

Barriers and facilitators of exclusive breastfeeding: Findings from a Barrier Analysis Conducted in Mwenezi and Chiredzi Districts, Zimbabwe

Gugulethu Moyo^{a*}, Tapiwa Magaisa^b, Arthur Pagiwa^c, Rutendo Kandawasvika^b, Loveness Nyanga^{b,d}, Zephania Gomora^e, Wilna Oldewage-Theron^a

^aDepartment of Nutritional Science, Texas Tech University, Lubbock, Texas, USA

^bNutrition Action Zimbabwe, Harare, Zimbabwe

^cFood and Nutrition Policy Research Institute, Harare, Zimbabwe

^dUniversity of Zimbabwe, Institute of Food, Nutrition and Family Sciences, Mt. Pleasant, Harare, Zimbabwe

^eUNICEF, 6 Fairbridge Avenue, Belgravia, Harare, Zimbabwe

*Corresponding author: gugulethu.moyo@ttu.edu

ABSTRACT

A barrier analysis study was carried out in Mwenezi and Chiredzi Districts of Zimbabwe, to guide the development of a community-based behaviour change program. The aim of the barrier analysis was to identify factors that influenced a woman's infant feeding and care practices. This paper reports the findings for one behaviour, exclusive breastfeeding. The study was based on the methodology from "A Practical Guide to Conducting a Barrier Analysis" (Kittle 2013). Structured in-depth interviews were administered to 91 women who were mothers of infants under the age of six months, 46 of whom who were exclusively breastfeeding and 45 who were not. Issues pertaining to self-efficacy, social support and perceived risks and benefits, as well as cultural and community norms and rules were identified. The qualitative analysis included sorting and identifying themes. Common barriers for exclusive breastfeeding were influence from the mother-in-law, high maternal workload, and perceived breast milk insufficiency. The main enablers were breastfeeding knowledge, the presence of a spouse/partner who assisted with chores and nurses who provided breastfeeding information. The insights gained from this study were used by Nutrition Action Zimbabwe to develop a behaviour change programme that was implemented from 2018-2020.

Keywords: lactating women, breastfeeding counselling, community-based, labour burden, self-efficacy, milk insufficiency, social support

INTRODUCTION

According to the Zimbabwe National Nutrition Survey, in 2018 about 40% of children in the country were not exclusively breastfed (Food and Nutrition Council 2018). Studies suggest that exclusive breastfeeding can help prevent childhood malnutrition (Scherbaum and Srouf 2016; Khan and Islam 2017). Child feeding practices are often affected by household food security status (Food and Nutrition Council 2018). Studies have observed a breastfeeding paradox in some contexts, where infants from low income households, who are most likely to be food insecure, are also the least likely to receive optimal breastfeeding (Venu et al. 2017). In other studies workload (Ahishakiye et al. 2019; Zakar et al. 2018), cultural practices and beliefs (Lindsay, Le, and Greaney 2017; Radzimirski and Callister 2016), social support, and influence from key members of the family (Negin et al. 2016; MacDonald et al. 2019; Zakar et al. 2018) all influenced a woman's decision to exclusively breastfeed.

Purpose

This analysis sought to identify beliefs of lactating women that influenced their behaviour, such as their perception of risk, belief in their ability to practice a behaviour (self-efficacy) and other barriers to and facilitators of behaviour change (USAID 2011). A similar study was conducted by Care International in 2014 for their Enhancing Nutrition, Stepping Up Resilience and Enterprise (ENSURE) programme. It successfully identified some of the key barriers and enablers to practicing certain behaviours in Manicaland province of Zimbabwe (CARE International 2014).

The aim of this study was to build an understanding of factors that influence exclusive breastfeeding practices (EBF) of lactating women in two districts in Zimbabwe. Its findings contributed to the development of a behaviour change intervention targeting women who were mothers of children zero to six months in Mwenezi and Chiredzi districts. The study sought to identify the mothers' perception of the barriers and enablers to the adoption of EBF and identify main influencing groups in the community who encourage or discourage adoption of the behaviour (Moyo et al. 2020).

METHODS

When preparing for a behaviour change intervention it is important to understand the target population, their current behaviours and the environment in which they occur. Barrier analysis is a rapid assessment tool used to identify behavioural determinants, and to inform the development of effective behaviour change interventions. It is based on the theory of reasoned action and the health belief model. For the present study, exclusive breastfeeding was the behaviour chosen, defined according to the World Health Organisation (WHO 2019) as breastmilk only without any additional food or liquids except for medications prescribed by a health professional for the first six months. Mothers were informed of this definition when assessing whether a mother was to be classified as a doer or a non-doer of the behaviour and during the interviews.

The present study was carried out by Nutrition Action Zimbabwe (NAZ) to inform the development of a behaviour change program. Data collection took place in May 2018 according to the protocol laid out in "A Practical Guide to Conducting a Barrier Analysis" (Kittle 2013). Approval was obtained from the relevant government departments at national, provincial and

district levels, as well as local and traditional leadership. Participant consent was obtained before beginning the interview and the field officers explained the purpose of the study and the fact that responses would be anonymous.

Sampling and Study Area

This cross-sectional study was conducted in four (of the eighteen) administrative wards in Mwenzi district and six (of the thirty-two) in Chiredzi district, where Community Nutrition Support Groups (CNSGs) were to be established. The CNSGs were to serve as peer-led groups through which the behaviour change intervention would be implemented. Purposive sampling was used both for the selection of the study area and the participants. The target sample size was 45 women who practiced exclusive breastfeeding, referred to as “doers” (of the behaviour under study) and 45 women who did not practice the behaviour, referred to as “non-doers.”

Selection of the administrative wards was based on relative need (high malnutrition and diarrhoeal rates) and absence of pre-existing nutrition education clubs or groups in the areas. Women were included in the study if they had infants ages zero to six months, were still lactating and permanently lived in the area. Women who did not meet the criteria were excluded from the study.

Data Collection

Prior to data collection, a one-day training was conducted for the enumerators who were going to interview the participants. The measurement tool was pretested during training to check for consistency in question administration, interpretation and understanding as well as the ability of the question to elicit required information. Pre-testing was conducted on women meeting the inclusion criteria in an administrative ward that was not included in the study. Data collection took place over ten days. Structured in-depth interviews were ultimately administered to 91 women who were mothers of infants under the age of 6 months, 46 who were exclusively breastfeeding and 45 who were not.

Data Analysis

After data collection, the enumerators grouped responses into categories based on their similarities and each category was allocated a code. The number of respondents giving a response that fit a specific code was tallied for doers and non-doers. These data were entered into a Barrier Analysis Tabulation Sheet (Microsoft Excel), as described in “A Practical Guide to Conducting a Barrier Analysis” (Kittle 2013) and estimated risk ratios were generated.

Results were considered significant if the difference between what the ‘doers’ (mothers who practice exclusive breastfeeding) say and what the ‘non- doers’ (mothers who were not practicing exclusive breastfeeding) say was equal to or greater than 15 percentage points, as suggested in the barrier analysis guidelines (Food for the Hungry 2016) and/or the significance (p-value) was less than 95% (0.05), as calculated through the Barrier Analysis Tabulation Excel Sheet (Kittle 2013).

RESULTS

Barriers for EBF included a high maternal labour burden, perceived milk insufficiency, and influence from mothers-in-law. The main enablers were breastfeeding knowledge, spousal support with chores, information from nurses and the belief that everyone approved of their decision to breastfeed. Women felt that other factors that made EBF easier were a desire to have a healthy baby, feeling that breast milk was enough to satisfy the baby, and family support. Breast pain and

the perceived need to give the baby water and other herbal fluids due to heat or religious practices made EBF difficult. Negative consequences of breastfeeding noted by some women were that it, was time-consuming, increased workload, and increased the risk of human immunodeficiency virus (HIV) transmission, though the latter was not statistically significant.

Table 1: Summary of the most common responses

Determinants	Statistically significant Responses	Examples of related quotes from mothers
Self – Efficacy/skills What makes it easier?	(Doer (n=24/38, 63.1%)): Doers were 2.1 times more likely to say having breastfeeding knowledge/education (p=0.037).	“The nurses told us that exclusive breastfeeding will help our children become intelligent”
Self-Efficacy – What makes it difficult?	(Doer n=28/33, 84%): Doers were 8.1 times more likely than non-doers to say nothing makes it difficult (p=0.000).	“My husband helps me out with chores which makes it easier for me to feed on demand”
	(Non-doer n=9/11, 81%): Baby crying all the time (p=0.023).	“The baby cries a lot so sometimes I think my breast milk is not enough”
	(Non-doer n=8/9, 80%): Time poverty (busy with chores/schedule and work in the field) (p=0.014)	“I am too busy with work in the field”
Negative Consequences: What is the disadvantage?	(Doers n=40/68, 58.8%): Doers were 3.6 times more likely than non-doers to say that there are no disadvantages (p=0.006).	“There are only benefits to exclusive breastfeeding, I cannot think of any negatives”
	(Non-doers n=10, 100%): Non-Doers felt that breast milk does not satisfy the baby therefore the baby will not grow well (p=0.000).	“Sometimes the milk I produce is not enough for the baby... I know this because he cries a lot”
Social Norms: Do most people approve?	(Doers n=45/83, 54.2%): Doers were 7.5 times more likely than non-doers to say that most people they know approve(p=0.027)	“Everyone around me supports my decision to exclusively breastfeed”
	(Non-doers n=5, 100%): Felt that most people do not approve(p=0.026)	“I feel that people do not support exclusive breastfeeding”

Social Norms: Who disapproves?	(Non-doers n=15/20, 75%): Non-doer mothers felt that their in-laws did not approve (p=0.009)	“My mother-in-law says all baby boys must have more than breast milk to keep them strong”
	(Non-doers n=6, 100%): Non-doer mothers felt that their spouses did not approve (p=0.012)	“My husband does not believe that exclusive breastfeeding is important”
Risk--How likely is it that your baby will become malnourished?	(Doer n=24/42, 57.1%) Doers were 4.1 times more likely to say it is very unlikely that their babies will become malnourished (p=0.005).	“Exclusive breastfeeding helps keep my baby healthy”

DISCUSSION

EBF rates are relatively low globally (WHO 2017), and the negative consequences of low EBF rates, such as infant malnutrition, are exacerbated in developing countries such as Zimbabwe, by relatively high rates of poverty and food insecurity (Food and Nutrition Council 2018).

The present study in two districts in Zimbabwe revealed that the major enablers for lactating women who were successful at exclusive breastfeeding was breastfeeding knowledge and the belief that everyone in the community approved of exclusive breastfeeding. Similar findings were observed in the ENSURE program barrier analysis study of 2014, carried out in a similar setting (CARE International 2014).

In contrast, one of the barriers to exclusive breastfeeding in the present study was time poverty due to household chores and agricultural activities in the field. This is supported by studies in rural Zimbabwe that have found women fully responsible for cooking, cleaning and other household chores such as collecting firewood and water, which sometimes involves travelling long distances and carrying heavy loads (Oxfam 2019; Graham, Hirai, and Kim 2016). Women are also responsible for childcare and agricultural production (Oxfam 2019). Focus groups conducted by Oxfam identified a prevalent perception that men who help their wives with chores are “weak” or under the effects of a “love potion” (Oxfam 2019). Similar challenges regarding the high workload of women have also been observed among lactating women in Pakistan (Zakar et al. 2018) and Rwanda (Ahishakiye et al. 2019). These findings highlight the need to develop strategies that reduce maternal workload and avail more time for breastfeeding and childcare. Strategies would include discussions with communities on gender division of roles to allow household members to help lactating women with household, childcare and agricultural related activities so that they can have more time to exclusively breastfeed the nursing infant.

Family support seemed to rank high as one of the determinants of whether a mother would decide to and manage to continue exclusively breastfeeding. Non-doers were more likely to feel that their spouses or in-laws did not approve of exclusive breastfeeding. Studies in Sierra Leone and Pakistan showed a similar influence of family members, where grandmothers had significant influence on exclusive breastfeeding (Negin et al. 2016; MacDonald et al. 2019; Zakar et al. 2018). The role of family was also observed in the ENSURE programme barrier analysis study carried out in

Zimbabwe, where husbands and mothers-in-law were highlighted as the key influencing groups when it came to the decision to exclusively breastfeed (CARE International 2014). There is a need to identify the main causes of disapproval within the social groups identified (spouses and in-laws) and target them, not just mothers, in behaviour change communication (CARE International 2014). Utilising grandmothers as advocates for exclusive breastfeeding is a strategy that has been developed in Sierra Leone (Negin et al. 2016).

Another issue that came up often among non-doers was the perception that the breast milk is insufficient for the baby's needs. This may be both a knowledge issue as well as a perception developed when the baby cries a lot and is a common reason why mothers give up on EBF (Zakar et al. 2018; Ahishakiye et al. 2019). It could be noted that traditionally women were in physical contact with young babies day and night, knew the signs of hunger before they reached the level of crying, and fed on demand. In cases where this is no longer practiced, babies may often reach the stage of crying before mothers realise that they are hungry. Older women may not have heard babies crying in their day, except when they were sick, and therefore assume that their grandchildren crying means that additional food or herbal cures are needed.

Nationally, 87% of women have institutional deliveries, and this was true even for predominantly rural provinces such as Masvingo, where the two districts under study are located (Food and Nutrition Council 2018). Women who deliver in clinics and hospitals should receive breastfeeding education and support in establishing lactation (WHO 2009). Rooming in, where the newborn infant stays in the same room and often bed with the mother, is also encouraged to promote breastfeeding on demand and bonding between mother and child, in accordance with the Baby Friendly Hospital Initiative (WHO 2009). As such, at childbirth, for women who deliver within the formal healthcare system in Zimbabwe, several steps are taken to ensure successful initiation of lactation. However, once women leave the health centre, there are several factors that may contribute to a physiologically low supply of breast milk. Some lactating women who resume household chores, which may include working in the field or selling at the market, spend several hours away from the infant thereby lessening their milk supply. However, this can be restored by increasing the frequency of feeds, for example at night, and by expressing when away from the baby. Milk insufficiency may also be due to hypothyroidism (Stuebe et al. 2015). No recent data are available on the prevalence of hypothyroidism in Zimbabwe, but policies exist for mandatory iodine fortification of salt. Studies in other countries have shown that poor storage of iodised salt can reduce the amount of iodine present (Anteneh, Engidayehu, and Abeje 2017; Roy et al. 2016), but a recent survey in Zimbabwe revealed that over 90% of the population consumes iodised salt, therefore meeting international targets (Zimbabwe National Statistics Agency (ZIMSTAT) and UNICEF 2019). One study estimated the prevalence of maternal postnatal depression to be between 21-31% in Manicaland Province, Zimbabwe (January and Chimbari 2018). No studies we are aware of have investigated the effect of postnatal depression and perceived milk insufficiency on exclusive breastfeeding practices in Zimbabwe.

Strengths of the study

The use of a standardised tool in this study aids in comparability with findings in other parts of the country. Only one other barrier analysis has been published (CARE International 2014); therefore, the findings of this study address a paucity of data in this field. Publishing programme findings such as these is useful for both government departments and non-governmental organisations that want to develop interventions to address infant and child nutrition. Additionally, one of the major

strengths of this study was that the results were utilised for the elaboration of a behaviour change programme by the non-governmental organization, Nutrition Action Zimbabwe.

Limitations of the study

A limitation of the study is that it is based on a standardised rapid assessment tool and therefore does not fully explore some of the issues highlighted by the mothers; for instance, why some family members did not approve of breastfeeding. As such these issues needed to be teased out during the actual intervention. However, the information obtained from this study was still useful for the development of a community-based behaviour change program.

CONCLUSIONS

The present formative research results revealed that issues such as high maternal workload characterised by numerous household chores (fetching firewood and water, cooking, cleaning, farming and family upkeep), limited familial support with chores, in-law influence and perceived milk insufficiency impeded optimal EBF. Approval and support from key social groups, identified mainly to be in-laws and spouses, was important in EBF. The results of this study were used in the development of a behaviour change intervention targeting mothers and key influencers such as mothers-in-law and spouses in Mwenezi and Chiredzi districts, Zimbabwe. The programme was launched in 2018 and implemented until 2020. The programme utilised group messaging activities to influence behaviour change. Using a monthly schedule, mothers and care givers participated in a timely and targeted curriculum on infant and young child feeding. Stories were developed that contextualised the behaviours by presenting a “good story” that showcased the benefits of practicing the behaviour, and a “bad story” that showcased the disadvantages of not practicing the behaviour. To address the barriers linked to the influencing groups, Men’s Dialogue Groups created a platform for men in the communities to meet monthly and discuss and address gender-related issues that may be barriers to adoption of nutrition behaviours. To compliment the gender-related activities, elderly women in the community were also organised into dialogue groups that discussed recommended infant nutrition behaviours and encouraged the support of the adoption of the behaviours.

RECOMMENDATIONS

- This measurement tool should be used in other parts of Zimbabwe with low exclusive breastfeeding rates and the results shared with a wider audience to help organisations and health care workers understand the barriers and facilitators of exclusive breastfeeding within their areas of operation.
- There is need for further study to explore some of the social barriers such as gender dynamics within the household.
- There is also a need to investigate the possibility of physiological reasons for perceived milk insufficiency, such as hypothyroidism or issues related to the frequency and duration of feeds.
- There are currently no known studies that investigate the effect of postnatal depression on exclusive breastfeeding behaviour in Zimbabwe; therefore, research must be done in this area.

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