The Role of Social Support for Improving Kangaroo Mother Care Practice among Low Birth Weight Infants' Mothers in North Jakarta

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Abstract: Kangaroo Mother Care (KMC) is a skin-to-skin contact between mother and newborn, frequent or exclusive breastfeeding, and early discharge from the hospital. Social support is crucial for improving KMC practice among Low Birth Weight Infants (LBWI)'s mothers after discharge from hospital. The objective of this study was to assess the relationship between social support and KMC practice among LBWI's mothers. This research was a cross-sectional approach implemented in three village in North Jakarta that are Cilincing, Koja, and Tanjung Priok. The respondents in this study were 50 LBWI's mothers post-discharged from Koja Hospital, North Jakarta. The sample was selected by consecutive sampling. The data were collected by questionnaire and interview. Mann-Whitney U-test was used to analyzed the data. The average age of respondents was 31 years old, the average of parity was 2 children, most of the respondents had a low level of education (64%), all were didn't work, and 56% of their home was close to health facility. The average duration of KMC practice was 3 hours per day. This study found that social support consisting of family support (z=-2,54, p value<0,05, CI 95%) and community health workers support (z=-2.70, p value<0,05, CI 95%) had significant relationship with practice of KMC among LBWI's mothers. The family support were in the form of replacing mother to do KMC, helps to tie KMC clothes, assist in carrying out household chores and the community health workers support were in the form of provide education about KMC, reminding mothers to practice KMC, and correcting the KMC practice. Information and education to the family and community members are required continuously in order to support LBWI's mothers improving KMC practice.

1 INTRODUCTION

The deaths among newborn in developing countries still very high, that is 40% of all deaths of under five years age children (Lawn et al., 2005). Low Birth Weight (LBW) was one of the causes of the death. About 95% of premature and/or LBW are born each in the developing countries (Lawn et al., 2010). Indonesian Demographic and Health Surveys (Badan Kependudukan dan Keluarga Berencana Nasional, Statistik, & Kesehatan, 2013) explored that Neonatal Mortality Rate is still higher than Mortality Rate among Infant and Mortality Rate among under five children in Indonesia.

Many health problems occurs among Low Birth Weight Infants (LBWI) because of the organs of the body that have not yet developed perfectly. They are greater risk for hypothermi, infectious problems, growth and development problems, that affects survival (Soleimani et al., 2014; Ballot, et al., 2012). The LBWI are at risk for keeping the temperature stable. They are easily get cold or hypothermy that could affect to infection (USAID and MCHIP, 2012)

Kangaroo Mother Care is one method of improving thermal care and increase survival rate among LBWI (USAID and MCHIP, 2012). It has been proven as an effective approach for caring the LBWI. Kangaroo Mother Care (KMC) is early, prolonged, and continuous skin-to-skin contact between mother and infants. The practice of KMC starts in hospital and continue at home after discharge. It will improve breastfeeding and increase survival rate among LBWI (WHO, 2003).

Some research explored that many benefits of KMC practice, such as increasing breastfeeding, increase love and affection between mother and infants, increase weight, body length and head circumference, lower hospital stay, and improving

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survival rate (Sloan et al., 1994; Charpak & Ruiz-pela, 2000; Charpak et al., 2017).

KMC practice among LBWI's mothers starts at hospital and continue at home, with the support from health workers. But many obstacles that must be faced by LBWI's mothers in practicing KMC at home, both internal and eksternal factors. There are few barriers of the practice of KMC at home, such as household chores, looking after the child, and support from family (Nguah et al., 2011; Quasem et al., 2003). One of the achievement of KMC practice at home is determined by support from the social environment include family, relatives, and community.

KMC practice can be influenced by various factors such as individual and social factors. Social support is very important for improving KMC practice among LBWI's mothers after discharge from hospital. Social support is a crucial factor for the success of KMC practice (Charpak & Ruiz-pela, 2000). Social support refers to assistance received from family members, relatives, and community to perform KMC. Social support including one of the enablers to KMC adoption (Chan et al., 2017).

Bergh et al., (2018) had conducted research on LBWI's mothers perceptions and practices of KMC in Koja Hospital, North Jakarta. The sustainability of KMC practice among LBWI's mothers after discharged from hospital is very important. The practice of KMC will influence on the health conditions and infants growth. Therefore, social support is needed by LBWI's mothers in order to practice KMC properly. The objective of the study was to assess the relationship between social support and the practice of KMC among LBWI's mothers post-discharged from Koja Hospital, North Jakarta.

2 METHOD

This research was a cross-sectional approach to assess the relationship between social support consisting of family support and community health workers support and the practice of KMC among LBWI's mothers. It implemented in three village in North Jakarta that are Cilincing, Koja, and Tanjung Priok. The respondents in this study were 50 LBWI's mothers post-discharged from Koja Hospital, North Jakarta. The sample was selected by consecutive sampling.

The practice of KMC was the dependent variable in this study, while social support consisting of family support and community health workers support were the independent variables. The data were collected by questionnaire and interview to identify socio-demographic characteristics and the practice of KMC. Mann-Whitney U-test was used to analyzed the data.

3 RESULTS

3.1 Socio-demographic Characteristics

In this study, the average age of respondents was 31 years old, the average of parity was 2 children, most of the respondents had a low level of education (64%), all were didn't work, and 56% of their home was close to health facility.

3.2 The KMC Practice

All of LBWI's mothers in this study were continue to practice KMC at home after discharge from Koja Hospital, North Jakarta. The mothers were practiced KMC with an average duration of 3 hours per day. Most of the respondents were practiced KMC in the morning after they've finished their household works. Then they were continue practiced KMC at night assisted by their husband after work. In addition, they were assisted also by family members such as grandmothers, auties, and other family members in practicing KMC.

3.3 Relationship between Social Support and the Practice of KMC

3.3.1 Relationship between Family Support and the Practice of KMC

Majority of respondents in this study was supported by family members in practicing KMC (74%). The family supports were in the form of replacing mother to do KMC, helps to tie KMC clothes, and assist in carrying out household chores.

Mann-Whitney U-test found that family supports had significant relationship with the practice of KMC among LBWI's mothers ($z=-2,54$, p value$<0,05$, CI 95%). The mean duration of KMC practice was higher among LBWI's mothers who get support from their families (Mean=3,32 hours, SD=1,03) compared to LBWI's mothers who did not get the support from the families (Mean=2,54 hours, SD=0,52). It can be seen in the following table.

Table 1: Relationship between Family Support and Practice of KMC

KMC Practice	Family Support	n	Mean	SD	SE	p value
	No	13	2,54	0,52	0,14	0,01
	Yes	37	3,32	1,03	0,17	

3.3.2 Relationship between Community Health Workers Support and the Practice of KMC

Majority of respondents in this study was supported by community health workers in practicing KMC (52%). The community health workers support were in the form of provide education about KMC, reminding mothers to practice KMC, and correcting the KMC practice.

Mann-Whitney U-test found that community health workers supports had significant relationship with the practice of KMC among LBWI's mothers (z=-2,70, p value<0,05, CI 95%). The mean duration of KMC practice was higher among LBWI's mothers who get the support from community health workers (Mean=3,50 hours, SD=1,10) compared to LBWI's mothers mothers who did not get the support from community health workers (Mean=2,71 hours, SD=0,62). It can be seen in the following table.

Table 2: Relationship between Community Health Workers Support and the Practice of KMCPractice of KMC

Community Health Workers Support	n	Mean	SD	SE	p value
No	13	2,71	0,62	0,13	0,007
Yes	37	3,50	1,10	0,22	

4 DISCUSSION

Practice is the realization of the knowledge and attitude of a real deed. Action is a person's response to stimulus in real or open form (Notoatmodjo, 2007). According to Notoatmodjo (2012), practice is the movement or action of the body after getting stimulation or adaptation from inside or outside the body of an environment.

In this study, LBWI's mothers were practiced KMC with a mean duration of 3,12 hours per day. Some studies showed different durations of time in practicing KMC at home. A study in India (Dawar et al., 2019) showed that KMC is practiced with an average duration of 3.3 hours per day. While other study in India found that mothers practice KMC with an average duration of 1.3 hours per day (Raajashri, R & Adhisivam, B, 2018); 5 hours per day (Rasaily et al., 2017). Study in Nigeria (Opara, PI & Okorie, 2017) showed that mothers practiced KMC with an average of 3.25 hours per day. While other study (Bazzano et al., 2012) found that mothers practice KMC for 2 hours per day.

Behavior is a person's response to a stimulus from the environment. Behavior is influenced by several factors, consisting of internal and external factors. Internal factors derived from the person itself, include social demographic factors and external factors derived from from outside of the person, include socio-cultur value, community, social environments, economic and politic condition, government policy, etc. (Notoatmodjo, 2003). KMC practice can be influenced by various factors such as individual and social factors.

Social support is very important for improving KMC practice among LBWI's mothers after discharge from hospital. Social support include community support is a crucial factor the success of KMC practice (Charpak & Ruiz-pela, 2000). Social support is the kind of help received from other people to practice KMC. Social support including one of the enablers to KMC adoption. Chan et al., (2017) found barriers and enablers to KMC adoption, that are buy-in (the adoption of KMC and the advantages), social support and empowerment (support from environment such as family members and community), time (time availability to practice KMC), medical problems (health problems of mothers or infants), access (the information provided regarding KMC and the of availability of KMC resources), and cultural norms cultural belief, family values of caring the newborn) (Chan et al., 2017).

Social support in this study consist of family support and community health workers support. In this study, family support had significant relationship with KMC practice among LBWI's mothers in North Jakarta. The family supports were in the form of replacing mother to do KMC, helps to tie KMC clothes, and assist in carrying out household chores.

Family support is an important component of KMC practice. Family support referred to the assistance from other people (family members) to perform KMC (Mustikawati et al., 2020). Family support may derived from the LBWI's fathers, grandmothers, and relatives in family. The supports will increase mother's self evidence to care the LBWI's, therefore will increase KMC practice (Effendi & Ichwan, 2012).

Study by Mustikawati et al., (2020) found that family support was one of the facilitators of KMC practice at home or KMC in the community. Another study by Effendi & Ichwan (2012) showed that social support had relationship with KMC practice. The social support consit of tangible and emotional support. Example of tangible support was helping mothers in practicing KMC or doing house chores. Mothers need this help to practice KMC routinely every day.

A study by Bello et al (Morhason-Bello, Adedokun & Ojengbede, 2009) found that KMC practice related with the social support given during childbirth. The early period of breast feeding after delivery will affect the KMC practice. The success of KMC influenced by family support, include husband, grandmother, or other relatives in the family.

The emotional support is very important to support mothers during delivery. The physiologic support from the family will give strength to mothers to care the LBWI's. She'll be able to take better care of the LBWI's and ready in the face of problems in taking care of the LBWI's (Effendi & Ichwan, 2012).

LBWI's mothers will usually face various problems in taking care of the small baby that can cause stress. Therefore, the mothers need any help from outside to dealing with the stress. Social support received from family or other relatives will help LBWI's mothers decrease the stress (Eisengart et al., 2003).

Caltabiano et al., (1996) said that emotional support is very important for health status of individual. Emotional support given for LBWI's mothers after delivery will makes mothers feel enjoy, comfortable, feel loved and cared for that will have an impact on LBWI's care and KMC practice. The mothers will do her role better with the support.

This study showed that community health workers support had significant relationship with KMC practice among LBWI's mothers in North Jakarta. The community health workers support were in the form of provide education about KMC, reminding mothers to practice KMC, and correcting the KMC practice. Community health workers in this study play a role in providing information and education about KMC to LBWI's mothers.

Study by Effendi & Ichwan (2012) found a significant relationship between informational support and KMC practice. Informational support refers to the information needed to do the activities and to handle any problems found in doing the practice. The information will help mothers to take the actions (M. Robin DiMatteo, 2001). Information and education of caring the LBWI's include KMC practice will be very important to ensure KMC practice among LBWI's mothers.

The success of KMC need support from individual and community. They will contribute to the continuity of KMC practice after discharge from hospital (USAID and MCHIP, 2012). Therefore, mothers and family will practice KMC at home well without any reluctants or barriers. Problems found in practicing KMC will faced together by mothers and families.

Study by Chan et al., (2016) explained that several things needed to adopt practice KMC, that are the availability of time, support from relatives include family and community, and medical condition. Promotion and education to LBWI's mothers and family are required to increase KMC practice, include home visit by community health workers.

Researches conducted in Bangladesh, India, and Ghana (Darmstadt et al., 2006; Quasem et al., 2003b; Sloan et al., 2008) showed that education provided by community health workers has been shown to improve KMC practice. LBWI's mothers want to practice KMC when the benefits of KMC are explained to them before (in the antenatal or postnatal period). In addition, the understanding of KMC through a cultural approach that suits the community and the solution provided when facing problems in practicing KMC will increase KMC practice among LBWI's mothers.

5 CONCLUSIONS

This study showed that social support consting of family support and community health workers support had significant relationship with KMC practice among LBWI's mothers in North Jakarta. Information and education to family and community members are required continuously in order to support LBWI's mothers improving KMC practice.

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