







The Increase of Knowledge, Attitude, and Practice of Husbands toward the Prenatal Care of their Wives Using the Illustrations Having the Local Cultural Nuance

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Abstract

BACKGROUND: The role of husbands in maternal health during pregnancy is crucial and is related to the high maternal mortality rate in Indonesia. In spite of that, the effort to involve husbands in the maternal health program is still low.

AIM: This paper aims to explain the results of the effort to produce learning assisting tools in a form of an illustration having local cultural nuance that can be used to do intervention of health education to increase the participation of husbands in maternal health.

METHODS: The research was conducted in Silaen Village, Silaen District in Toba Regency, North Sumatera Province. To make the teaching materials, interviews and focus group discussions were conducted for the village community figures, the village midwives, the pregnant women, and their husbands. After illustrations were made, the trial was conducted to 10 pairs of husbands and pregnant wives.

RESULTS: The illustrations made accommodating the role of husbands in maternal health can increase the knowledge, attitude, and practice (KAP) of husbands, including the KAP of their wives. The biggest increase happening in the attitude component ($p < 0.05$).

CONCLUSION: The educational method using an illustration adopting local culture is important to become one of the education teaching alternatives in the effort to improve husband's KAP.

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Introduction

The role of husbands in maternal health is truly essential and cannot be ignored [1]. The WHO recommends that husbands must be involved in the whole reproduction process, from the pregnancy period, the delivery process period, to after the delivery process period [2]. Unfortunately, in most of the low- and middle-income countries, the role of husbands is far from adequate [3], [4], [5].

Just like what happens in Indonesia, although the maternal mortality rate is very high, even the highest in ASEAN [6], the mother and child health (MCH) service policy approach tends to prioritize the role of women. The health service system developed by the Health Ministry of Indonesia is dominated more by the involvement of pregnant women, while the role of husbands is not maximized. In the health examination activity, the midwives only have the discussion with the wives, while the husbands only take the wives

to see the midwives. A similar thing occurs with the implementation of the activities to ease the delivery process. For instance, in pregnancy workouts, the health officers only encourage the wife involvement. The effort to increase the husband involvement is rarely done.

Such situation, whether we realize it or not, has put the husbands as if they were not needed very much to be involved in the issues of pregnancy and the delivery process. The impact is that the husbands often become apathy, and even they obtain justification that reproduction health is really the domain for the wives only. This situation keeps the husbands away from the health recommendation to provide full support to their wives.

However, unfortunately, in the culture with patrilineal majority, a wife has a very weak position in a household. In the rural areas in Indonesia, a wife is bound to the ideal values as a wife. Consequently, a wife often cannot make a decision about herself, including in the health aspect. The fact is that the

decision on reproduction health is often made by the husband [7], [8], [9], [10], [11], [12].

Thus, making intervention in a form of providing health education to husbands is a strategic thing to do but with a proper and effective way [13]. A good strategy is very much needed because besides very rarely exposed to the reproduction health information, the husbands are often bound with the existing cultural values surrounding them [14]. Just like the wives, husbands absorb masculinity values more from the patrilineal cultural concept. Providing health education requires carefulness so that it can be accepted by husbands and community in general. Therefore, the teaching materials used have to be able to increase the interest and provide sustainable education. Therefore, the learning material used is crucial to be designed to change knowledge, attitude, and practice (KAP). This research explains the process of making the learning assisting tools, in a form of illustrations, and then explains the results in a rural community in Indonesia.

Methods

This research was conducted in a rural area, namely, in Silaen Village, North Sumatera Province, Indonesia. In that area, the dominant ethnic is Batak ethnic. The majority of the people in the community work as farmers. To absorb important information to become illustration materials, the researcher did in-depth interviews to five community figures, five village midwives, and one midwife coordinator. Moreover, the researcher conducted focus group discussions (FGDs) to three groups of community figures and two groups of husbands and wives. The topics asked are related to the role of men, cultural barriers, information that is less known, and local tradition. The in-depth interviews and FGDs were generally conducted at the houses of the informants, the village hall, or Silaen Community Health Center. The results of the interviews and FGDs were made into verbatim data to be analyzed.

Even though the illustrations were aimed for husbands, the training was given to the couples of husbands and wives. Culturally, in general, the husbands are reluctant to join the training if not accompanied by their wives. Therefore, at the same time, despite being in a different place, the training was also given to the wives. The total number of the couples involved in this activity is 10 couples, namely, the pregnant women and their spouses. These participants joined the training voluntarily in five meetings and learned about the materials prepared in the illustrations.

To evaluate the KAP of the participants, the pre- and post-tests were designed and each consists of 10 knowledge questions, five attitude questions, and five practice questions. The knowledge and practice questions

are made into the form of a three-choice answer, namely, "yes," "no," and "do not know." To calculate the respondent scores of the training participants, the answer "yes" is given 2 scores, the answer "no" is given 0, and the answer "do not know" is given 1 score. Meanwhile, the answers on the attitude questions are designed using the Likert scale 1–5 with positive answers so that the score for each is 1, 2, 3, 4, and 5. To test the significance of KAP statistically, the paired sample t-test was conducted at the level of testing $\alpha = 0.05$.

Research ethics

The ethics permit was obtained from the Health Research Ethical Committee of the Medical Faculty of Universitas Sumatera Utara. In the field, while recruiting the participants, the participants were given informed consent forms that had to be signed, containing their right to withdraw from the research anytime when they wished to do it.

Results

Pre-making phase

After the interviews and FGDs were conducted, the themes and subthemes obtained from the verbatim analysis results are presented in the following table.

The design of the illustrations

The illustrations produced consist of 20 illustrations (Figure 1). The figure in the pictures is illustrated as a Bataknesse ethnic husband who is happy because he provides support to his wife (a). The support meant is in a form of joining the pregnancy visitation to a midwife (b) and participating in taking care of the baby in the future (c). Furthermore, the husband is also asked to always remind his wife to consume the zinc tablets (d). The illustrations also contain the message for the husbands to maintain good relationships with their wives during the pregnancy period (e).

To understand the illustrations impact to participant's KAP, training was given 5 times to 10 couples of husbands and wives. The participant demographic pictures are presented in following table.

Evaluation of KAP

After five meetings, the participants KAPs were then evaluated using a questionnaire handed out during the pre- and post-tests. The results are presented in figures. To find out the differences between before and after the training for husbands and wives, a statistic test was conducted with the results as follows:



Figure 1: Several illustrations made, (a) The cover, picturing a husband and a wife with local traditional clothes being happy, (b) An illustration picturing a husband accompanying his wife visiting a midwife, (c) An illustration of a husband taking care of his baby, (d) An illustration picturing a husband reminding his wife to consume zinc tablets, (e) An illustration picturing a husband massaging his wife's feet while showing affection

Discussion

The media used in this research was created by using themes as listed in Table 1. The demographic profile of participants are listed in Table 2. In general, both husbands and wives have completed their mandatory school. The role of husbands in reproductive health is very important to be increased by health education. Providing

Table 1: Theme and sub-theme during interviews and FGDs

Theme	Subtheme
The position of men compared with the position of women	Work division; reasons
Pregnancy process	Antenatal care (ANC), the role of husbands, the role of mothers-in-law, the role of the pregnant women's parents, and the role of other families
Delivery process	Determining the place to deliver their baby, the role of husbands, the role of mothers-in-law, the role of the pregnant women's parents, and the role of other families
Postnatal	Determining the number of children, the sex of the child, and child education

FGD: Focus group discussions.

education to husbands is proven to be able to increase knowledge and attitude of husbands to be more positive as reported by various previous studies [15], [16], [17], [18]. As seen in this research, the use of illustrations, in a form of pictures adopting the local culture, turns out to be quite effective to improve the KAP of both husbands and wives (Table 3) distributed equally for all the knowledge, attitude, and practice (Figures 2 and 3).

The use of media with illustrations has been applied quite many times in various health issues because it can provide very satisfying results. Using comics as the assisting tool, it has been reported that the depression level of workers in a company turned out to decrease [19]. Comics as the tool to promote better physical activities and eating behavior turned out to be quite effective since the users reported that they paid more attention to their health because of that tool [20]. KAP of school aged children also increase using the comics that are capable of drawing their attention toward the epilepsy disease [21].

Table 2: The demographic profile of participants

Demographic category	Number	Percentage
Education of Husbands		
Junior/Senior High School	7	70
Diploma	1	10
Bachelor Degree	2	20
Age of Husbands		
<25 years old	-	-
25-30 years old	4	40
>30 years old	6	60
Education of Wives		
Junior/Senior High School	7	70
Diploma	3	30
Bachelor Degree	-	-
Age of Wives		
<25 years old	1	10
25-30 years old	7	70
>30 years old	2	20
Pregnancy Age of Wives		
<3 months	2	20
4-6 months	6	60
7-9 months	2	20
Gravidity		
1	1	10
2	6	60
3	3	30
Parity		
1	9	90
2	1	10

Health communication through the use of illustrations as shown in Figure 1 is indeed not only effective to deliver the health message but also potential to keep on being developed as a creative and updated study [22]. Therefore, its production has to be designed as close as possible with the participants profile. Learning materials adopting both pictures and local phenomena are actually very good because they are related with the life of the participants. The more relevant the information with the life and needs of the participants, the easier the message is delivered, and the more realized the desired behavior is. The illustrations presenting the behavior of humans in their daily lives will provide better impression and can be easily understood [23].

Table 3: The statistic test (paired sample t-test)

Participant	Category	Mean difference	P
Husband	Knowledge	0.98	0.000
	Attitude	2.32	0.000
	Practice	0.90	0.000
Wife	Knowledge	0.97	0.000
	Attitude	2.24	0.000
	Practice	0.82	0.000

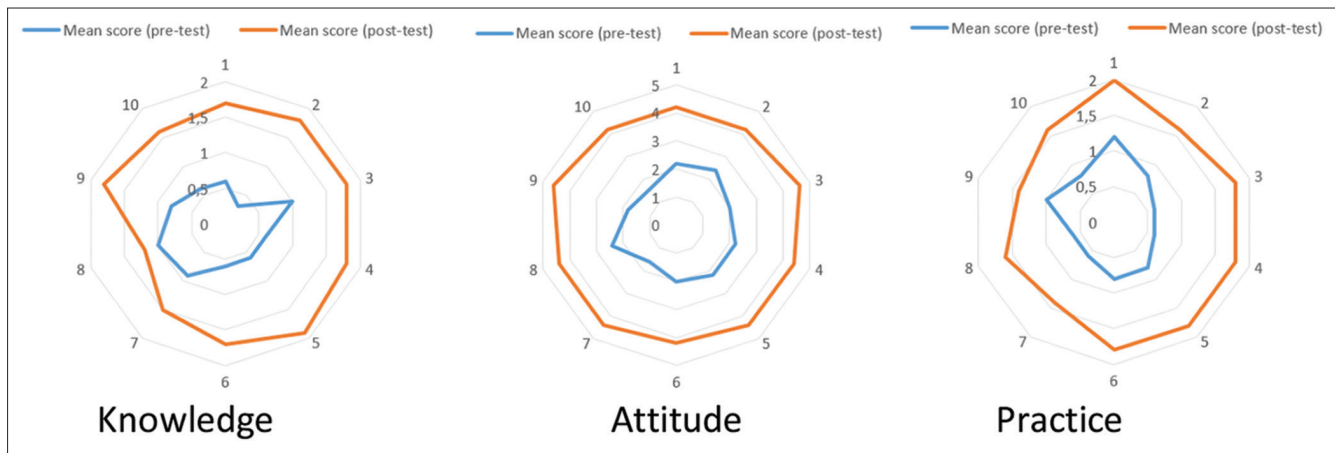


Figure 2: Knowledge, attitude, and practice of husbands, the pre-test (before the training) and the post-test (after the training)

The lack of husband involvement in reproductive health issues is a classic problem that has to be dealt with also a creative method. So far the husbands still believe that they have to carry out a traditional role, which is becoming the breadwinner in the family, while the wives are also considered to have different traditional roles, such as taking care of and raising children, including being pregnant and giving birth [24], [25]. Husbands still believe that if they were not involved in reproductive health issues, there would be other people, such as traditional birth attendants or other female family members, considered to have the better knowledge and skills to help their wives with the reproductive health issues [26], [27]. In addition, the husbands getting involved in reproductive health often face some stigmas from the community. Such husbands are often accused to be controlled by their wives, and that is an insulting point of view for the husbands [7], [28]. It is not an exaggeration that in the pregnancy matter, husbands still position themselves in the “second roles,” not in the essential ones [24]. The conditions are classical barriers happening in analyzing the low involvement of husbands in MCH.

The wrong knowledge from husbands about pregnancy or the delivery process is still reported by various studies. There are still husbands that feel that

if emergency situations occur in pregnancy, a wife still has to wait for the consent from her husband before visiting a health facility to acquire help [29]. Moreover, there are still husbands stating that if their wives have been through the antenatal care, and after going home from the health facility and being advised to have plenty of rest, the wives will eventually become lazy [30]. Some husbands also still consider that pregnancy is not a difficult process and even believe that a delivery process is a natural event, which can be done just at home [31]. The cases of wrong knowledge as mentioned above can cause losses to the health of pregnant women so that it has to be corrected.

Husband involvement can actually be increased, like in this research, if the intervention conducted really targets the group of men. Like what has been done in Ethiopia, health education using the right media can increase husbands' concern to accompany their wives when delivering their babies [32]. The messages in the illustrations in this present study are about the pride of a husband because he is able to accompany his beloved wife, or they are about a husband that becomes the pride of his family, and those are important things that have the potential to increase the husband's acceptance of improving involvement in MCH [33], [34]. Then, the messages in the illustrations in this research are the

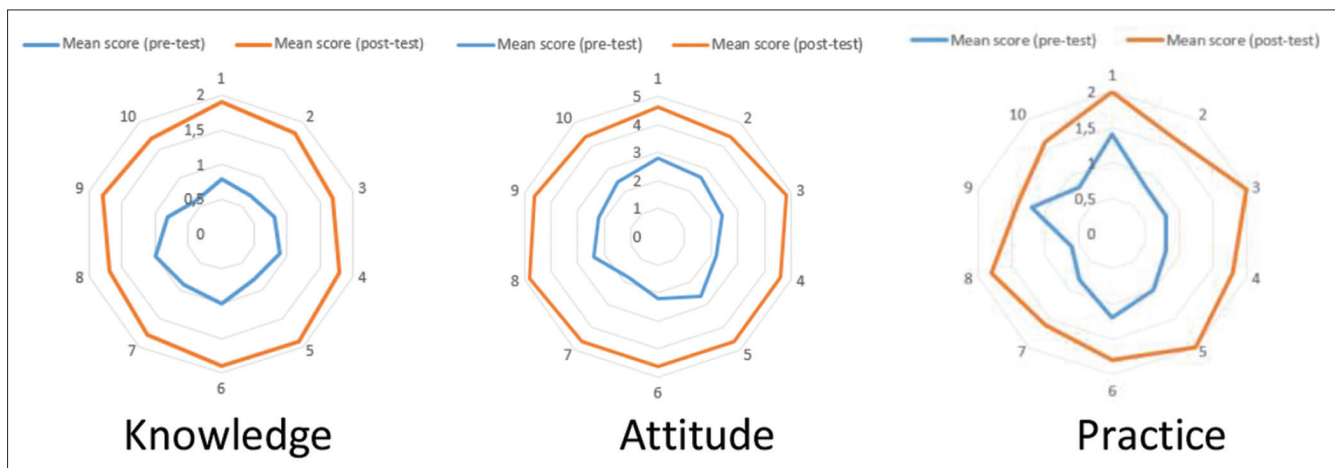


Figure 3: Knowledge, attitude, and practice of wives, the pre-test (before the training) and the post-test (after the training)

“bottom-up narrative,” which has to be developed to become a concept or a policy in redesigning the intervention model toward husbands in reproductive health. The adequate husband participation not only will provide better further impacts toward the wife health, compared with the one without support from the husband, but also will increase the sustainability of the MCH program that has been too heavily focused on the pregnant women only so far [35], [36].

Research limitations

This research was limited to be conducted on one community, namely, the Batak ethnic only. Indonesia and many countries have a variety of ethnics, so this condition requires the more varied illustration identification so that the adoption of illustrations in the research of involving many ethnics will require more time. However, the idea of identification in these illustrations will be more efficient in adopting the research approach somewhere else. Besides, the KAP increase effects still need to be tested in the group of husbands that has larger participants.

Conclusion

The illustration material is able to increase the KAP of the husbands having pregnant wives. Even the side effect of education to pregnant women is also obtained by the increase of the wife KAP. Such an illustration book, according to our knowledge, is the first at least for the Batak ethnic community. The illustration book like this one needs to be developed more intensively.

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