THE COLLABORATIVE MODEL OF HUSBANDS AND HEALTH OFFICERS ROLES IN IMPROVING MOTHER'S BEHAVIOUR TOWARDS PROVIDING EXCLUSIVE BREASTFEEDING: A QUALITATIVE STUDY

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Abstract
Breastfeeding is a biological reproduction process and a natural feeding habit with a major impact on improving the health of individual families and the global community. This research aims to create a collaborative model for the role of husbands and health workers in improving mother's behaviour towards providing exclusive breastfeeding. This research used a qualitative method, while data were collected using in-depth interviews, and Focus Group Discussion (FGD). The informants were the chairpersons of the Barru Regency Indonesian Midwives Association, the Head of the Mangkoso Health Community Center, health workers, the persons in charge of nutrition program, cadres, husbands, and pregnant women. The research results of in-depth interviews found that the husband's role in supporting exclusive breastfeeding was very low, due to the lack of understanding, while the health worker's role was controlled by midwives. There was no roles' division between nutrition workers and cadres. Therefore, Focus Group Discussion (FGD) results formed a collaborative model for the role of health workers and husbands in supporting exclusive breastfeeding, by dividing their respective roles from the third trimester of pregnancy until the 6th month. The midwives and nutrition officers provided education for pregnant women and their husbands regarding exclusive breastfeeding. The cadres' role included, controlling exclusive breastfeeding, as well as the husband's role by making house visits within 6 months. The collaborative model was made in the form of a module containing the roles of each health worker and husband, starting from the third trimester of pregnancy until the 6th month.

Keywords: Model, Module, Collaboration, exclusive breastfeeding

INTRODUCTION
Breast Milk or breastfeeding is given to babies aged 0 to 6 months without any additional food and drinks including water, except for medicines.1 Exclusive breastfeeding for the first six months and continued for up to 24 months has appeared to be the most effective preventive intervention to reduce mortality and morbidity in children, with the potential to save 1.3 million lives worldwide.2,3.

The global study of the Lancet Breastfeeding Series (2016) showed that exclusive breastfeeding reduced mortality rate by 88%, due to infection in baby younger than 3 months. Furthermore, it was stated that, as many as 31.36% to 37.94% of children were sick, since they did not receive exclusive breastfeeding.4 The profile report of the Barru District Health Office shows that the achievement rate of exclusive breastfeeding at Barru Regency in 2018 was 58.9%, which was far from the target set at 80%. The achievement rate at each Health Community Center in Barru Regency on 2018 was varied, with the lowest in Mangkoso (12.5%), followed by Padongko with (35.8%). 5 The factor affecting the low exclusive breastfeeding level in Indonesia is the lack of support from local people. Therefore, a demographic and health survey in Indonesia recommends the importance of supporting people in carrying out exclusive breastfeeding. 6,7 Research on factors related to exclusive breastfeeding has been carried out, namely, by Nasrabadi et al., (2019) and Britton & Gronwaldt (2006) 8, 9 which stated that there
was a relationship between husband’s support and the mother’s willingness to provide exclusive breastfeeding. Another study conducted by Mustamin et al., (2018) 10 found that the most dominant factor simultaneously influencing the intention of pregnant women in providing exclusive breastfeeding, is the health workers support with an OR value of 10.543. The support from officers and husbands for pregnant women was not clearly detailed, while the husbands’ support is only verbal. Based on the above problems, it is necessary to formulate the type of husband’s role (related to the informational, assessment, instrumental, and emotional supports) and the health workers’ roles (in the form of lactation education), as well as a collaborative model between them as outlined in the form of modules.

**METHOD**

**Research Design**

This research used a qualitative method with the following stages. The first stage was formulating the roles of husbands and health workers through an in-depth interview, which involved the person in charge of the nutrition and MCH program, the husband, pregnant women, and the Integrated Healthcare Center cadres. The second stage was formulating a collaborative model regarding the role of husbands with health workers through a Focus Group Discussion (FGD), and involving the persons in charge of the nutrition and MCH program, the husband, pregnant women, and the Integrated Healthcare Center cadres. The third stage was making a collaborative module on the roles of husbands and health workers. The fourth stage was the socialization of the collaborative Module based on the rules of Husbands and Health Workers in improving Mother’s behaviour towards Providing exclusive breastfeeding by involving the Head of the Health Office, Community Health Center, Nutrition and MCH Officers, husbands, pregnant women, and Integrated Healthcare Center cadres. The fifth stage was the revision of the module from the socialization results.

**Research Location**

This research was conducted in the work area of Mangkoso and Padangke, Barru Regency, South Sulawesi, due to the lowest coverage of exclusive breastfeeding in these areas.

**RESEARCH RESULT**

a. **Qualitative Research Results**

1. Cadres’ role

The cadre’s role in supporting exclusive breastfeeding in the work area of Mangkoso Community Health Center was only limited to the midwives when there were activities at the Integrated Health care Center such as, weighing toddlers, blood pressure checks, and measuring the height of toddlers. Regarding exclusive breastfeeding, it was recommended that mothers eat vegetables to support breast milk production. The results of the in-depth interview were as follows:

“... Our activities as cadres included, weighing of babies under 5 months and at pregnancy, tension checking, administering TT and PMT, assisting midwives in examinations, weighing, toddler’s height and head circumference measurement, counseling mothers that breastfeed babies for 3 months only, due to insufficient milk production. Therefore, we recommended that they eat a lot of vegetables such as, banana hearts, moringa leaves, etc” (Cadre A).

2. **Husband’s role**

Husbands support for mothers in providing exclusive breastfeeding was found to be very low. The results of interviews with husbands and pregnant women explained that husbands were less supportive, due to unawareness of their role in this term. They lacked this knowledge since they never received any counseling about it from the health workers. The results of the interview were as follows:

“... While my wife was breastfeeding, I helped by doing housework, wash dishes and clothes, and prepare food for her. I did not understand my role as a husband in terms of exclusive breastfeeding. Health workers have never given information about the benefits and importance of breastfeeding” (Husbands).

3. **Nutrition Officer’s role**

The nutrition officer’s role in supporting exclusive breastfeeding was collaborated with that of the midwives in providing counseling on Early Initiation of Breastfeeding (EIB) and how to attach babies to breastfeeding. Counseling regarding nutrition was carried out only for pregnant women and never involved the husband, therefore the husband’s support for his wife regarding the nutrition needed in pregnancy and breastfeeding was not optimal. The results of the interview were as follows:

“... My job at the Integrated Health care Center was to meet with the pregnant women and provide counseling on Early Initiation of Breastfeeding (EIB), guiding mothers on how to latch on to babies (since good attachment while breastfeeding makes it easier for babies to breastfeed), conducting education about the importance of exclusive breastfeeding, monitoring pregnant women that did not feed their babies with formula milk, and those foods that inhibit breast milk production.” (Nutrition Officer).

4. **Midwife’s role**

The midwife’s role in supporting exclusive breastfeeding starting from the third trimester of pregnancy included, conducting counseling on the benefits and early initiation of breastfeeding, breast care and nutrition to support milk production. Based on interviews, it was found that midwives played more roles to mothers in this term. This was evidenced by the counseling on the nutritional needs of mothers in supporting breast milk production provided by midwives. The interview results were as follows:

“... The midwife’s role during the third trimester of pregnancy was providing counseling on ANC, exclusive breastfeeding early initiation of breastfeeding, breast care, and nutritional recommendations supporting breast milk production. Meanwhile, given birth again reinforced exclusive breastfeeding, IMD, breast care, and nutrition. Therefore, the mothers were bound to fight until the baby is 6 months old. For husbands, there was no special counseling conducted, however, there were programs of being self-responsible in the family, and those invited included, husbands, in-laws, and mothers. They were special programs for Mangkoso Community Health Center, since it was innovative” (Health Workers - Midwife).

b. **Collaborative Model**

The results of the Focus Group Discussion (FGD)
involving midwives, nutrition officer, cadres, and husbands showed a collaborative model of husband’s role with health workers in improving mother’s behaviour towards exclusive breastfeeding. In this case, it was agreed that for the mothers’ smoothness in providing exclusive breastfeeding, the types and roles of the midwife, nutritionist, cadres, and husbands were needed to be made clearer starting from the third trimester of pregnancy until the baby was 6 months old. Therefore, to accelerate the implementation of collaborative model between health workers and husbands in the working area of the Mangkoso Community Health Center, a module regarding this term was created. This contained the roles of each health worker and husband, as well as the cooperative models starting from the third trimester of pregnancy until the 6th month.

**DISCUSSION**

### a. Health Workers Role

A strong commitment from health workers (midwives, nutrition officers, and cadres) in increasing the exclusive breastfeeding program was needed, since they always interact directly with the community and provided explanations and information on exclusive breastfeeding. Assuming this commitment was weak or even almost non-existent, it causes difficulty to the community in providing exclusive breastfeeding\(^{11,12,13}\). The results showed that health workers role (midwives, nutrition officers, and cadres) in order to support exclusive breastfeeding in the working area of Mangkoso Health Center included, providing counseling to mothers in the third trimester of pregnancy about the benefits of exclusive breastfeeding, early initiation of breastfeeding (IMB), breast care methods, and nutritional needs to support breast milk production. The roles of nutrition officers and cadres were only to assist midwives in conducting counseling, however, there was no division of duties for each officer. From the informants, information was obtained that the officers’ role, both midwives, nutrition officers, and cadres, had provided a lot of education about the importance of exclusive breastfeeding therefore breastfeeding worked out well.

This research results were in line with the theory that influenced exclusive breastfeeding, which was supported by the health workers. They were also in line with the research conducted by Sadji, (2019)\(^ {14}\) which showed that the health workers’ role was a factor associated with exclusive breastfeeding. The research conducted by Windari, Dewi, and Siswanto, (2017)\(^ {15}\) found a relationship between the support of officers in exclusive breastfeeding for 6 months.

### b. Husband Role

The husbands were important in mothers’ life, encouraging their wives before others, and were the life partner of their wife and father of their children\(^ {16}\). Furthermore, they had full responsibility in the family, not only as a breadwinner, and also as a motivator and supporter in various policies to be decided including family planning\(^ {17}\). The results showed that the husbands’ role in supporting exclusive breastfeeding in working area of Mangkoso Community Health Center was only limited to washing, cooking, and earning a living. Their lack of understanding about the benefits of exclusive breastfeeding, early initiation, and the nutrition needed, was due to the limited counseling from the health workers, midwives, and cadres. They always take their wives to Community Health Center, however, never involved them in the counseling conducted by the midwives.

This was reinforced by the research results conducted by Britton and Gronwaldt\(^ {18}\) in Brazil, which showed that family support greatly determined the mothers’ behaviour in exclusive breastfeeding. The research in Arizona found that family support, especially from husband and mother, increased during breastfeeding, especially in the first six months.\(^ {19}\) Also, research in Southern Alberta showed that support from husband was very meaningful and increased the mother’s confidence in giving exclusive breastfeeding to baby.\(^ {20}\)

### c. Collaborative Model

Collaboration is a mutually beneficial and well-defined relationship that has been agreed upon by two or more organizations to achieve common goals. The relationship includes commitments and objectives, the development structure and sharing of responsibility, mutual benefit, authority, accountability, resources, and rewards.\(^ {21}\) The results through a collaborative model between midwives, nutrition officers, cadres, and husbands in supporting exclusive breastfeeding, divided the roles from the 1st to the 10th meeting or during the third trimester of the pregnancy to the 6th month of the baby. In the third trimester, midwives played roles in educating pregnant women and husbands about the advantages and benefits of exclusive breastfeeding, the benefits of Early Initiation of Breastfeeding (IMD), techniques for carrying out IMD, breastfeeding techniques, breast care, how to squeeze breast milk, how to store breast milk, toxins, and husband’s role types. Nutrition officers in the third trimester played roles in educating pregnant women and husbands about balanced nutrition for breastfeeding mothers, nutritious food sources, and eating myths. Meanwhile, the cadres’ role was only to assist midwives and nutrition officers when providing education to mothers and husbands.

Healthcare team collaboration with the husbands was aimed at strengthening relationships among different health professions such as, midwives, nutritionists, cadres, and social workers. Their main objective was to provide the right service through the health team, at the right time, and place.

The research supporting the collaboration between health workers, which was conducted by Lestari, Saleh, and Syahrir, (2017)\(^{23}\) showed that the implementation of inter-professional collaboration, works well in filling out patient development records, integrated with strong and positive correlation. The research conducted by Merrigan et al., (2016)\(^ {24}\), in the Philadelphia Children’s Hospital showed that the partnerships between professions helped in designing, assessing, and advancing care services to patients and families. The research conducted by Ingumbor et al., (2014)\(^ {25}\), showed the ability of partnering physicians and other health workers, in the effective maintenance of patients’ treatment, and also contributed to the treatment of HIV patients with relevant support mechanisms. Similarly, the research conducted by Bond, Blenkinsopp, and Raynor, (2012)\(^ {22}\), stated that partnerships have the potential to improve access, quality, and efficiency in health care. Therefore, it needs to be developed and thoroughly evaluated, and lessons learned widely should be shared to guide policymakers.

**CONCLUSIONS AND RECOMMENDATIONS**
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a. Conclusion
The collaborative model on the roles of health workers and husbands in supporting exclusive breastfeeding was conducted by dividing their respective roles from the third trimester of pregnancy until the baby turned 6 months old. The midwives and nutrition officers’ roles included, educating the pregnant women and their husbands about exclusive breastfeeding. While the cadres were involved in controlling exclusive breastfeeding as well as monitoring husbands’ roles by making monthly home visits within 6 months.

b. Recommendation
In order to increase the behaviour of exclusive breastfeeding, the collaboration between health workers and husbands is needed.

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