

SELF-CARE BEHAVIORS AMONG PREGNANT WOMEN IN MOTHER AND CHILD UNIT IN SAVANNAKHET HOSPITAL

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ABSTRACT

Objectives: To study self-care behaviors of pregnant women and factors related to those behaviors.

Background: The maternal mortality rate in Laos is still the highest among Southeast Asia, at 185 per 100,000 live births. Self-care behaviors can prevent health problems during pregnancy and childbirth, consequently reducing maternal and neonatal mortality rates. Many factors have been found to be related to self-care behaviors.

Methods: A descriptive cross-section study was conducted during June – August 2020 in 108 pregnant women who attended antenatal care at Mother and child unit, Savannakhet hospital.

Results: The result showed that most pregnant women (72,2%) are under 31 years old (mean = 28,3%

± 6,1 year). Around 40% of participants had given birth only once and over one fourth (25,9%) had three or more children. Most participants (75,9%) had at least a college degree. Majority of participants were housewives (66,7%). Over half of mothers (54,6%) had high level of knowledge about pregnancy, but only around 20% of them had high self-care behaviors, majority of support from families were in poor to fair range quality (87,9%), around 5% of participants still believed in old traditional beliefs. The significant correlation was found between traditional beliefs and self-care behaviors (adjusted odds ratio = 1,3; 95% CI: 1,0; p<0,05).

Conclusions: Approximately half of participants had high level of pregnant knowledge but only 1 out of 5 had a good self-care behavior. Traditional beliefs impacted the mother self-care behaviors significantly.

Keywords: Pregnant women, self-care behaviors, antenatal care, Savannakhet hospital.

INTRODUCTION

Pregnancy period is a very important time. During this time, the health of the mothers will directly affect the baby's health. Therefore, their behavior during this time is very crucial.

There are multiple factors that affects the women's responses to self-care, such as individual characteristics, health knowledge, traditional beliefs, social support systems, and the health care system. Therefor the women's behaviors

during this period should be programmed to support activities, maintain life, health and well-being.

For those reasons, World Health Organization (WHO) recommended that the pregnant women of low income countries without any complications should attend antenatal care at least 4 times before childbirth to receive a better health care and desired birth outcome ("WHO Guidelines Approved by the Guidelines Review Committee," 2016).

Lao People's Democratic Republic (Lao PDR or Laos) has a lower-middle-income economy and is the only landlocked country in Southeast Asia. Every year, there are over 1000 cases attended antenatal care (ANC) but the maternal mortality rates although are on reducing trends are still among the highest in Asia, which is at 185 deaths per 100.000 live births (Health, 2021; PDR, 2018).

Various factors are associated with high mortality rates (Diana, Wahyuni, & Prasetyo, 2020). One of the factors is mothers' self-care behaviors. Self-care

behaviors were proved to increase the utilization of ANC (Tsegaye & Ayalew, 2020), consequently prevent health problems during pregnancy and childbirth (Berhan & Berhan, 2014).

There have been very few previous studies about self-care behaviours in Laos focused on healthy women during pregnancy. In addition, the modern lifestyle and accessible health information might be affected by the current attitudes and behaviours of women during pregnancy. Therefore, an investigation of self-care behaviours in pregnant women was needed to explore their recent behaviours in terms of maintaining health and well-being. We conducted this research in order to have a better insight of the mothers' self-care behaviors and to determine the associated factors with mother's behaviors during pregnancy.

MATERIALS AND METHODS

Study design: This study used cross-sectional survey design.

Sample

Taro Yamane formula (1967) was used due

to the lack of data from prior studies. We collected total of 147 women who had children between 6 months to 1 year old.

$$n = \frac{N}{1 + Ne^2}$$

After calculation, the result yielded total of 108 women.

The inclusion criteria were the pregnant women who attended ANC and were able to read, write and answer in Lao language, willing to participate and recorded in Public Health Center (PHCs).

The exclusion criteria: the pregnant women who were not able to read, write or understand Lao language, unwilling to participate.

Sample size.

Taro Yamane formula (1967): $n = \frac{N}{1 + Ne^2}$

$e = 0,05$ (margin of error).

$N = 147$ (total number of mothers who had children between 6 months to 1 year old attended Mother and child unit).

$n = 108$ (the pregnant mothers who attended ANC during study period)

Recruitments

A convenient sampling method was used.

The study used self-administered questionnaire to collect the data. The dependent variables were self-care behaviors and independent variables were age, occupations, educational status, family support and traditional beliefs.

There were 4 sheets of questionnaires, each one would comprise different of small questions. The topics were about the knowledge of self-care during pregnancy, amount of support from family members, mothers' traditional beliefs, and mothers' self-care during pregnancy.

After the participants filled in the answers, the questionnaires were evaluated and analyzed by two other assistants. Each of the answer would be given point based on Nominal scale (1 point for right answer and 0 for wrong one). After the total sum of points were collected and we would grade them based on 3 ranks as shown below.

$$\text{Rank} = \frac{\text{Maximum point} - \text{minimum point}}{\text{Interval}}$$

The amount of support from family, pregnant mothers' knowledge and self-care behaviors were graded into 3 categories from low, average and high. Weak, neutral and strong were instead used for the traditional beliefs.

Data Analysis

The data were analyzed using Stada. Descriptive statistics of frequency, percentage, mean, and standard deviation were used to analyze data regarding demographic characteristics of the participants. Moreover, the relationship between self-care behavior with other factors was determined using Pearson's product-moment correlation coefficient.

RESULTS

Characteristics of population

We included total of 108 pregnant women during June to August 2020. The average age of the participants was $28,1 \pm 6,1$ years, over 70% of them were under 30 years old. Majority of mothers gave birth only once or twice (43,5% and 30,6% respectively), around 25% had 3 or more children. Most mothers had never had a miscarriage in their lifetime. Nearly two third of the participants were

housewives, followed by the office workers (19,4%). Approximately 76% of the mothers had at least college degree or higher.

Table 1: Demographic characteristics of pregnant women (n = 108)

Demographic characteristics	N	%
Age (years)		
< 31	78	72,2
≥ 31	30	27,8
Average age	28,1 ± 6,1	
Occupations		
Housewives	72	66,7
Office workers	21	19,4
Sellers	15	13,9
History of gravidity		
1	44	40,7
2	33	30,6
3	21	19,4
≥ 4	10	9,3
History of parity		
1	47	43,5
2	33	30,6
3	22	20,4
≥ 4	6	5,5
Educational status		
Secondary school or below	26	24,1
College or higher	82	75,9

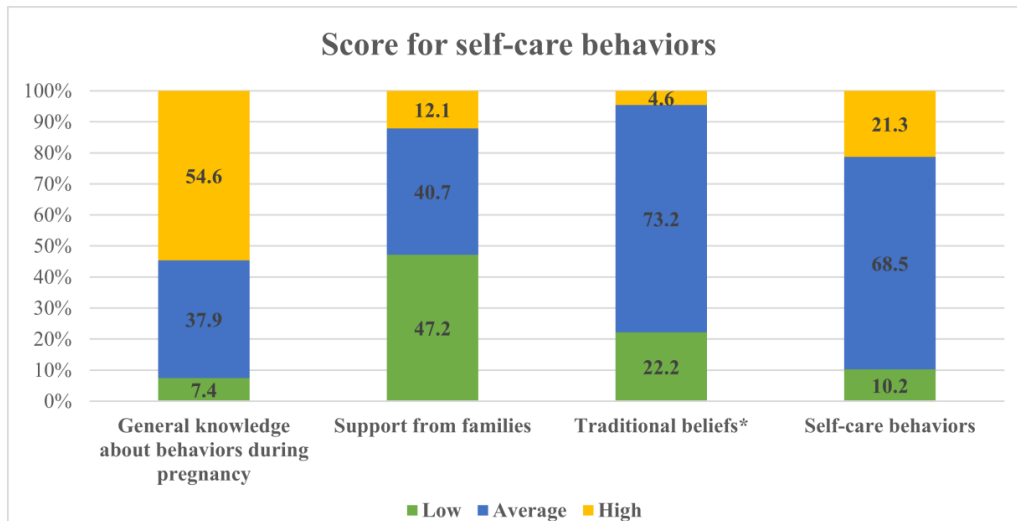


Chart 1: Grading score for mother's behaviors

*Score for traditional belief were weak, neutral and strong instead

Chart 1: the left most pillar showed that over half of the participants had a high level of knowledge about pregnancy (54,6%). However, from the right most pillar also showed that only around one fifth of them did have a high level of self-care behavior (21,3%). The data of middle left pillars indicated that every mother got some form of support from their family members but only minority of the support were high-quality (12,1%). The middle right pillar revealed that there were still some cases that still had strong beliefs in old traditional beliefs (4,6%).

Associated factors

Table 2 showed us the significant colleration between traditional beliefs and self-care behaviors during pregnancy of the mothers ($P = 0,05$).

Variables		Self-care behaviors		AOR* (95% CI)	P - value
		High	Low		
Age (years)	< 31	62	16	1	
	≥ 31	23	7		
Occupations	Housewives	55	17	1	
	Office workers	30	6		
Educational status	College or higher	52	7	1	
	Secondary school or below	33	16		
Family support	Low quality	43	8	1	
	Strong quality	42	15		
Traditional beliefs	Weak	23	1	1	
	Strong	62	22		

*Adjusted Odds Ratio

Table 2: Associatted factors with self-care behaviors

DISCUSSION

The findings showed that over half of the mothers (54,6%) had a high level of pregnant knowledge. Most of them knew that overworking or standing still for too long were not good for their babies. They also knew that having proper exercise would have a benefit for their babies. Surprisingly, they did know that polyuria was a common sign during pregnancy. This might be due to most of them had finished a formal education. Although they have different educational level, more than two third of them have at least a college degree. However, there were only 21,3% with the high level of self-care behaviors and over two third of mothers had average self-care behaviors. This indicated that the mothers were concerned about everything which could affect the health in both themselves and their babies but only half of them actually followed those knowledge and that the mothers still tended to follow the traditional beliefs rather than the actual benefit doing, this was also reported in another study from Indonesia^(Agus, Horiuchi, & Porter, 2012).

The data also revealed that most most mothers did get some form of supports from

their family members, ranging from receiving proper advice to helping them cooking in daily basis, but quality of supports were in low to medium range. Most Mothers reported that they usually attended ANC alone or with her partner, never with other member of families. This would cause them to miss ANC visit once their partner were busy. Their other family member almost never bothered if they ever missed the schedule ANC. This was an important issue as the pregnant women are usually very fragile and any amounts of supports are important. The family supports were reported to be one of factors for mothers' better self-care behaviors in study from Thailand^(Alburuda & Damayanti, 2019; Boonyaprapa, 2010).

Only few mothers did have strong traditional beliefs (5%) and over two third were neutral. For clearer view, we will list some of traditional beliefs from the questionnaire. Firstly, over 70% of mothers thought that drinking a coconut water during pregnancy would make an easier childbirth. Secondly, pregnant women should never sit on stairs or else would make a difficult childbirth. Thirdly, most of

mothers thought that killing/harming a living being might cause their babies damage or disable. Fourthly, half of the mothers believed to not go to funeral or else there would be ghost followed them back home. Some even had believed in the extreme one like taking a bath at night would make their babies become water spirit or any potential danger could be blow away by traditional birth attendance simply by touching mothers' belly (5-15%). The traditional beliefs always play a major role in decision making of people, especially in Southeast Asia or low-income countries. There were multiple studies around the world that reported the impact of the traditional beliefs on self-care behaviors (Agus et al., 2012; Ansong, Asampong, & Adongo, 2022; Boonyaprapa, 2010; Panthumas, Kittipichai, Pitikultang, & Chamroonsawasdi, 2012; Pritham & Sammons, 1993; Tsegaye & Ayalew, 2020).

Associated factors with mothers' self-care behaviors

Mothers' age, educational status, support from families and jobs were found

not related to good self-care behaviors ($P > 0,05$). This finding was not in line with the previous reports from around the world (Boonyaprapa, 2010; Panthumas et al., 2012; Puspita, Jerayingmongkol, & Sanguanprasit, 2015; Tsegaye & Ayalew, 2020). This might be due to this small sample size and various bias from population which could be recall difficulties. This could also be explained that most of samples had similar education levels, so they had similar ability to search for the information on self-care and to explain further the time this study was conducted was around the covid outbreak in Laos, although not in the peak of the pandemic but most people, especially pregnant women would rather stay at home, this also explained a fairly amount of freetime they got in order to research the related topics.

The significant, but weak relationship between mothers' traditional beliefs and self-care behaviors during pregnancy was in line with various studies around the world (Agus et al., 2012; Ansong et al., 2022; Boonyaprapa, 2010; Panthumas et al., 2012; Pritham & Sammons, 1993; Tsegaye

& Ayalew, 2020). This might be due to most mothers had high educational status, therefore they know which beliefs are true. On the contrary, this showed that some of their behaviors were still partially restricted by their own traditional beliefs and there were still some of extreme beliefs like mentioned above. This would eventually affect their decisions in self-care.

Limitations

The study was one of the first that was conducted in Savannakhet. Further research with the same objectives could be conducted in different regions, especially in poorer regions. Main weakness of our study was a small sample size due to covid outbreak which could made some results less significant. Although the samples in this study were selected purposively according to their ability to read and write and being registered with public health centers, which could give a bias in the results. As stated earlier, the educational level of the participants was high and 100% of them were registered with PHCs. This could reduce the sampling biases to a certain extent. At any rate, it is suggested that

future studies should use a random sampling technique to ensure the representativeness of the samples.

Due to the collected location being Savannakhet hospital, which is the central hospital, the results may not be representative of all regions in Laos.

Our grading score method was our own created system which was not yet proven to be reliable.

There are absence of data relating to ANC visits number, monthly income, intention of pregnancy, associated between number of children and self-care behaviors.

CONCLUSION

After evaluated 108 pregnant women who attended Mother and child unit, Savannakhet hospital. We found that half of the mothers (54,6%) had high level of pregnant knowledge but only 1 out of 5 mothers had high behavior score (21,3%). Mothers' families did give support but the quality were only low to average range. Some of the mothers still believed in traditional beliefs, such as taking a bath at night might result in their babies becoming a water spirit. Traditional beliefs were found to have a significant relationship with mothers' self-care behaviors.

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