

Barriers and support to exclusive breastfeeding in Sukoharjo district, Central Java province, Indonesia: a qualitative study

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Abstract

Purpose – The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of a child's life. However, while the national coverage was 61.33%, the coverage in Sukoharjo was 39.33%. Effective intervention is needed to promote the importance of exclusive breastfeeding, and this requires knowledge of the barriers and support structures in place. This study analyzed the supports and barriers of exclusive breastfeeding in Sukoharjo, Central Java, Indonesia.

Design/methodology/approach – This qualitative study used in-depth interviews conducted from December 2017 to March 2018. The population consisted of 33 informants (29 mothers with babies over six months of age, a pregnant mother, two midwives working in the community health center and a staff member in the district health department).

Findings – There were barriers to and support for exclusive breastfeeding in Sukoharjo, Central Java province, Indonesia. The district already has support systems in place, while the barriers emerge from society, the baby's condition, environmental and other sources. The government has tried to overcome the barriers.

Research limitations/implications – The limitation of this study was that the triangulation method was not utilized. However, the use of various informants strengthened the findings.

Practical implications – The district government, especially the health department, needs to establish a program to evaluate existing exclusive breastfeeding support programs thoroughly. Smarter and more comprehensive interventions may be needed, for example, by integrating various supports into one activity. For researchers, the findings of this study imply that they can conduct experimental community research using the framework of the two aforementioned theories of behavior change. For example, investigation of combining the support of trained peers with the presence of family members such as the grandmothers of the babies. If both types of support are conducted concurrently, it may strengthen support and reduce barriers from either inside or outside the home.

Social implications – The district government, especially the health department, needs to establish a program to evaluate existing exclusive breastfeeding support programs thoroughly. Smarter and more comprehensive interventions may be needed, for example, by integrating various supports into one activity. For researchers, the findings of this study imply that they can conduct experimental community research using



the framework of the two aforementioned theories of behavior change. For example, investigation of combining the support of trained peers with the presence of family members such as the grandmothers of the babies. If both types of support are conducted concurrently, it may strengthen support and reduce barriers from either inside or outside the home.

Originality/value – There are barriers to exclusive breastfeeding in Sukoharjo, but the government has made effective attempts to overcome them. The support systems in place were in line with the theory of planned behavior (TPB) and social cognitive theory (SCT).

Keywords Exclusive breastfeeding, Support, Indonesia

Paper type Research paper

Introduction

The health and development of infants and children have become a significant concern in a nation's Sustainable Development Goals (SDGs). Therefore, there is a need to determine methods to promote healthy nutrition and child development. Adequate breastfeeding is recommended as one of the critical interventions for a good start for a newborn baby [1]. Over the years, there has been consistent and robust global evidence on the importance of exclusive breastfeeding as it improves a child's health and development, thereby reducing the infant mortality rate [2].

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) have recommended that mothers should commence breastfeeding within the first hour after birth and should continue with exclusive breastfeeding for six months thereafter. It is further advised that this practice should be continued until the age of two or more years, with additional safe and adequate supplementary feeding strategies gradually introduced after the first six months. A total of six months of exclusive breastfeeding is the ideal food for babies as it provides the nutrients and energy needed for physical and neurological growth and development [3].

According to UNICEF [4], the global coverage of exclusive breastfeeding is still very low at only 41%. The Ministry of Health of the Republic of Indonesia [5] reported a 61.33% national coverage [5], while the Sukoharjo District Health Office [6] reported a 39.33% local coverage. The breastfeeding practices in most countries are still under the WHO recommendation [7]. According to Nkala and Msuya [8], the WHO recommendation is to achieve 90% coverage of exclusive breastfeeding. The low coverage of breastfeeding has been connected to barriers in the application. Kavle [9] argued that the presence of barriers can be divided into barriers prepartum, barriers one day postpartum and barriers to maintaining breastfeeding for the first six months. Chapman *et al.* [10] stated that the risk of poor health, which is related to the lack of quality breastfeeding, was evident. Therefore, there is an urgent need for public health policies to increase awareness of the importance of exclusive breastfeeding for the first six months.

Sukoharjo is a district in Central Java, Indonesia. Similar to other regions in the nation, the achievement of exclusive breastfeeding is still below national and global recommendations. The Sukoharjo District Health Office [6] reported that exclusive breastfeeding coverage was 39.33%.

This qualitative research study aimed to explore the supports and barriers that contribute to the achievement of exclusive breastfeeding in Sukoharjo. The results of this study aimed to identify barriers as well as existing supports, thereby making it the basis for the improvement of government programs to increase the coverage of exclusive breastfeeding.

Methods

Research setting

This study was conducted in Sukoharjo district, Central Java, Indonesia, in 12 subdistricts where most residents work as farmers, traders or public and private employees in factories

and organizations. Many women help their husbands by working outside their homes and therefore tend to have dual duties.

Similar to other regions, the health system provides public and private services. The public sector consists of district health offices and community health centers, which are an extension of the district health office that helps to carry out key functions. Community health centers conduct management function for coordinating, planning, implementing and evaluating health-related programs.

Research design and the sampling method

This qualitative research aimed to explore an in-depth understanding of the supports and barriers associated with practicing six months of exclusive breastfeeding using the maximum variation sampling technique. Informants consisted of (1) mothers with babies over six months old, (2) pregnant women, (3) midwives working in community health centers and (4) a health program manager at the district level. A total of 33 informants were utilized, with 29 mothers who had babies over six months, a member of the pregnant women class, two midwives working in the community health centers and one staff member in the Sukoharjo health department.

A total of four groups of informants were utilized with the following objectives. The information expected from mothers with babies over six months old aimed to find out the support and barriers encountered during exclusive breastfeeding. Interviews with pregnant mothers aimed to obtain information related to support they received to prepare the newborn baby, especially relating to exclusive breastfeeding. The information correlated with regulations and support from stakeholders was obtained through interviews with the head of the public health section of the district health department. In addition to the information related to the support and barriers encountered by breastfeeding mothers, interviews were conducted with midwives working at the community health centers. In Indonesia, midwives working at the community health centers have direct access to breastfeeding mothers and related families. Interviews with midwives working at the community health centers were expected to extend the information compared to interviews with midwives working in the district health department.

Data collection

In-depth interviews were conducted from December 2017 to March 2019 using a semi-structured questionnaire. Topics included (1) supporters and (2) inhibitors of exclusive breastfeeding. The questions in the topic guide were obtained from concepts in the theory of health behavior change, especially the theory of planned behavior (TPB) and social cognitive theory (SCT). The constructs in the two theories strongly emphasized the importance of understanding the supports and existing barriers that may affect behavior change. Through understanding the existing supports and barriers, it was very helpful to design programs that could change the expected behavior.

Interviews with mothers of babies over six months were conducted at home, while those with midwives were carried out at the community health centers. Furthermore, the interviews with the public health leader at the district were carried out in the office. The first author and two trained research assistants conducted the interviews in the Indonesian language.

The data analysis

A content analysis was applied to *verbatim* transcripts using interviewers' records. First, the author read all the transcripts repeatedly, which was followed by identifying and summarizing the meaning units. Codes were obtained from condensed meaning units which were realized by words or phrases and grouped into subcategories linked to each other.

Examples of the analysis from meaning units to codes are shown in [Table 1](#), while those of codes to subcategories in [Table 2](#).

Reliability

The credibility and reliability of this analysis were ascertained using source triangulation by interviewing a variety of informants from various positions. The research informants consisted of (1) mothers with over six months old babies, (2) pregnant women, (3) midwives working in community health centers and (4) staff in the Sukoharjo health department.

Ethical clearance

Ethical clearance was obtained from the health research ethics committee of Universitas Muhammadiyah Surakarta No: 1050/B.1/KEPK-FKUMS/II/2018.

Results

The total number of participants interviewed was 33. The demographic data of informants are shown in [Table 3](#).

Topic	Meaning units	Condensed meaning units	Codes
What are the barriers to exclusive breastfeeding practices?	"The average failure was in the first three days, so because breast milk has not come out much, finally given another drink and it was supported by grandmother and also from other family members"	The average failure was in the first three days because breast milk was not easily produced until finally given another drink, it was supported by grandmother and also from other family members	Breast milk does not come out at the beginning, grandmother's and family's influence
What are the support structures for exclusive breastfeeding practices	"Who encourages mothers to give exclusive breast milk ?" "So, because there are many benefits, now there is a cellphone, so I search information from it, then if I see a doctor or midwife, I was told about the benefits of exclusive breast milk"	"There are many benefits, now there is a cellphone, so I search for information on it, then if I saw a doctor or midwife, I was told about the benefits of exclusive breast milk"	Social media, midwife and doctor's support

Table 1.
Examples of the coding
process from meaning
units to codes

Topic	Codes	Subcategory
What are the barriers to exclusive breastfeeding practices	Grandmother's influence Husband's influence Aunt's influence	Negative family influence
What are the supports for exclusive breastfeeding practices	There are pumping and storage facilities at home Office facility in the form of pumping time Storage facility for breast milk at the workplace	Facility supports

Table 2.
Examples of the coding
process from codes to
subcategory

Table 3.
Demographic data of
informants

Informant's characteristics	Total	%
<i>Position</i>		
Mothers with babies over six months old	29	87.9
Pregnant women	1	3.0
Midwives at the community health center	2	6.1
Head of the public health section of the district health department	1	3.0
<i>Sex</i>		
Female	33	100
Male	0	0
<i>Age (years)</i>		
Under 35/ over 35	22	66.7
	11	33.3
<i>Education</i>		
Elementary	1	3.0
Junior high School	4	12.1
Senior high School	17	51.6
Diploma II program	1	3.0
Diploma III program	3	9.1
Undergraduate	6	18.2
Graduate	1	3.0
<i>Occupation Status</i>		
Housewives	13	39.4
Carrier women	20	60.6

The theme of portrait to barriers and supports of exclusive breastfeeding in Sukoharjo reflected that the district already has support systems in place while having many barriers to exclusive breastfeeding emerging from social, baby's condition, environmental and other sources. A summary of ten categories consisting of five classes of barriers and five support structures were revealed (Table 4).

The five categories of supports consisted of (1) motivation from spiritual values, (2) social support, (3) availability of facilities, (4) government regulation and program support and (5) information and education support. While the five categories of barriers comprised (1) social barriers, (2) baby's condition, (3) lack of motivation and lactation management, (4) lack of delivery helper commitment for early breastfeeding initiation and (5) funding barriers of social worker cadres.

The results indicate that there are a number of barriers to exclusive breastfeeding in Sukoharjo. The results also indicate that the support for exclusive breastfeeding in Sukoharjo has considered every level of individual, environment and government regulations and attempts to tackle existing barriers in practice.

Barriers of exclusive breastfeeding

Social barriers. Social barriers led to the promotion of formula milk, with negative influences from family and friends. However, one of the barriers to the practice of six months of exclusive breastfeeding was the promotion of formula milk. "... when I went to the supermarket and was seen carrying a baby, I was offered formula milk products, even though they said breast milk was better" (baby's mother, 37 years old).

External barriers that negatively influenced families' failure of exclusive breastfeeding included intervention from the husband, baby's aunt and grandparents. In general, it was highly influenced by grandmothers living together or close by. "My mother told me to give

Topic	Subcategory	Category	Theme
What are the barriers to exclusive breastfeeding practices	Promotion of formula milk	Social barriers	Portrait of barriers and supports to exclusive breastfeeding
	Negative family influence		
	The negative influence of others		
	Influence of the baby's condition	Baby's condition	
	mother's lack of motivation	Lack of motivation and lactation management	
	Incorrect lactation management		
	Lack of commitment to childbirth assistance for early breastfeeding initiation	Lack of commitment to childbirth assistance for early breastfeeding initiation	
What are the supports for exclusive breastfeeding practices	Funding barrier	Funding barrier of social worker cadres	
	Spiritual value support	Motivation and spiritual value	
	good maternal motivation support		
	Family, health staff and midwife support as a delivery helper	Social supports	
	Pumping and storage facility support both at home and workplace	Availability of facility	
	Government regulation support	Support from government regulation and program	
	Workplace support		
	Government program support		
	Information and education support	Information and education	

Table 4.
The example of coding processes for subcategories to category and theme

formula milk so that whenever the baby was left alone, it would be comfortable, however, my baby was rather fussy" (baby's mother, 36 years old). "Sometimes the grandmother was impatient, especially when the breast milk stored in the refrigerator becomes warm (baby's mother, 33 years old). Another external barrier was from friends as they tend to dish out advice meant for the good of the baby and mother, which might end up harming them" . . . (baby's mother, 25 years old).

Baby's condition. The difficulty associated with extracting breast milk led to sickness and fussiness, which affected the baby's health condition. According to a 29-year-old mother, "I gave breast milk until the age my baby was five days old, then I complained to the doctor that my baby has jaundice, though it wasn't severe, she was finally taken to the light-room. At that time, my milk was not too much, and at noon, the hospital asked me to provide some milk, but the only solution then was formula milk" (baby's mother, 29 years old).

Lack of motivation and lactation management. The first internal barrier was the lack of mother's motivation. ". . . Using formula milk also makes it easy for me to go anywhere as she did not depend on breast milk alone. However, this was because I needed to work, and I was afraid it would not be enough" (baby's mother, 34 years old).

Incorrect management of lactation also influenced the failure of exclusive breastfeeding. During the first three days after birth, there tends to be reduced flow. However, babies do

survive with the administration of other food or drink. The first three days after birth are usually a crucial time for the baby's survival or failure. "... from the first to the third day, there was no flow of milk. Therefore, they felt it was not enough and mixed it with formula milk" (a community health center midwife, 40 years old). "... the common failure was in the first three days" (a community health center midwife, 40 years old). Mothers sometimes have less milk, even though its production is gradual and becomes enough with optimal frequency. "Three days after arriving at home, I utilized both formula and breast milk because there was not much breast milk (mother, 35 years old).

Lack of delivery helper commitment in early breastfeeding initiation. "All midwives in Sukoharjo have been trained to support initiating breastfeeding early" (a community health center midwife, 40 years old). This is the first strategy for exclusive breastfeeding production, which is very important. The facts in the field showed that not all midwives had a good commitment to conducting early breastfeeding initiation after assisting in childbirth. "... all midwives in Sukoharjo have been trained, but sometimes they fail to practice" (a community health center midwife, 40 years old). "I am not certain my friends carried out early breastfeeding initiatives. However, if they did, it is good because it helps make babies stay healthy" (staff in Sukoharjo health department, 49 years old).

The funding barrier of social worker cadres. One of the strategies of the Sukoharjo Government to promote exclusive breastfeeding was through social workers. This was made known during a meeting on exclusive breastfeeding (staff in Sukoharjo health department, 49 years old). Unfortunately, there are no funding sources to provide rewards to cadres in social workers. "... social worker cadres helped a lot in educating exclusive breastfeeding, but there were financial constraints to reward them" (staff in Sukoharjo health department, 49 years old).

Support of exclusive breastfeeding

Motivation and spiritual value. These statements showed motivation. "It's my desire because when I breastfeed, I feel closer to my child" (mother, 21 years old). "... I adopted it because I was always at home without carrying out other external activities" (mother, 24 years old).

One of the informants who succeeded in the practice of exclusive breastfeeding revealed that she practiced exclusive breastfeeding due to her belief in the religious rules which advocated giving breast milk. "In my opinion, it is healthier" (mother, 37 years old).

Social support. Social support emerged from outside the individual, with the first came from various persons in the family such as the baby's grandparents, aunt and father. "... the most support came from mom, aunt, other family members" (mother, 25 years old).

Social support also came from health staff that supported the practice such as doctors, midwives and pediatricians. "... for every visit to the hospital for immunization, I was asked if my baby was still fed with breast milk, and not formula" (mother, 31 years old). "... for every visit, I was educated by the midwife and also the doctor" (mother, 30 years old).

Availability of facilities. Additional support came from the availability of facilities such as storage and pumping equipment. Facilities for breast milk storage were available both at home and at the workplace, while pumping was owned by the baby's mother. "... yes, my baby was given exclusive breastfeeding, even though I am a working-class lady because I pumped it, and kept it in the freezer" (mother, 30 years old). "I also pumped at work, as there was a milk storage facility located there" (mother, 25 years old).

Government regulation and program. The Sukoharjo Government is different when compared to others related to supporting the implementation and achievement of exclusive breastfeeding. There was available specific regulation on the rules of individuals and agencies in supporting exclusive breastfeeding. Therefore, it supported exclusive and eliminated barriers that could lead to its failure. "... also, there is support from the regulation

of the regent, on its increment. The regent regulation number 13 of 2013 concerning six months" exclusive breastfeeding.

Regulatory support instructs institutions such as offices, companies and supermarkets to provide time and facilities for pumping and storing breast milk. "... these companies must provide time for their workers to pump (staff in Sukoharjo health department, 49 years old). "... one of the requirements for permission to establish supermarkets in the Sukoharjo region was to provide breastfeeding space. ..." (staff in Sukoharjo health department, 49 years old). "Every company or institution must provide a breastfeeding room, and we showed an example by providing a feeding and pumping room in our district office. The community health center also has the same facilities" (staff in Sukoharjo health department, 49 years old).

Besides recent regulation, the Sukoharjo Government also implemented pregnant woman class programs, a national program aimed at reducing maternal and infant mortalities. One of the materials presented was exclusive breastfeeding (a community health center midwives, 41 years old). Another national program carried out was postpartum visits during which the right feeding position was practiced. "... A puerperal visit is now mandatory during which the breastfeeding positions are practiced" (a community health center midwife, 41 years old).

Information and education. Like other government programs related to health, information from both social media and counseling as part of existing health promotion. "There are many benefits, nowadays associated with its use and the information is accessible from our mobile phones ..." (mother, 30 years old). "The education from campus and midwife" (mother, 30 years old).

Discussion

Barriers of exclusive breastfeeding from various levels

A mother practicing exclusive breastfeeding in Sukoharjo faced barriers that came from various levels including individual, family, community and institutional.

The lack of motivation and incorrect management of lactation could thwart exclusive breastfeeding. The barriers from the family came from husbands, the baby's grandmothers and other relatives. Barriers from a more distant environment came from friends and also the influence of formula milk promotion. It also came from babies when they became fussy and sick. The status of working mothers also played an important role in thwarting exclusive breastfeeding for six months.

This finding is in line with Ratnayake and Rowel's [11] analysis which found barriers in Sri Lanka. These were from various levels, namely: the health service system, family and workplace. Makonene *et al.* [12] found barriers to exclusive breastfeeding practice in southwestern Ethiopia, which included workplace conditions, insufficient perceptions of breast milk, health conditions and advice from family and neighbors. While Jama *et al.* [2] found that the barriers for exclusive breastfeeding included the health system, factors related to mother and baby, family pressure and returning to work and school. Furthermore, examples of barriers from the health system were related to when a baby's mother encountered a challenge in administering breast milk at home and when inquiries were made from health workers, who often failed to provide advice that supported its utilization. Examples of barriers related to maternal and infant factors were that the perception of breast milk was not enough [2].

Strong efforts to overcome the barriers seen from the theory of health behavior change

Efforts made by the Sukoharjo Government to ensure the successful practice of exclusive breastfeeding were quite good, as the supports for mothers were considered from various levels.

As per the findings in this study and also the results of other studies, maternal barriers to the practice of exclusive breastfeeding extended from the level of individuals, families, communities and institutions. In line with the TPB and SCT, to make a change in health behavior must consider these various levels. Tougas *et al.* [13] stated that the theory could provide a framework to direct the development and implementation of health interventions. Stacey *et al.* [14] stated that interventions based on behavioral theory were reported to be more effective than other approaches.

The following supports were found in this research: motivation from spiritual values, social support, availability of facilities to support breastfeeding, support from government regulations and programs and information and education. It considered the individual, family, community and institutional levels. Those findings were in line with the constructs that existed in the TPB and SCT.

Principally, the TPB consists of four constructs, namely, attitude toward the behavior, subjective norms, perceived behavior control and intentions [15]. The first three constructs influence intention, which directly affects the behavior and control.

Attitude means the extent to which individuals behave, while subjective norm means social pressure which makes an individual carry out a task. Perceived behavioral control means a situation where individuals cannot fully control their behavior, and this consists of two things. The first is self-efficacy, such as the convenience of a person, while the second is controllability, namely, the availability of necessary resources such as time, money and tools. The absence of facilitating conditions tends to reduce intentions [15].

Individual spiritual beliefs are seen as representing attitude because it affects a person's behavior. Family and friends' support are a subjective norm construct due to the ability to strengthen the individual's behavior. Supports in the form of regulations, as well as pumping and storage facilities at the factory, represent a construct of perceived behavioral control that strengthens the intention to behave.

SCT emphasizes dynamic interactions between individuals, environment and behavior [16]. Its key constructs include (1) knowledge of health risks and benefits, (2) perceptions of self-efficacy in which individuals can control their healthy behavior, (3) outcome expectations, (4) health goals, (5) perceptions of facilities and social support and (6) obstacles related to change. Knowledge of health benefits and risks alone is not enough to encourage behavioral change [14]. Self-efficacy is the convenience of someone to carry out a behavior [15]. It is the perception of the ability to conduct what is desired from behavior in various conditions [17].

The portrait of exclusive breastfeeding support is explained in SCT. Its knowledge was derived from the counseling of health workers, cadres and social media. Self-efficacy was obtained by the number of support systems from various levels of individuals, social and institutional in the form of regulations and the provision of pumping facilities in public areas, which tended to resolve the obstacles. The strong support of exclusive breastfeeding has not produced maximum results due to the many obstacles that existed.

The district government, especially the health department, needs to establish a program to evaluate existing exclusive breastfeeding support programs thoroughly. However, smarter and more comprehensive interventions may be needed, for example, by integrating various support systems in one activity. For researchers, the implication drawn from the findings of this study is that it can conduct experimental community research using the framework of the two theories of behavior change. One of the experimental studies that can be explored is to combine support from trained peers and simultaneously involve the presence of families, especially the grandmothers of babies. If both types of support are conducted concurrently, it is expected that they will strengthen support and at the same time reduce barriers from either inside or outside the home.

Limitation

The triangulation method was not utilized, though its validity and reliability relied on its source. However, the use of various informants strengthened these with dependence on ascertaining a district government program considered at various levels of behavior change theory.

Conclusions

The study of barriers and supports of exclusive breastfeeding in Sukoharjo suggests that the district already has support systems while having barriers to exclusive breastfeeding emerging from social, baby's condition, environmental and other sources. In order to improve the coverage of exclusive breastfeeding, efforts to overcome the barriers at an individual, social and institutional level should be applied comprehensively.

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