

〈教育報告〉

平成19年度合同臨地訓練報告
第2チーム

Training Needs Among Midwives in Two Cities, in the Philippines

フィリピン国二都市の保健局における助産師の訓練ニーズについて

Team No.2

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I. Introduction

1. Background

Midwives have made significant contributions to the health status of the Philippines and their areas of their work have been expanded. Human resources development, training being one component, is essential to maintain the quality of health services¹⁾. This study focused on assessing training received, current work and training needs among midwives, in order to improve the quality of health services in two selected cities in the Philippines, namely Parañaque and Marikina.

2. Objectives

The general objective was to examine training needs among midwives to improve their roles in health care services. Three specific objectives were: 1) To identify the training received by midwives and their current work; 2) To determine the relevance of training received by midwives to their current work; and 3) To find out the factors influencing training needs (Fig.1).

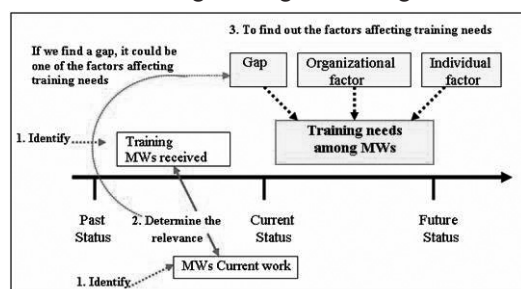


Figure 1 Conceptual framework of this study

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II. Methodology

1. Study Design: A cross sectional descriptive survey

2. Study population: The target population was midwives working in Parañaque and Marikina cities close to Metro Manila in the Philippines.

3. Data collection: Data was collected through the self-administered questionnaire on October 23, 2007 in Marikina City and October 24 and 26, 2007 in Parañaque City.

4. Questionnaire: A questionnaire consists of three sections: 1) socio-demographic characteristics; 2) training received by midwives from January 2006 to October 2007; and 3) midwives' current work and training needs.

5. Data entry and analysis: The database was designed with *Microsoft Excel*. Consistency checks were built into the design of the data entry form to ensure accuracy. Data analysis was done using *Microsoft Excel* for socio-demographic characteristics, trainings received by the midwives, midwife's current work, applicability of topics under each area in training received by the midwives to their current work, relevance of trainings received by the midwives to their current work, importance of topics under each area to midwives current work and additional training needs among the midwives.

6. Twelve areas of current work and training received: We identified the following areas as important to examine midwives' current work and training needs: Family Planning (FP), Antenatal Care (ANC), Delivery (DLV), Postnatal Care (PNC), Childcare and Immunization (CCI),

Nutrition (NT), Tuberculosis (TB), Sexually Transmitted Diseases (STDs), HIV/AIDS, Inventory Management and Drugs Dispensing (IMD), Administration and Management (ADM) and Others.

7. Applicability of topic of training received: We rated each topic of training received using four-grade scale ranged from “most applicable” to “not applicable at all”.

8. Matching rate: We objectively introduced a method of matching, referred to as “Matching Rate” to verify the relevance between the trainings received by the midwives to their current work. As shown in Table1, the person who has received the training for FP between January 2006 and October 2007 and who is currently working for FP belongs to “yes-yes” group as Y-Y. In the same way, the other three categories are, “yes-no” as Y-N, “no-yes” as N-Y and “no-no” as N-N. Matching rate is calculated with the numerator of the number of respondents and the denominator of the total number of the respondents.

Table 1 Calculation of “Matching Rate”

Ex) Family Planning		Current work?		total
		Yes	No	
Training received?	Yes	Y-Y 41	Y-N 6	47
	No	N-Y 18	N-N 7	25
total		59	13	72

$$\text{Y-Y rate} = \frac{\text{Number of respondents received training of FP and working for FP currently}}{\text{Total number of respondents}} \times 100 = \frac{41}{72} \times 100 = 56.9$$

9. Importance of topic to their current work: We rated each topic using four-grade scale ranged from “most important” to “not important at all”.

III. Results

1. Characteristics of respondents:

Seventy-two midwives were interviewed (33 in Parañaque and 39 in Marikina). The mean age of all the midwives was 45.0 ± 8.4 years. Of all respondents, 93.1% (n=67) had more than 10 years midwifery experiences.

2. Training received:

Ninety-six percent of all the respondents had received training at least once within the period under this study. Forty-seven percent of the training received had one day duration. The major areas in which the midwives had training once, were FP (n=51, 59.7%), TB (n=44, 47.2%) and, CCI (n=51, 38.9%) (Fig.2).

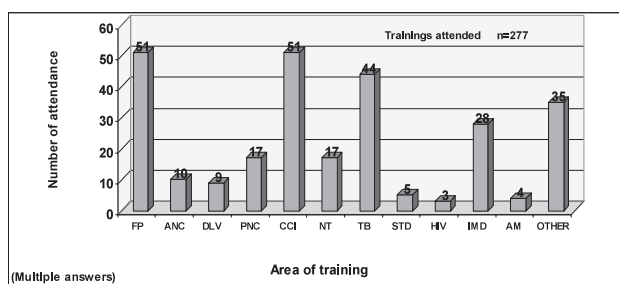


Figure 2 Area of training received by midwives Jan 06 – Oct 07

The City Health Offices (CHOs) were the leading organizers conducting 47% of all the trainings over the 22-month period (Fig.3).

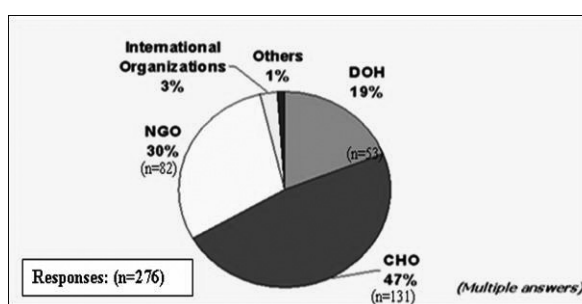


Figure 3 Organizers of training

3. Current work:

Midwives work mainly in the areas of FP, CCI, ANC, PNC and TB. Less midwives worked in the areas of STDs, HIV/AIDS, ADM, DLV and NT (Table 2).

Table 2 Area of midwife’s current work (multiple answers)

Area of current work (Number of total respondents=72)	Number of responses	
	n	%
FP	59	81.9
ANC	49	68.1
DLV	23	31.9
PNC	49	68.1
CCI	58	80.6
NT	28	38.9
TB	47	65.3
STDs	11	15.3
HIV/AIDS	12	16.7
IMD	42	58.3
ADM	16	22.2
Others	41	56.9

4. Relevance of training received to their current work:

All the topics of training received, with the exception of computer literacy, were recognized as applicable by respondents and therefore, relevant to their current work. Table 3 shows the result of matching in the four categories,

Y-Y, N-N, Y-N and N-Y, for eleven areas. FP, TB and CCI showed high Y-Y matching rates, which were greater than 40%. The Y-Y matching rate under IMD was slightly high, 27.8%. In addition, HIV/AIDS, STDs and ADM had the top three N-N matching rates. On the other hand, the top three N-Y matching rates were observed in ANC, PNC and CCI. For CCI, the N-Y rate was moderately high although the Y-Y rate has already reached more than 40% as mentioned above. The Y-N rate was slightly higher in TB and IMD; however, those were not so much remarkable.

Table 3 Area-basis matching rate in eleven areas

	Matching rate (%)			
	Y-Y	N-N	Y-N	N-Y
FP	56.9	9.7	8.3	25.0
ANC	8.3	27.8	4.2	59.7
DLV	9.7	65.3	2.8	22.2
PNC	16.7	27.8	4.2	51.4
CCI	41.7	11.1	8.3	38.9
NT	16.7	56.9	4.2	22.2
TB	43.1	23.6	11.1	22.2
STDs	4.2	81.9	2.8	11.1
HIV/AIDS	4.2	83.3	0.0	12.5
IMD	27.8	30.6	11.1	30.6
ADM	2.8	75.0	2.8	19.4

Next, we focused on topics under areas with the three highest Y-Y and N-Y rates, so that we could assess additional topic-basis training needs in high Y-Y area and existing topic-basis gap in high N-Y areas.

In FP, CCI and TB with three highest area-basis Y-Y rates, the topic-basis Y-Y matching rates were evenly observed except *Immunization* (37.5%) in CCI and *DOTS* (36.1%) in TB. They were also high for *Contraceptive management* (37.5%) under FP, *Immunization* (38.9%) and *Nutrition for child* (44.4%) under CCI, when compared with other topics in these areas. In ANC and PNC with high area-basis N-Y rates, the topic-basis N-Y matching rates were higher in *Management of high risk pregnancy* (45.8%) and *Management of normal pregnancy* (52.8%) under ANC, and all of three topics under PNC, such as *Management of mother after delivery* (41.7%), *Monitoring of post delivery complications* (40.3%) and *Breastfeeding* (52.8%) (Table 4).

Table 4 Topic basis matching rate in FP, ANC, PNC, CCI and TB

		Matching rate (%)			
		Y-Y	N-N	Y-N	N-Y
FP	<i>Contraceptive management</i>	38.9	16.7	6.9	37.5
	<i>Counseling</i>	38.9	20.8	37.5	2.8
ANC	<i>Management of high risk pregnancy</i>	5.6	43.1	5.6	45.8
	<i>Management of normal pregnancy</i>	5.6	36.1	5.6	52.8
	<i>PMTCT</i>	4.2	66.7	2.8	26.4
	<i>Monitoring and evaluation</i>	4.2	63.9	1.4	30.6
PNC	<i>Management of mother after delivery</i>	9.7	44.4	4.2	41.7
	<i>Monitoring of post delivery complications</i>	6.9	48.6	4.2	40.3
	<i>Breastfeeding</i>	9.7	33.3	4.2	52.8
CCI	<i>Neonatal Care</i>	8.3	61.1	4.2	26.4
	<i>Premature or Low birth weight child</i>	4.2	65.3	4.2	26.4
	<i>Immunization</i>	37.5	15.3	8.3	38.9
	<i>Nutrition for child</i>	9.7	44.4	1.4	44.4
TB	<i>Diagnosis including sputum collection</i>	20.8	43.1	11.1	25.0
	<i>DOTS</i>	36.1	27.8	12.5	23.6
	<i>Clinical management</i>	20.8	52.8	6.9	19.4
	<i>Recording and reporting</i>	26.0	43.0	10.0	21.0

5. Additional Training Needs:

All the topics under FP, DLV, PNC, CCI, HIV/AIDS and ADM were recognized as important to their current work by respondents. Training needs were recognized mostly in the areas of DLV, STDs, ANC, FP, HIV/AIDS and PNC (Table 5).

Table 6 indicates one topic with highest training needs from each area identified by respondents. Prioritized topics for additional training needs include: *Management of high-*

Table 5 Midwives who need additional training in their current area of work (multiple answers)

Area of current work	Working in current area	Needing additional training	
	n	n1	% (n1/n)
FP	59	40	67.8
ANC	49	38	77.6
DLV	23	19	82.6
PNC	49	30	61.2
CCI	58	33	56.9
NT	28	17	60.7
TB	47	22	46.9
STDs	11	9	81.8
HIV/AIDS	12	8	66.7
IMD	42	16	38.1
ADM	16	9	56.3
Others	41	31	75.6

risk pregnancy (ANC), Management of complicated delivery (DLV), Monitoring of post-delivery complications (PNC), Contraceptive management (FP), Voluntary counseling and testing (HIV/AIDS), Counseling (STDs) and Computer literacy (Others).

For all areas, improving knowledge, attitude and skills was the chief reason indicated for additional training needs.

IV. Discussion

The present study identified training needs among midwives in most areas of their current work with the

exclusion of TB and IMD. In accordance with the definition²⁾ of midwife, TB and IMD are additional areas to their current work. Apart from the small proportion of midwives working in the DLV area, they continue to work in the traditional midwifery areas. All the topics of training received were applicable and therefore, relevant to their current work, not including computer literacy. Remarkably, the main reason among the midwives for additional training needs in our survey was to improve the knowledge, attitude and skills rather than incentives, higher salary, promotion or recognition by others.

Table 6 Topic for additional training among midwives in their current area of work

Area of current work	Need additional training n1	Topic	n	% (n/n1)
FP	40	<i>Contraceptive Management</i>	28	70.0
ANC	38	<i>Management of high risk pregnancy</i>	21	55.3
DLV	19	<i>Management of complicated delivery</i>	12	63.2
PNC	30	<i>Monitoring of post-delivery complications</i>	14	46.7
CCI	33	<i>Immunization</i>	12	36.4
NT	17	<i>Nutrition in general</i>	10	58.8
TB	22	<i>DOTS</i>	14	63.6
STDs	9	<i>Counseling</i>	4	44.4
HIV/AIDS	8	<i>Voluntary counseling and testing</i>	4	50.0
IMD	16	<i>Dispensing practice</i>	8	50.0
ADM	9	<i>Recording and reporting</i>	5	55.6

Based on our conceptual framework a few trends were observed between the training received, current work and training needs of the midwives. Additionally, the level of importance as determined will assist in prioritizing the topics for future training.

Both TB (n=47) and IMD (n=42), have a substantial number of midwives currently working in these areas. They also had high and moderate area-basis Y-Y matching rates respectively (Table 4), and hence, training received was relevant to their current work. However, TB has to be given special mention because of its considerable burden, being the sixth³⁾ leading cause of morbidity and mortality in the Philippines, in the year 2000. The National Tuberculosis Programme (NTP) is one of the priority⁴⁾ health programmes of the Philippines. The percentage of midwives working in TB was 65.3% (n=47) (Table 2), which was the fifth highest among twelve areas. This could be a unique situation in the Philippines, since the top four areas belong to maternal and child health, traditional working areas for midwives.

In addition to the above, another trend was observed, in that, areas with low Y-Y matching rates (Table 3) have high training needs. The low area-basis Y-Y matching rates

mean that, a smaller proportion of midwives received training in their areas of current work. In effect, low area-basis Y-Y matching rates should also translate to high area-basis N-Y matching rates, but this was not the case. The area-basis N-Y matching rates identified ANC, PNC, and CCI (the latter also having high area-basis Y-Y rates) but did not correlate with the training needs in the five areas in which lower numbers of midwives are currently working. These areas comprising of NT (n=28), DLV (n=23), ADM (n=16), HIV/AIDS (n=12), and STDs (n=11) not only had low area-basis Y-Y matching rates but also high area-basis N-N matching rates (Table 3). With the low area-basis Y-Y matching rates, seven areas correlated for additional training needs, the two remaining areas being ANC and PNC. Our understanding is that, midwives who received less training in the past need additional training in future. Therefore, low area-basis Y-Y matching rates compares more favorably with training needs than high area-basis N-Y matching rates.

However, how can we explain the disparity in areas such as FP and CCI? In that, both of these areas have high area-basis Y-Y matching rates, but they are still among the areas that need additional training (Table 5). The high area-basis

Y-Y matching rates signify that, a large proportion of midwives received training in areas of their current work. The reason for additional training needs in these areas could be explained in terms of the extent of both the areas and the duration of training. In terms of duration of training, 47% of all the trainings conducted were over one day and 23% for two days. Therefore, they were of short duration and could have affected training needs. These courses with short duration may have been conducted to meet the needs for specific interventions⁵⁾. Another explanation is that, training received was directed at one or combination of knowledge, attitude and skills, about all three of which our study did not enquire. It is possible for the training to address one component and not the others.

In order to identify the topics of precedence to the midwives, we subjectively determine the level of importance of the topic to their current work. In addition, in order to prioritize their training needs, they were asked to indicate the most important topic. In the six areas (FP, DLV, PNC, CCI, HIV/AIDS and ADM) all the topics were important to their current work. In fact, some of the targets set under the National Objectives for Health Philippines 2005-2010 which include increasing: 1) the total contraceptive prevalence rate from 48.9% to 80%, 2) the percentage of deliveries assisted by skilled birth attendants and in a health facility from 53.9% to 70% and 3) the percentage of post-partum first visit within the first week of delivery from 51% to 80%, coincides well with the most important topics for training.

The role of the midwives in these two cities is somewhat extensive in that, it is not solely confined to maternal and childcare but involves the rest of the population, as in their role in NT, and infectious disease such as TB, among others (Table 2). The job description supplied by Marikina City did indicate these areas along with IMD and ADM. The job description also has the phrase "performance of other task assigned" which no doubt is helpful to organizations as they adapt to changing human resource needs. Improving knowledge, attitude and skills was the main reason for requiring additional training among the midwives in our study, denoting motivation towards and genuine love for their work. However, in discussion with the administrative staff at one of the CHOs, it seems to be common knowledge that training does not qualify one to receive promotion or higher salary. Nonetheless, acknowledgment of the findings of training needs in our study and coordination with CHO, DOH, NGOs and other organizers of trainings will help to improve the roles of midwives in the healthcare services in Marikina City and Paranaque City.

V. Conclusion

In this study we set out to determine the training needs of midwives. In order to accomplish this, we investigated the training received, the areas of their current work, the applicability of topics of training received to their current work, the priority topics in areas of their current work and the factors influencing training needs. Based on the findings from our research, the following conclusions can be drawn.

1. Midwives work primarily in the following areas such as FP, CCI, ANC, PNC and TB. Less midwives worked in the area of STDs, HIV/AIDS, ADM, DLV and NT.
2. FP, CCI, TB, IMD and NT were the most common areas in which the midwives received 1-2 days training.
3. All topics of training provided were applicable and thus relevant to their current work, except for Computer literacy.
4. Training needs were identified mostly in the areas of DLV, STDs, ANC, FP, HIV/AIDS and PNC.
5. The major reason for the additional training needed among the midwives in all areas of current work, was to improve knowledge, attitude and skills.

VI. Acknowledgements

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