model to estimate the potential costs, health outcomes and budget impact of the MCH voucher scheme compared with the current situation. These research findings were ultimately presented to ministry of health decision-makers, representatives of key international donors in Myanmar, and health professionals at the township level, for verification purposes.

## CURRENT STATUS OF MATERNAL AND CHILD HEALTH SERVICES UTILIZATION AND KEY BARRIERS

In Myanmar, over 900 000 women become pregnant annually. Out of this total, only 68% and 50% receive antenatal care and delivery services, respectively, provided by skilled birth attendants.<sup>12</sup> Meanwhile, non-skilled birth attendants, including auxiliary midwives and traditional birth attendants, play an important part in the provision of MCH care. Information obtained from the focus group discussions indicated that poor people in rural areas sought delivery care from traditional birth attendants, who also provided other services such as washing, cleaning and taking care of children and the neonates during the first week after delivery. Concerns have been raised that a significant fraction of neonatal deaths are associated with obtaining care from these providers.<sup>13</sup> On the other hand, other

research indicates that well-trained and supported traditional birth attendants could have a role in the reduction of perinatal mortality in many settings.<sup>14</sup>

Home deliveries are common, especially in remote, hard-to-reach areas, because travelling to health facilities is time-consuming, as well as a substantial financial burden. Although MCH services are freely provided by the government, the midwives and medical officers interviewed maintained that there were severe shortages of medical and surgical supplies, and that clients had to pay out-of-pocket to obtain these supplies from private pharmacies. In addition, public MCH care providers were paid voluntarily by their clients as the latter wanted to express their gratitude for the services received. The providers accepted these payments to compensate both for their underpaid salary and the cost of travelling between the health facilities and villages; neither were subsidized by the government.

The community survey indicated that household spending on MCH services was significant, at approximately 28 000 kyats and 32 000 kyats for deliveries assisted by non-skilled birth attendants and by skilled birth attendants, respectively. The majority (67%) of pregnant women and new mothers faced difficulties in raising funds to address these costs. Thirty-nine per cent of them borrowed money from others, 17% did without essential food consumption, and 13% sold or pledged crops or gold in order to pay for the MCH services.

## THE MATERNAL AND CHILD HEALTH VOUCHER SCHEME: FEASIBILITY AND FEATURES

Following a comprehensive literature review and a discussion among ministry of health officers and respective stakeholders, it was agreed that a voucher scheme was feasible and could be effective in enhancing the uptake of government-provided MCH services, since this intervention would eliminate existing financial barriers on the demand side. Furthermore, it was decided that this scheme would cover the costs of service provision previously shouldered by township hospitals and health stations. The first model of this initiative was developed by the research team and submitted to ministry of health decision-makers. The experience of other countries has been that demand-side financing for MCH care works well when all of pregnant women and mothers are entitled to the scheme's benefits. For Myanmar, however, it was decided that only pregnant women and mothers with low incomes would be targeted, owing to concerns about affordability and financial sustainability.

Regarding the voucher distribution, the focus group discussion participants argued that it should not be monopolized by particular groups or organizations, but should rather involve contextually relevant stakeholders, such as members of village health committees and community support groups, traditional healers, police personnel and monks. As also agreed by ministry of health officers and key stakeholders, the benefits covered in this scheme would include four antenatal care visits, delivery and postnatal care, as well as MCH services-related transportation, food and lodging. The voucher holders would receive free services from midwives and physicians and would be able to choose whether to deliver at home or at health centres.

In the case of delivery at health centres, the financial burden for transportation, food and lodging would be subsidized by cash handouts. The reimbursement for the service costs would be claimed by forwarding the vouchers collected by the health providers to the ministry of health.

## DETERMINING THE VALUE OF THE VOUCHER AND COST-EFFECTIVENESS OF THE SCHEME

Using the societal viewpoint, an economic analysis conducted under this collaborative research indicated that introducing the voucher scheme would increase the coverage of government-provided MCH services from 73% to 93% for antenatal care and 51% to 71% for delivery. At the same time, the total cost of the MCH programme, which includes not only direct medical care costs but also direct non-medical care costs and indirect costs, would increase by 95 000 kyats per woman who obtained antenatal care and delivery services. This means that if the scheme was designed to cover all of the additional costs incurred by both health providers and households, the voucher's value should be set at 95 000 kyats. It was noted that the value of the voucher could be adjusted if the government decided to partially subsidize the programme's costs. If the government decided to fund the programme in full, uptake of the MCH voucher scheme would be expected to increase, resulting in better value for money of the scheme.

The economic analysis also suggested that the MCH voucher scheme is a cost-effective policy intervention. If the cost of services provided under this scheme is fully covered, the lives of one mother and four infants would be saved for every 1000 voucher holders who used the services. As a result, the incremental cost-effectiveness ratio – or the additional cost per life-year saved from the introduction of the MCH voucher scheme – compared with the status quo is estimated to be 377 000 kyats. As recommended by WHO Commission on Macroeconomics and Health, the cost-effectiveness threshold for investment in health interventions in developing countries is equal to the gross national income (GNI) per capita.<sup>15</sup> If such a threshold was applied, the MCH voucher scheme would offer value for money, given Myanmar's GNI per capita of 413 800 kyats in 2010.<sup>2</sup>

## DISCUSSION

As suggested in the joint research studies, the introduction of the voucher scheme for MCH services in Myanmar is feasible and represents good value for money. From the outset, the voucher scheme was likely to obtain strong support from community leaders and civic groups, and was, predictably, accepted by the target clients and service providers, owing to the resulting reduction of financial impediments in accessing essential care for mothers and infants, particularly in rural areas. At a reasonable rate of cost subsidization, the scheme has good potential to save the lives of mothers and infants who are currently unable to access MCH services provided by skilled birth attendants.

The joint research, as discussed in this paper, is an ex-ante assessment of a public health programme to guide policy adoption and the design of its features. The set of studies

employed both qualitative and quantitative techniques, in order to obtain insight on the country context, and also encouraged the participation of multiple stakeholders, in order to ensure contextually relevant policy recommendations. However, the use of their results should not be absolute because some parts of the research deployed particular parameters from different settings and contained some assumptions that may not be applicable in this setting. This means that there are some uncertainties in the results of this study. Therefore, a closely monitored pilot study in a small area was recommended to ensure that the parameters and assumptions are properly revised before scaling up the programme nationwide.

The need to attain greater efficiency from international aid programmes in the health sector, such as those organized by the Global Fund, GAVI and other United Nations agencies, is notably relevant because growth in foreign aid has declined as a result of the economic recession.<sup>14</sup> This joint research on the voucher scheme in Myanmar provides a role model for global health funding agencies and development partners to maximize good health in recipient countries and ensure efficient use of allocated budgets. Measuring the potential impact and value for money of their investments should be a part of the process for international development assistance.

The results illustrated in this paper were presented to senior decision-makers at the ministry of health, as well as to representatives from WHO and UNICEF, in March and August 2011. An agreement was reached to implement the voucher scheme in one township before expanding to other areas of the country. In May 2013, a pilot scheme was introduced in Yedarshey township. A mid-term evaluation conducted in January 2014 suggested that the scheme improved access of poor pregnant women to antenatal care and delivery services provided by skilled birth attendants.<sup>16</sup>

One important point mentioned by stakeholders was the need to prioritize the development of human resources at both the central level (the ministry of health staff, who manage the MCH voucher scheme) and the peripheral level (health professionals, who are service providers). To address this, the HSS grant supported by GAVI will be used to build up the capacity of physicians and midwives, by increasing their numbers within the next couple of years. WHO proposed a training programme for ministry of health staff at the central level, in order to develop a concrete public communication plan for the MCH voucher scheme, as well as to strengthen the monitoring and evaluation systems. Conducted by HITAP and its partners, the training programme for ministry of health officers was completed at the end of 2011.

The need for locally relevant research and the national capacity to foster proper policy formulation, implementation, monitoring and evaluation, while ensuring sustainable outcomes of the health investments, is becoming increasingly crucial.<sup>17</sup> Therefore, this research collaboration provides a good example of a capacity-strengthening programme within the Region. WHO and HITAP not only provided supervision on research activities, but also involved ministry of health officers and other stakeholders at every step of the study. This included encouraging the participation of local personnel in data collection, analysis and interpretation, as well as in establishing policy recommendations from the research results.

In addition, the Thai institute and its research staff also benefited from this project. HITAP's participation as programme consultant not only widened the organizational experience of managing the research study in a different sociocultural context, but also provided the opportunity to network with Myanmar's Ministry of Health.<sup>18</sup> To pursue the sustainable development of low- and middle-income countries' health systems, international agencies and donors need to emphasize that their investments should be used to strengthen local human resources. As suggested in this paper, South–South collaboration is a promising platform for capacity transfer because it provides significant opportunities for sharing lessons and expertise, to deal efficiently with common problems faced by countries in the same region, thereby promoting further regional cooperation.

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**How to cite this article:** Teerawattananon Y, Tantivess S, Werayingyong P, Kingkaew P, Tin N, Aye SS, Myint P. Evidence-informed policy formulation: the case of the voucher scheme for maternal and child health in Myanmar. *WHO South-East Asia J Public Health*. 2014;3(3-4): 285–288.

**Source of Support:** The Health Intervention and Technology Assessment Program (HITAP) is funded by the Thailand Research Fund's Senior Research Scholar Program, the National Health Security Office, and the Bureau of Health Policy and Strategy, Ministry of Public Health, Thailand. This study was specifically funded by the World Health Organization (WHO) and the Thai Health-Global Link Initiative Project. In 2014, HITAP received a grant to carry out its international work through the International Decision Support Initiative (iDSI). iDSI is funded by the Department for International Development of the United Kingdom of Great Britain and Northern Ireland (UK) and the Bill & Melinda Gates Foundation, though the National Institute for Health and Care Excellence International, UK. The findings, interpretations and conclusions expressed in this paper do not necessarily reflect the views of the funding agencies.

**Conflict of Interest:** None declared.

**Contributorship:** All authors played an equal part in the design of this paper and document reviews. YT and ST wrote the manuscript. All authors approved the submitted version of the manuscript.

**Acknowledgements:** The authors acknowledge the contributions to the development of the voucher scheme for maternal and child health of ministry of health officers, health-care workers, researchers and WHO officers who joined them in the collaborative research team described in this article. These include the following: Ministry of Health, Myanmar: Thet Thet Mu, Aye Aye Sein and Mar Mar Swe; HITAP, Ministry of Public Health, Thailand: Roongnapa Kumpang, Pattara Leelahavarong, Hatai Limprayoonyong, Juntana Pattanaphesaj, Songyot Pilasant, Teera Sirisamutr, Kanlaya Teerawattananon, Utsana Tonmukayakul and Jomkwan Yothasmut; WHO Regional Office for South-East Asia: Alaka Singh; Pan American Health Organization/WHO: Margareta Skolds.