FACTORS INFLUENCING INTENTION OF MATERNAL HEALTH CARE SERVICES UTILIZATION IN PA-OH ETHNIC GROUP IN MYANMAR

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ABSTRACT: Improving women's health is the fifth Millennium Development Goal and antenatal care, skilled birth attendants and postnatal care services are key health interventions for reducing maternal morbidity and mortality. A cross sectional study was carried out in three Pa-Oh villages aiming to determine the factors which influenced the intention to practice of maternal health care services in antenatal, delivery and postnatal period among Pa-Oh women in Myanmar. A total of 301 reproductive age women were interviewed face to face by using structured questionnaire. The result showed that women's age, marital status, Burmese language skills and women's knowledge on maternal health care were significantly associated with intention to utilize maternal health care services.

Keywords: maternal health care, utilization, Pa-Oh ethnic group, Myanmar

INTRODUCTION

Approximately 1.3 million women give birth each year in Myanmar [1] and according to the "Nationwide Cause-specific Maternal Mortality Survey" in 2004-2005, maternal mortality ratio was estimated at 316 per 100,000 live births at the national level. The complications during antenatal and delivery periods were the main causes of maternal mortality and morbidity [2].

Antenatal care, skilled birth attendants and postnatal care services are key health interventions for reducing maternal morbidity and mortality [3, 4]. Numerous studies had been carried out to indicate factors affecting utilization of maternal health care services [5-12] and showed that socio-demographic factors, women's knowledge and attitude on danger signs and maternal health care, accessibility to mass media influenced the uptake of antenatal care, skilled birth attendants and postnatal care.

In Myanmar, more than 70% of the total population lives in rural areas [1] where 89% of all maternal deaths were reported [2]. Pa-Oh is the second largest ethnic group residing in Shan State which is located in east central region of Myanmar. The people are poor and have almost no opportunity to make things better for themselves. This study aimed to determine the factors which influenced the intention to practice of maternal health care services in antenatal, delivery and postnatal period among Pa-Oh women in Myanmar.

METHODS

A cross-sectional study was carried out in three Pa-Oh villages in Shan State during May 2010. Total population in three villages was estimated to be about 1100 and most of the habitats are farmer and gardener. Maternal health care is provided through midwife working in rural health centre which is 45-60 minutes far by walk and mobile clinic by NGO.

Census was used in this study and women in the reproductive age group (15-49 years old) including single and married, residing in one of three villages, and willing to participate were recruited. A total of 301 reproductive age women were interviewed and the structured questionnaire which was translated in Pa-Oh language was used. The questionnaire included socio-demographic characteristics of the respondent, knowledge, attitude and intention to practice concerning maternal health care in antenatal, delivery and postnatal period. Questionnaire was also checked for reliability and validity. All the study procedures were approved by Ethical Review committee for Research Involving Human Research Subjects, Health Sciences Group, Chulalongkorn University, Bangkok, Thailand.

Outcome variable is intention to take at least 3 antenatal visits during pregnancy, intention to have skilled birth attendants when delivery occurs and intention to take at least one postnatal visit with health personnel after child birth. Data was analyzed by using SPSS software. Chi-square test was used for categorical variables and independent sample t-test was used for continuous variables. Significant predictors in bivariate analysis were entered into binary logistic regression model. Odds ratios and their 95% confidence interval were presented. The level of significance was set at 0.05.

RESULTS

Table 1 reveals the socio-economic characteristics of the respondents. All of the respondents were in

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Table 1 Socio-economic characteristics of respondents (n = 301)

Variables	Frequency	Percentage
Age		
15 - 24	110	36.5
25 - 34	96	31.9
35 - 49	95	31.6
Range = 15 - 48, Mean ± SD = 29.05 ± 9.527		
Marital status		
Single, divorced, widowed	88	29.2
Married	213	70.8
Education		
Never go to school	40	13.3
Ever go to school	261	86.7
Average family income per month in US$		
≤15	179	59.5
15 - 35	104	34.5
>35	18	6.0
Range = 3 - 100, Mean ± SD = 18.98 ± 16.595		
Burmese Language skill		
Cannot speak, read nor write	133	44.2
Can communicate Burmese language	168	55.8
No of pregnancy (n = 217)		
≤ 3	128	58.9
> 3	89	41.1
No of children alive (n= 207)		
≤ 3	150	72.5
> 3	57	27.5

Table 2 Bivariate analysis of predictors of intention to practice maternal health care services

Variables	Intention to take at least 3 antenatal visits		Intention to have skilled birth attendants		Intention to take at least one postnatal visit	
	N (%)	p-value	N (%)	p-value	N (%)	p-value
Age†		0.497		0.783		0.868
Marital status						
Single, divorced, widowed	54 (61.4)	<0.001	35 (39.8)	1.0	38 (43.2)	0.078
Married	190 (89.2)		84 (39.4)		116 (54.5)	
Education						
Never go to school	34 (85)	0.665	18 (45.0)	0.489	20 (50.0)	1.0
Ever go to school	210 (80.5)		101 (38.7)		134 (51.3)	
Average family income per month in US$						
≤15	144 (80.4)	0.935	85 (47.5)	<0.01	90 (50.3)	0.680
15 – 35	85 (81.7)		29 (27.9)		53 (51.0)	
>35	15 (83.3)		5 (27.8)		11 (61.1)	
Burmese Language skill						
Cannot speak, read nor write	108 (81.2)	1.0	43 (32.3)	0.025	58 (43.6)	0.021
Can communicate Burmese language	136 (81.0)		76 (45.2)		96 (57.1)	
No of pregnancy (n = 217)						
≤ 3	116 (90.6)	0.281	54 (42.2)	0.779	74 (57.8)	0.268
> 3	76 (85.4)		35 (39.3)		44 (49.4)	
No of children alive (n = 207)						
≤ 3	135 (90)	0.155	63 (42.0)	0.530	83 (55.3)	0.439
> 3	47 (82.5)		21 (36.8)		28 (49.1)	
Knowledge†		<0.001		<0.001		<0.001
Attitude†		0.740		0.065		0.192

† Independent sample t-test

Table 3 Logistic regression analysis of significant predictors of intention to practice maternal health care services

Variables	Odds Ratio (95% CI)		
	Intention to take at least 3 antenatal visits	Intention to have skilled birth attendants	Intention to take at least one postnatal visit
Marital status			
Single, divorced, widowed	1 (ref)	1 (ref)	1 (ref)
Married	2.9 (1.4-5.9)**	0.6 (0.3-1.1)	1.1 (0.6-1.9)
Average family income per month in US$			
≤15	1 (ref)	1 (ref)	1 (ref)
15 – 35	0.8 (0.4-1.8)	0.3 (0.1-0.5)	0.8 (0.5-1.4)
>35	0.5 (0.1-2.0)	0.2 (0.07-0.7)	0.9 (0.3-2.7)
Language skill			
Cannot speak, read nor write	1 (ref)	1 (ref)	1 (ref)
Can communicate Burmese language	1.4 (0.7-3.0)	1.1 (1.2-3.6)*	1.9 (1.1-3.1)*
Knowledge	1.2 (1.1-1.3)***	1.3 (1.1-1.4)***	1.2 (1.1-1.3)***

*<0.05, **<0.01, ***<0.001

reproductive age ranged from 15 to 48 years and the mean age was 29.05 (SD = 9.527). Majority of the women (70.8%) were married, more than one-third of women ever go to school, and more than half of the respondents had average family income 15 US$ or less per month. Regarding Burmese language skill, 44.2% of the women cannot speak, read nor write Burmese language. Among women who have ever been married (217 women), 41.1% had experience of more than 3 times of pregnancy and 72.5% of the women who currently have children (207 women) had 3 or less children. In this study, 81.1% of the respondents intended to take at least 3 antenatal visits, 39.5% intended to have skilled birth attendants and 51.2% intended to take at least one postnatal visit with health personnel.

Table 2 shows the relationship between socio-economic factors and intention to practice of maternal health care services. There were significant relationship between marital status and intension to have at least 3 antenatal visits. There were also significant difference between monthly income, Burmese language skill and intention to have skilled birth attendants and at least one postnatal visit with health. Moreover, there was also significant difference between knowledge and intention to practice of all three maternal health care services.

Binary logistic regression analysis was used to find the predictors of intention to practice of maternal health care services. Odds ratios and their 95% confidence interval were presented. The predictors of intention to take at least 3 antenatal visits were being married and knowledge of the women regarding maternal health care. It also shows that there was significant association between income and intention to have skilled birth attendants. Moreover, Burmese language skill and knowledge towards maternal health care were significant predictors of intention to have skilled birth attendants and intention to take at least one postnatal visit with health personnel (Table 3).

Regarding accessibility to health education materials and training on maternal health care, 39.7% of the women ever seen health education materials such as pamphlets and handbooks, 25.3% ever received health education materials and only 8.6% ever attended health education training.

DISCUSSION

The purpose of this study was to determine the factors which influenced the intention to practice of maternal health care services in antenatal, delivery and postnatal period among Pa-Oh women in Myanmar.

Marital status was seen as influential factor for intention to utilize antenatal care as married women were more likely to intend to take antenatal care at least 3 times during pregnancy. This could be due to the community and health delivery system favored the married women for maternal health care practices and belief of reproductive topics as traditional taboos among single women. This association was supported by the study done in Kenya [9].

Even though the effect of household wealth on delivery appeared to be very strong as women from rich households being more likely to deliver with skilled birth attendants [9, 11], this study found that the women who had higher monthly household income were less likely to intend to have skilled birth attendants.

Pa-Oh ethnic group uses local language, therefore, nearly half of the respondents cannot read, speak or write Burmese language which made them difficult to access to health care facilities. The findings revealed that Burmese language skill was positively associated as women who can communicate Burmese language were more likely to intend to have skilled birth attendants and take at least one postnatal visit with health personnel.

Although the knowledge is not the only one factor which impact behavior, Qian and Yue state that one

of the main factors shaping behavior is knowledge [13]. Health knowledge is considered as one of the key factors that enable women to be aware of their rights and health status in order to seek appropriate health services [12]. The effect of knowledge about danger signs antenatal care, safe and clean delivery, and postnatal care was strong in the expected direction as women who had better knowledge were significantly more likely to intend to practice maternal health care in terms of at least 3 antenatal visits, skilled birth attendants and at least one postnatal visit with health personnel. This was consistent with the previous studies done in elsewhere [6, 7, 10].

Accessibility to health education is one of the important factors that influence to women in obtaining information on maternal health care, promoting awareness, decision making and practicing maternal health care in antenatal, delivery and postnatal period. Our finding revealed that the percentage of women who ever seen and received health education materials such as pamphlets and handbooks and access to health education training was not much which in turns showed the lack of proper health information, education and communication activities in the villages.

Our study has some limitations. Firstly, the main outcomes measures in this study were intention to practice of maternal health care services in future, so the utilization of maternal health care services among reproductive age Pa-Oh women in previous time could not be determined from this study. Secondly, there was difficulty in transportation to travel to remote villages; our study could not cover large areas. The respondents were predominantly poor and less educated; hence the findings should be extrapolated with caution. Lastly, this study was cross-sectional study so the changes over time could not be observed and a cause-effect relationship could not be established.

CONCLUSION

This study highlighted the low intention to have skilled birth attendant for delivery and postnatal visit which could be due to lack of awareness and language barrier. Therefore awareness should be created in the community to motivate the reproductive age women and it will in turn encourage them to seek to antenatal care, skilled birth attendant at delivery and postnatal care. It is recommended that health education program for increasing awareness of maternal health care should be implemented in Pa-Oh villages targeting reproductive age women and the health messages should be communicated in local language to overcome pronounced language barrier in Pa-Oh ethnic group.

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