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Go with the (Milk) Flow

Infant feeding practices and premature introduction of solids in rural Eastern Cape South Africa

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Abstract

This study uses an intersectional approach to examine and understand how different social and cultural norms impact women's agency when choosing infant feeding practice. The study wishes to broaden the debate on how women can succeed with breastfeeding or the infant feeding practice of her choice and decrease harmful premature introduction of solids such as Nestum®. Data was collected via group and individual interviews in Ginyitsimbi, Eastern Cape, South Africa and focuses on understanding women's lived experiences. Particular attention was given to how power relations and demographic hierarchies intersect on women's choice of feeding practice and the premature introduction of solids as well as social and cultural viewings of motherhood.
The theoretical framework was constructed by the work of Bourdieu as well as Kabeer and helped to analyze the findings. These suggest that women's choice of infant feeding practice is affected by broader contextual factors that through normative expectations on motherhood and demographic hierarchies impact on women's agency and decision-making power.
The study stresses the importance of community support and information as it aspires to inform and improve attitudes and practices for infant feeding support. These are key elements for enabling the acceptance of breastfeeding and improving infant feeding knowledge.

Key words: Breastfeeding, Community support, Infant feeding, Nestum®, Agency
Words: 14 365

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The MFS Scholarship Programme gives Swedish university students the opportunity to carry out fieldwork in low- and middle income countries, or more specifically in the countries included on the DAC List of ODA Recipients, in relation to their Bachelor's or Master's thesis.

Sida's main purpose of the Scholarship is to stimulate the students' interest in, as well as increasing their knowledge and understanding of development issues. The Minor Field Studies provide the students with practical experience of fieldwork in developing settings. A further aim of Sida is to strengthen the cooperation between Swedish university departments and institutes and organizations in these countries.

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1 Introduction

The conventions on the Rights of the Child states that every infant and child has the right to life, health and good nutrition (UNICEF, 2014). These rights have further been emphasized in The UN Sustainable Development Goals. Here, Goal number 2 pushes for the end to all forms of malnutrition and to reduce stunting and wasting among children under the age of five (UNa, 2015). Goal number 3 targets health and looks to end preventable deaths among newborn and children under the age of five (UNb, 2015). In South Africa, good nutrition for all children remains a challenge along with South Africa´s high levels of HIV infections, low rates of exclusive breast feeding in the first 6 months, malnutrition, and unequal access to good quality health care as these are some of the biggest challenges undermining childhood survival (UNICEF, 2013). In this paper, malpractices among infant feeding will be discussed as it elaborates on the social structures and cultural norms that impact how women and care-givers in South Africa feed their babies. This paper will through qualitative interviews elaborate on the early introduction of solids among infants' younger than, the WHO guidelines, of 6 months of age (WHO, 1989). The importance of such a study lies in the effects that malnutrition in early childhood has on a growing child. Malnutrition impacts several factors where children's slower cognitive development and poorer immune system are only some of the effects that early introduction of solids can have. This paper does not examine the harmful effects that early introduction of solids or the lack of breastfeeding can have on a growing infant but rather considers the importance of understanding the malpractices found around infant feeding. How social and cultural norms affect women and care-givers when choosing to breastfeed or not is vital to understand if one more efficiently wants to target unjust behaviors disempowering women in their choice of feeding method. This paper will do so by using Pierre Bourdieu's (1977, 1986, 1992, 2001) theory of practice together with Naila Kabeer´s (1999, 2005, 2016, 2017) discussion on agency to elaborate on women's abilities to make feeding choices for their children. The paper wishes to showcase the importance of prenatal support for new mothers and create an understanding of the difficulties in infant feeding.

1.1 Problem area and research question

Zithulele Hospital, located in the Eastern Cape, is a hospital specializing in family medicine treating the surrounding communities. Clinicians working with maternal and infant health have found it challenging to address infant feeding practices. They have found that there is a need for better and more local, context specific data

considering maternal and child health in rural areas. To deepen the knowledge base and improve interventions at hospitals, clinics and in the local community, the Zithulele Birth Follow up Study (ZibFus) was launched in 2013. Here 478 mother infant pairs were recruited and followed during a period of one year. When working as a research coordinator at Zithulele Research and Training Centre I analyzed the ZibFus-data together with the head investigator Karl Le Roux and a knowledge gap was identified that became the basis for this paper. Looking specifically at the data collected on infant feeding, the data showed exclusive breastfeeding to be around 17.2% when being followed up at 3 months and that the number declined to 8.1 % at 6 months (ZibFus, 2013)[1]. What further became of interest was that the ZibFus-data showed that 48 % of all mothers had introduced a combination of infant formula and Nestum® porridge by 3 months already, and by 6 months, 92% of mothers who were using formula mixed it with Nestum® instead of pure formula[2] (Le Roux et al, 2017; Le Roux, 2014). Although mothers worldwide are highly recommended by WHO to breastfeed their babies' only 36 % of all babies under 6 months are exclusively breastfed and thus many babies are instead fed formula (WHO, 2017).

Nestum® is a cereal based food that can be mixed with both infant formula or breastmilk and described as a product that can help when introducing solids to babies. The product should be introduced as a complimentary food at 6 months[3] (Nestlé, 2016). What has been showed by the ZibFus-data as well as informal interviews is that it is commonly used not as a porridge and help to introduce infants to a more solid based diet, but that it is mixed in with formula in bottles and given to infants as a milky broth much earlier than the 6 moths recommended by Nestlé.

The practice of introducing Nestum® and formula mix has not been well described in the literature on infant feeding, although experienced researchers have noted this trend without writing it up in other parts of South Africa[4]. Therefore, in response to the widespread use of Nestum® in the communities around Zithulele Hospital this study wishes, to provide an assessment of the perspectives, attitudes and practices found regarding infant feeding and the introduction of Nestum®, to emphasize this

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[1] When compared to what the South African National Health and Nutrition Examination Survey (SANHANES-1) found, 7 % exclusively breastfeeding at 6 months in 2012 (Shisana et al, 2012).

[2] In this paper, breastmilk substitutes are referred to as "Formula". This includes Infant formula, products to be given typically between 0-6 months of age and Follow-on formula, intended for weaned infants, typically 6-12 months of age.

[3] Please note that Nestum® is not a necessity when introducing solids but merely a product created to make the infants use to a bore solid consistency.

[4] Personal communication with Prof. Anna Coutsoudis in December of 2016. "Anna Coutsoudis is a public health scientist who holds the post of Professor in the Department of Pediatrics & Child Health at UKZN. She has engaged in extensive research on HIV and nutrition, and especially in breastfeeding and has published over 100 peer-reviewed journal articles. Her research work has played an important role in the shaping of the WHO guidelines on HIV and Infant Feeding" http://paediatrics.ukzn.ac.za/Staff/ProfAnnaCoutsoudis.aspx

pressing infant feeding malpractice. To address this aspiration, the following research questions will be considered.

1.1.1 Research Question

What perceptions, attitudes, and feeding practices are found around the use of Nestum® and breast milk substitutes among mothers and care-givers?

How do power relations and demographic hierarchies intersect and affect women's choice of feeding practice?

How do social and cultural norms on motherhood affect women´s agency in their choice of feeding practice and early introduction of solids as Nestum®.

2 Contextualization

This section will introduce the local historical context as well as an introduction of Zithulele Research and Training Centre together with the local nongovernmental organization: Philani. Further, indicators concerning infant feeding both nationally and in the region chosen for this study will be provided.

2.1 The Eastern Cape province

Looking at South African history, the Eastern Cape (EC) has come to play an important role for the country´s cultural conflicts and the fight for African democracy. It is in this region the first colonial wars were fought and later, the area has been controlled under Afrikaner nationalism (Van den Berghe, 1965). The region thus has a dark history of racial division leading to the birth of the apartheid resistance movement lead by, the EC born, Nelson Mandela. Apartheid has influenced the racial differences and development injustices found in South Africa but especially between races and between the country´s Western versus Eastern sides. Although officially dismantling apartheid in the early 1990s the EC still lives with the aftermath of this devastating era (Sahistory, 2011, 2013)

Table 1: Map of South Africa.

(Researchgate.net)

EC is South Africa's second largest province holding around 14% of the national population. Migration levels are high from this region leading to skewed sex-ratios,

where women are out-numbering men (RPUECDSD, 2010; STATSSA, 2015: 13). Therefore, there are many female-headed households and older women holding the responsibility to take care of children. High levels of unemployment, poor access to both piped water and electricity remains an issue together with poorly maintained infrastructure and long distances to insufficient healthcare facilities or schools (ECHEALTH, 2016; STATSSA, 2016).

The location for this study is Ginyitsimbi and the communities surrounding the Zithulele Hospital. This area is in the Oliver Tambo District outside of the city Umtata, found on the map. The district holds around 1,470 000 people and is one of South Africa's poorest rural areas. Families are dependent on government grants, remittances and subsistence farming for survival and 75% of all the children in the area are stated to live in poverty (NIECDP, 2015: 40). Around 30% of all new mothers are under the age of 19 and the majority of mothers giving birth are between 15-23 years old (Philani b, 2014). As commonly found in the region, mothers in this area claim not to be cohabitating with the fathers of their children. Most mothers state the fathers to be boyfriends and as many are teenage pregnancies a majority of the pregnancies are found to have been unplanned (Philani b, 2014; RPUECDSD, 2010)[5]. HIV-prevalence is high in the region as 20% of South Africa's women in their reproductive age are estimated to be HIV-positive. According to ZibFus-data, around 31 % of women in the area of Zithulele are HIV-positive (Philani b, 2014)

2.2 Zithulele Research and Training Centre

In 2010 Philani, a nongovernmental organization specializing on infant care and mother empowerment, implemented their flagship program with mentor mothers to ensure greater access to antenatal and post-partum care in EC. The mentor mother program was created with inspiration of two international child health programs, 'Positive Deviant Model' and 'Nurse Home Visiting Program' as these enable for stakeholders to access care and information in their homes (Philani c, 2014). As an effect of this program, and as demographic information in this region was very scarce Philani together with Stellenbosch University and Zithulele Hospital launched the ZibFus-study in 2013. This later grew into Zithulele Research and Training Centre (ZRTC) that today works with maternal and infant research in the area.
The ZibFus-study, as mentioned earlier, looked at a various range of topics like access to healthcare, immunizations, HIV status, social support, maternal mental health, food security and many other topics (ZibFus, 2013). When the data later was analyzed, by ZRTC it became clear to what extent infant feeding malpractices were

[5] 62 % of these mothers were not cohabitating with a partner defining the baby's father to be a boyfriend. In total, 63 % of the mothers stated that they had not planned to get pregnant (philani.org.za)

being performed in the region. With low breastfeeding rates, mothers were giving their infants formula and diluting the formula with Nestum®.

2.3 Infant feeding in South Africa

Breastfeeding is a natural and sufficient way to beneficially ensure infant nutrition. Therefore, mothers are recommended to exclusively breastfeed (EBF) their babies for the first 6 months of life and introduce complementary foods thereafter. Continued supplementary breastfeeding up to two years and beyond is recommended (WHO, 2010; Siziba et al, 2015). From the start, breast milk supplies the baby with immune components, antibodies, anti-inflammatories, hormones and over 700 species of microbes helping to nourish the infant's microflora and even certain sugars that only can be up taken and used by bacteria have been found and shown to be of importance in the start of a new life (Bode et al, 2014). Not only is breastfeeding beneficial for the newborn child and its future development, it also has health impacts on the mother. When breastfeeding immediately after delivery, it helps the uterus to contract, contributing to a decrease of postpartum blood loss amongst mothers (SADHS, 2016: 28ff). Breastfeeding also enhances the connection between mother and child (Siziba et al, 2015).

In South Africa, EBF is an uncommon practice for the entire first 6 months but high levels of breastfeeding initiation rates between 75-95 % are found (Siziba et al, 2015: 170). According to the SANHPIBCS[6], 26% of children 0-6 months were EBF in 2012 (Shisana et al, 2014a). Of these, only 8 % reached the 6-month cut off point. Further, it showed that 22 % of the children 0-6 months were exclusively formula fed and 51 % were mixed fed, with formula and breast milk (NIECDP, 2015: 40). South Africa Demographic and Health Survey from 2016 states that EBF rates have increased drastically from 7 % in 1998 to 32 % in 2016. These numbers seem promising but the EBF rates decline from 44 % when the infants are 0-1 months to around 24 % at 4-5 months (SADHS, 2016: 28ff).

[6] South African National HIV Prevalence, Incidence, Behavior and Communication Survey

Table 2: Breastfeeding status in South Africa 2016.

Percent distribution of youngest children under age 2 who are living with their mother, by breastfeeding status; percentage currently breastfeeding; and percentage of all children under age 2 using a bottle with a nipple, according to age in months, South Africa DHS 2016

	Breastfeeding status										
Age in months	Not breast-feeding	Exclusively breast-feeding	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids[1]	Breast-feeding and consuming other milk	Breast-feeding and consuming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with the mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	19.2	44.0	14.0	1.2	14.9	6.7	100.0	80.8	110	47.3	115
2-3	28.9	28.2	6.7	0.4	11.0	24.9	100.0	71.1	110	52.2	120
4-5	27.2	23.7	19.5	0.4	8.5	20.8	100.0	72.8	125	35.4	128
6-8	40.8	4.9	0.7	1.3	5.1	47.2	100.0	59.2	146	55.0	165
9-11	42.5	0.0	0.0	0.0	2.1	55.4	100.0	57.5	143	52.2	160
12-17	53.3	0.4	0.3	0.0	0.1	46.0	100.0	46.7	311	50.0	360
18-23	81.5	0.1	0.0	0.0	0.0	18.4	100.0	18.5	267	38.5	317
0-3	24.0	36.1	10.3	0.8	13.0	15.8	100.0	76.0	221	49.8	235
0-5	25.2	31.6	13.6	0.6	11.4	17.6	100.0	74.8	345	44.7	363
6-9	40.4	3.7	0.6	0.9	5.3	49.1	100.0	59.6	194	55.3	215
12-15	48.6	0.6	0.4	0.0	0.2	50.3	100.0	51.4	201	55.7	231
12-23	66.4	0.2	0.1	0.0	0.1	33.2	100.0	33.6	578	44.6	677
20-23	87.0	0.0	0.0	0.0	0.0	13.0	100.0	13.0	161	43.4	189

Note: Breastfeeding status refers to a 24-hour period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only, consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfeeding, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category, even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.
[1] Non-milk liquids include juice, juice drinks, or other liquids.

(SADHS, 2016: 29)

As malnutrition in early childhood is shown to impact several factors such as children's cognitive development and immune systems, the South African government in 2012 implemented the "Strategic Plan for Maternal, Newborn, Child and Women's Health and Nutrition 2012-2016" (SADH, 2012). One of the important goals in this document was to focus on capacity-building community health workers in key training of infant and young child feeding.

2.3.1 HIVs impact on feeding practice in South Africa

South Africa faces, some of the highest, HIV- prevalence rates in the world, this has had an unfortunate impact on breastfeeding rates. Fear of transmission between mother and child has lead the South African National Department of Health to advise HIV-positive mothers not to breastfeed their children. Alongside this, the government provided free infant formula for all HIV-exposed babies for the first 6 months of life (Bloemen, 2012). The benefits of EBF even for HIV-exposed infants has been known for decades, however not globally recognized. In line with these arguments, WHO in 2010 presented guidelines for infant feeding showing that breastfeeding was preferable to formula-feeding even where the infant was HIV-exposed (WHO, 2010). In 2007 Coovadia et al. published a study that presented the increased risk of mortality for HIV- exposed infants using formula exclusively compared to HIV-exposed infants who were EBF (15 % for formula versus 6% breastfed at 3 months). They further showed that the transmission of HIV for EBF infants was only 4 % at 6 months, whilst infants receiving mixed feeds, combining infant formula or solids with breast milk, increased the HIV transmission rate at 3

months to 8 % and 44% at 6 months. Coovadia's study also discussed the danger of the early introduction of solids for HIV exposed babies in particular, and that early solids cause significant damage to the intestinal mucosa (Coovadia et al, 2007). In 2011, the Tshwane Declaration of Support for Breastfeeding was adopted and thus the provision of infant formula to HIV-exposed babies was revised and a push for maternal support to exclusively breastfeed for the first 6 months was made (NIECDP, 2015: 33). Now South Africa strives to increase the levels of exclusive breastfeeding and discourages supplementing breast milk for babies under the age of 6 months (SADHS, 2016).

Although there has been a drive to improve breastfeeding numbers in South Africa the early introduction of supplementary feeds and mixed feeding are the most common infant-feeding practices found in the country. In 2014, the average age for introduction to solids was 4.5 months, a practice that carries a high risk for infections, diarrhea and malnutrition among infants (Shisana et al, 2014b; Siziba et al, 2015). South Africa's uptake of breastfeeding has been undermined through powerful marketing by companies like Nestlé, Danone and Abbott whom produce breast milk substitutes, governmental policies, and at times by cultural and social attitudes (Rollins et al, 2016). However, in South Africa where the previous infant feeding policy, advising women not to breastfeed, was implemented with the intention of diminishing HIV transmission, it likely further undermined women's confidence in breastfeeding by both HIV positive and HIV negative women (Coutsodudis et al, 1999).

2.3.2 Infant feeding in the Eastern Cape province

As mentioned earlier this paper started to form whilst I was working as a research coordinator at ZRTC and thus looking at data collected via the preformed ZibFus–study. Data showed that 72 % of infants, at the 3-month follow-up were given formula and that 81 % of these had been introduced to formula before they had turned 1 month. When looking further into how the infants were fed, the study shows that 68 % of the formula fed babies were introduced to Nestum® as the mothers are diluting the formula with Nestum® by mixing the tins together and from that mixture adding water to prepare the babies' food. When following the same group of infant and mothers at 6 months 72 % of the infants were given formula mixed with Nestum® as their main food and over 50 % of the infants had been introduced to this mix of Nestum® and formula before they had turned 3 months (Le Roux et al, 2017; Le Roux, 2014; Philani, 2013).

Early introduction of supplementary foods and mixed feeding is the most common feeding practice in South Africa and according to these numbers, EC and the location set for this study is unfortunately no exception.

3 Theoretical framework

This paper elaborates on the cultural and social norms that intersect and affect why and when women choose to introduce solids among infants. When doing so the paper takes its standpoint in feminist sociology. In order to elaborate on the components of social inequality and the ability to act upon one's choice Pierre Bourdieu´s Theory of practice will be introduced together with perspectives on intersectionality and dominance. As the paper seeks to analyze demographic hierarchies and power dimensions of motherhood as well as women's agency this paper is theoretically based on the concept of agency of choice as explained by Naila Kabeer.

3.1 Individual choice, Theory of practice

Bourdieu developed his *Theory of Practice* (1977) to understand human action but also as a critique of the social sciences. Bourdieu argues for the interconnection between structure and agency and how it lies in the interplay between the phenomena of habitus, fields and capital and how this inflicts on individual freedom (Abel & Frohlich, 2012). This way of looking at agency and structure becomes interesting for this paper as it aims to discuss the reproduction of unequal health choices, as breastfeeding and infant feeding are. Further, Bourdieu's concept of habitus will help to explain how particular forms of agency essentialize class differences in health disadvantages over time (Abel & Frohlich, 2012).

3.1.1 Habitus

Habitus is a set of attitudes and values that are transmitted within the home and shape how we perceive and act in the world (Sullivan, 2002: 149). Habitus is a product of history, producing individual and collective practice that perpetuates itself (Bourdieu, 1977: 82). Bourdieu explains our inequalities as dispositions that shape our habitus and that are acquired through our exposure to social conditions and conditionings, external constraints and possibilities and change over time. Bourdieu explains habitus as a product of structure and producer of practice and reproduction of structure (Waquant, 1998: 220ff). Dependent on the position and power that an individual has in society and the amount and types of capital that one holds help to shape our dispositions and guides our behaviors (Collyer et al, 2017). Bourdieu describes capital as divided into economic, social and cultural and it is in the interconnection between these three that social inequality is produced.

Economic capital holds a decisive role for social advantage, it is the root of all other types of capital and consists of material and financial assets (Bourdieu, 1986). Social capital builds on the inter- individual level looking at social relationships and the networks that one belongs to, one´s membership in a group (Abel & Frohlich, 2012: 238). Cultural capital plays a vital role in an individual's capacity for action and agency. It looks at education levels, the skills and titles that one has acquired within the family but also through social learning (Bourdieu, 1986).

The field is an arena of struggles where identity, hierarchy and dispositions are reproduced and these struggles can be fought by both individuals, groups or institution (Jones et al, 2011: 151f). The amount of power and the probability to succeeds depends on the amount and types of capital that one possesses. However, capital is only a resource if it can be used in a given field (Bourdieu & Wacquant, 1992: 97ff). You must hold the right sort of capital that is accepted in the field you are entering. This is then a powerful tool to dominate others in your field. (Jones et al, 2011: 152)

Habitus informs practice from within and are perceptions, expressions, thoughts and actions limited by historical and social conditions and structures. (Bourdieu, 1977: 95) In this paper, this helps us to understand one´s agency and how social structures and the unequal distribution of capital are both results and key mechanisms in the reproduction of power and privilege, conflicting on a person's capability to make choices, in this case, feeding choices for their infants.

3.2 Symbolic Domination, a cultural production and Doxa

Bourdieu's *Theory of practice (1977)* has also been used to analyze the unconscious schemes of perception and appreciation that are embedded historically by structures of domination (Dillabough, 2004). By looking at masculine domination, Bourdieu (2001) argued that masculine privilege can be identified in all social fields, on different levels, that affect and lead to social inequality. He argues that gender as a continuous dimension of social action constantly inflicts on people's everyday life, relations and consciousness (Bourdieu, 2001, Bourdieu & Wacquant, 1992: 172). Bourdieu helps to identify the complex social process that is part of intersecting classifications of inequality such as class, race and gender (Dillabough, 2004). By looking at the rules, norms and customs that influence on how everyday life is conducted Bourdieu contextualized this by his concept of doxa (1977). Doxa is traditions and beliefs that have become so naturalized that they exist beyond discourse or argumentation. The social world constructs the body as a sexually defined reality, gendering the sexually characterized habitus that then shape our decisions, opportunities and behaviors differently (2001). This symbolic domination shapes and organizes the social conditions of gender inequality

(Dillabough, 2004: 492). This social inequality persists and is seen as a cultural practice that in a given social field controls the hierarchies found in social order. Thus, mechanisms of inequality are grounded in culture. This as domination and inequality is shaped by the doxa, the rules and norms constructed in our society. These then come to form our habitus that then again perpetuate the inequalities and the doxa found in the world (Bourdieu, 2001).

3.3 Agency and choice

By looking at the perspectives followed by feminist research, it follows the same view that individuals make choices limited by their personal circumstances and their possibility to exercise agency. However, feminists have included the constraints posed by structural distribution of rules, norms, resources and identities between different groups. Here by addressing how gender, class, race, age and other factors affect the inequalities of power and privilege (Kabeer, 2016: 297).
Choice can be described as an act of power, and people that exercise a great deal of choice in their lives, often do so by imposing their choices on others. This then leads them to be seen as powerful (Dahl, 1957). Another way of looking at power lies in the *ability* of making choices. As this paper, will come to discuss women's agency and their ability to choose infant feeding practice the term agency needs to be presented. Naila Kabeer, professor of gender and development describes agency as a dimension of power challenging current power relations and structures of inequality of the given society. This as it is through agency choices are made and put into effect (Kabeer, 2005: 13ff). To fully understand how choices are being made one needs to study under what conditions that the choice was made. Were there alternatives and what implications did the choice have on the lager structures of inequality (Kabeer, 1999). Our choices have consequences on our position in the social hierarchy but also how these hierarchies are reproduced and changed over time (Kabeer, 2017: 651). Kabeer states there being both positive and negative forms of agency. Positive agency is "the power to" and refers to the ability to make choices even if they are opposed by others. Negative agency or "the power over" refers to some actor's capacity to override the agency of others by using authority, placed in the social hierarchy or other forms of oppression (Kabeer, 1999; 2005). Gender-related inequalities are often key factors in the absence of choice when making strategic life choices (Kabeer, 2005: 13ff). There are many factors affecting the forms of agency that women are able to exercise.

3.3.1 Resources

As argued by Max Weber (1978), people's choices are constrained by the material resources and normative rules of the community or status group they belong to and this affects our opportunities in everyday life (Abel & Frohlich, 2012: 237).

With this backdrop, Bourdieu (1986) looked at how social, cultural and economic capital played a role for habitus. Kabeer also notes the importance of resources as resources are the preconditions for choice. She divides them into material, human and social resources that all enhance our ability for choice. Resources are acquired by social relationships with in the society and are acquired through family, the market or within the community. Thus, they can be actual allocations or even future claims or expectations. Resources are distributed and guided through rules and norms that then give certain actors authority and power over others and thus affects the preconditions of choice (Kabeer, 1999). Therefore, Kabeer states, that it is the combination of resources and agency that enable for choices and it is in the very way that we exercise choice that inequalities can be found. This combination makes way for a person's potential to live the life one wants or not (1999; 2005).

3.3.2 Intra-household responsibilities effect on agency.

When studying development, Kabeer continues to argue that gender- ascribed constraints are rooted in the "intrinsically gendered" relationships. These are formed in families, rooted by contextual norms and beliefs. This helps to shape dominant models of masculinity and femininity found in different societies assigning men and women, boys and girls, with different roles and responsibilities based on socially constructed abilities and dispositions. This inflicts on the process of life choices, leaving men responsible for productive work and women for reproductive work (Kabeer, 2016). This, in turn, is essentializing the role of how a woman should be and the social constructions of motherhood, reducing women's mobility into the public domain and creating cultural expectations on women's dependency.

When women in sub- Saharan Africa have entered the labor force, they have not been freed of their unpaid reproductive labor but expected to share the breadwinning responsibilities of men (Kabeer, 2016: 298ff). Now mothers in low-income households must take employment in order to ensure a living, often keeping their older daughters back from school to take care of the younger children, or end up taking their children with them to work or leaving them with older relatives or unattended at home (Kabber, 2016: 302). This, according to Kabeer shows that it is not just the access economic resources that translates into empowerment and agency but that it rather has the potential to challenge the gendered structures of constraints or transformative forms of agency (Kabeer, 2016: 313).

3.4 Intersectionality

Intersectionality will in this paper be used as an analytical tool to help analyze and showcase how power and constraining norms based on different discourses, institutional settings, and structurally constructed sociocultural categories interplay and create and reproduce social inequalities and unjust relationships between

people (Lykke, 2010: 50f). In order to understand specific features and particular forms of dominance, intersectionality was coined by African- American- and postcolonial feminists in the early 1990´s as a means to showcase the insufficient attention given to the oppressions and complex struggles found by women of color and other marginalized women (Pease, 2010: 18)

Intersectionality is a model that recognizes that oppressions are different but acknowledges that they are interrelated and equally reinforcing. Importantly, one form of oppression cannot be seen alone but intersected with other forms of oppressions (Pease, 2010: 17). Intersection of class, race, gender, age and so on, affect the contextual interplay and diversity of women's lives and is experienced differently by different women. Intersectionality is a model that wants to understand women's particular circumstances. According to intersectional theory all people, no matter status, will at some point experience both oppression and privilege in different social contexts dependent on their different positionalities (Pease, 2010: 19-21).

3.5 Operationalization of theories

As presented, the theoretical framework builds on the understanding that women's ability to choose feeding method is influenced by many intersecting factors. Bourdieu's theory of practice will be used as a tool to better understand how norms can affect our ability of choice. Here his concepts of habitus and doxa are used to understand the interaction between gender norms and gendered practices and how we through conforming to these norms inflict on women's ability to choose feeding method. By understanding that power relations and intra-household responsibility is culturally inflicting on women's choice we can broaden the understanding of the choice being made. This will be done by Kabeers concept of agency and resources as these describe under what ability these choices have been made.

4 Methodology

This section will showcase the epistemological and ontological standpoints behind the paper as well as the feminist research design chosen and how data was collected and analyzed.

4.1 Social constructivist standpoint

The ontological and epistemological positioning of this paper is structured from a social constructivist point of view. Ontologically, social constructivists emphasize that the world in which research is conducted is constantly in the making and socially constructed through people's' interactions and ideas (Creswell, 2009: 8). In line with this thought, this paper seeks to create knowledge and will do so by interactions determined by a mix of social and contextual influences (Moses & Knutsen, 2012: 9ff). Constructivists also maintain the thought that people perceive the same things differently as both individual and social characteristics play a vital part in how we see the world (Moses & Knutsen, 2012: 10ff). As stated in the research questions, the paper will investigate the perceptions found around infant feeding practices and also what norms and social structures that interplay on women's agency and feeding choice. This ontologically fits into how the world in which we live and make our choices in is constructed. The research questions are of a broader character and knowledge is gathered by seeking the participants' point of view (Creswell, 2009: 8).

4.2 Feminist research

This paper aims to follow a feminist research design, by doing so the study believes in the inclusion of those whom are seen as unprivileged and dominated as this helps to create less androgenic knowledge (Hesse- Biber & Leavy, 2007: 30). By using a qualitative research method knowledge was gathered by conducting qualitative interviews with semi structured questions as it allowed some control to be held by the interview conductor but also opened for the participant to tell her story (Hesse-Biber & Leavy, 2007: 115). This way of conducting research was vital when following a feminist research design as the study is aiming on letting the participants voice their experiences and thus trying to create research *together* with the participant rather than on them (Spivak, 1988). By building the creation of knowledge on mutual respect, together with women living and experiencing the

matter, one is trying to let the subaltern speak and trying to break the reinforcement of domination (England, 1994). With this in mind, it also becomes important to note the positioning of the researcher, the power and authority that come to affect the research situation and the context in which research is conducted (Hesse- Biber & Leavy, 2007: 117). By looking at research as a process and intersubjective activity, the position of the researcher and reflexivity is important to discuss. The researchers own introspection is a vital part of the research design as this will come to impact on the way that information is interpreted and collected (England, 1994).

4.3 Research design

While working as a research coordinator for Zithulele Research and Training Centre (ZRTC) the first steps toward this study was made. This as the ZibFus-data was analyzed and a research gap was located. The question that arose was, why were mothers and care-givers introducing Nestum® to their infants earlier than 6 months of age? The chosen location for this research was the area around the Zithulele Hospital, Eastern Cape South Africa, as it was the same area where the ZibFus-data had been collected (Bryman, 2012: 417: ZibFus, 2013).
After conducting informal interviews with medical staff and colleagues at Zithulele Hospital a first outline of the study and the research topic started to evolve. This table shows the order of data collection.

Table 3. Description of the order of data collection

Type	**Date**	**Location**	**Participating**
Pilot study	7/12/2016	Maternity ward, Zithulele Hospital	Me & Research Partner
Screening interviews	9/1- 20/2/ 2017	Pumalanga Clinic	Me & Data Collector
Ice breaker activity	11/1-20/2/ 2017	ZTRC	Me & Research Partner
Semi structured interviews	11/1-20/2/2017	ZTRC	Me & Research Partner
Group/pair discussions	11/1-20/2/2017	ZTRC	Me & Research Partner

4.4 Methods used for data collection

With backdrop of the theoretical framework, the study has had the aim to follow an intersectional approach. Thus, the inclusion of a feminist research design tried to

take power structures along with social and cultural factors into consideration. This is important as these factors become present and can affect people's possibilities for participation (Davis, 2008). With respect to this, and due to cultural and language barriers I, a 26-year-old, white, European, student, hired a research partner and translator. The research partner was a black, 27-year-old, isiXhosa women working as a dietitian at Zithulele Hospital. The research partner was chosen as she had both local knowledge of the area and experience in the research topics. This was necessary and helpful as she not only could help to interpret what was being said, she could also ethnologically explain some participants' behavior (Buja, 2006: 174f). In order to ensure a transparent research process both the researcher and partner discussed the research design properly as it needed to take cultural and context specific considerations into consideration. We found, that to examine the participants own subjective meanings of the world, qualitative methods were the preferable research methods to be used as the isiXhosa culture builds on story telling (Bryman, 2012: 5ff). However, some quantitative methods have also been included to contextualize the chosen area and group of women for the study. Qualitative methods were, semi-structured interviews and group discussions. Quantitative methods were used during the recruitment sessions and ice-breaker survey. Secondary sources like ZibFus and South African Health and Nutrition Examination Survey 2014 (SANHANES-1) was also introduced in order to contextualize and triangulate some of the findings.

4.4.1 Pilot Study

In November 2016, the planned study started forming and in December 2016 a pilot study was conducted to test the planned questionnaire and research design for the study (Yin, 2003). During this pilot, 10 mothers all about to give birth to their first child and whom were admitted to the maternity ward at Zithulele Hospital were included in a group discussion. During this session, it became clear that some methodological considerations to the planned sampling of participations and research design needed to be made. My ethnicity and position as a European student became a hinder in the way to discuss infant feeding. Participants where very shy and wanted to answer, "the right thing" which was caught by the translator and researcher partner whom also is isiXhosa. Thus, I was asked to leave the room and now the participants felt free to answer the questions and could tell their stories. These alterations will be discussed under section 4.4.7 ethical considerations and reflexivity.

4.4.2 Screening interviews and inclusion criteria

Participants for the qualitative interviews were recruited via six recruitment sessions that included screening interviews between January and February 2017. These sessions were conducted weekly, during vaccination days at the clinic found closest to Zithulele Hospital. They were conducted together with Data collectors,

women working at ZRTC who were all isiXhosa speaking and experienced in interview techniques[7]. Women were approached during their wait to vaccinate their children and were asked if they would like to participate in the study. All participants were informed of their rights to reject participation and that it did not affect their position in the queue or the treatment of themselves or their child.
The recruitment included a shorter questionnaire that helped to determine if the participant was to be included or excluded from the study. Within this, basic questions were asked about themselves, their children and their feeding practices[8].

Each participant was screened individually and participants were included if they fit the inclusion criteria: sex (female) age, (over 18 years), feeding their infant Nestum® in some form, living in the area, voluntary participation, and mental and psychological ability to voluntarily provide informed consent[9].

Participants were primarily recruited via these recruitments sessions at the Pumalanga clinic however, some participants were recruited via opportunistic meetings. This was allowed as some recruited participants brought friends or family along to the focus group discussions. These "walk in´s" did however have to go through the same screening questionnaire in order to determinate if they were suitable participants. Also, as it became of interest to see how women working with these issues had experienced Nestum®, Data collectors working at Zithulele Research and Training Centre, also became part of the sampling. These were categorized as "key informants" and sampled after the same inclusion criteria as other participants. Thus, participants were purposively sampled after criteria and by snowballing and opportunistic encounters to fit the research scope (Bryman, 2012: 418-419, 424).

Out of the recruitment process, 99 screening interviews were made leading to 75 eligible participants for more in-depth interviews and discussions[10]. These were then welcomed to participate in one of the five interview sessions carried out between January and February 2017 at Zithulele Research and Training Center. The venue was chosen for its accessibility and as it was seen as a neutral spot for discussions. It was important to state to the participants that their participation in this study would under no circumstances affect their or their babies' medical treatment.

[7] Vaccination days were chosen as this was a day were around 20–80 mothers or care-givers would attend the clinic and thus women in line waiting for vaccination could be screened and sampled for the study.
[8] See appendix 7.1 for the questions used during the screening interviews.
[9] Exception was made regarding key informants, these women were interviewed even if they stated to NOT have given Nestum® to their children or mothers expressing that they were going to give Nestum® before the 6-month cutoff period.
[10] The excluded participants were too young, had provided wrong contact numbers or did not claim to give their children Nestum®.

4.4.3 Ice-breaker activity

When conducting the Pilot study in the maternity ward it became clear that a shorter introductory exercise needed to be introduced. This as it would help participants to open up to each other and us and create a more comfortable discussion environment. Thus, a short session of "Yes, No, I am not sure" was introduced[11]. This activity included misconceptions about breastfeeding, infant feeding and maternal health. The activity also helped to get the group informed about the topics at hand. Further, these unintentional changes to the research design created even more data that could be analyzed.

4.4.4 Semi-structured interviews

This paper looks to create knowledge together with the participants and thus the choice of semi- structured interviews was made. It enables a level of flexibility both for the person conducting the interviews and the participant as new themes can arise during the interview to be further elaborated upon. In order to enable for comparability and to guide the discussions on the topic and experiences of infant feeding, an interview guide with open ended questions was distributed[12] (Bryman, 2012: 470-472). The interviews and discussions were carried out in isiXhosa and took between 60- 90 minutes. All interviews started with the introductory icebreaker[13].

Prior to participating, all women were fully informed about the study objectives and methods before being asked to sign an informed consent form *or* verbally give informed consent if agreeing to participate. Voluntary participation was emphasized as each participant was told that she could voluntarily refuse to answer a question or withdraw from the study at any time, without any consequence[14] (Bryman, 2012: 138).

In total 12 individual interviews were conducted. Seven of them with mothers sampled through vaccination days and five of them with key informants, women working in the ZibFus- project as data collectors. This category of women was included as they formed and interesting group where some basic knowledge on infant feeding was expected.

4.4.5 Group and pair discussions

Smaller group and pair discussions were conducted the same way as the individual interviews, in isiXhosa and with open ended questions following the interview

[11] Please see attachment 7.3 for the Icebreaker questions.
[12] Please see attachment 7.4 for the interview guide
[13] Please see attachment 7.3 for the introductory icebreaker
[14] Please see attachment 7.1 for information.

guide. As a means to enable a comfortable climate for discussions regarding women's situations as mothers and how everyday life affects their choices of infant feeding, women were instructed to speak freely. The group discussions were also looking to create a space where topics were shared between respondents and those conducting the research (Avashai et al, 2012). To ensure that both the participants and the researcher left the discussions with increased knowledge on infant feeding, each session ended with opportunities for the women to ask questions or book a personal appointment with a dietitian as well as both parties expressing what they had learned from the sessions[15] (Kapoor, 2004).

With respect to the cultural context, the groups where divided into age categories separating participants 18-25, younger mothers, from those 26- and up, older mothers. This was done as a measure to ensure a climate where participants would feel safe to share their experiences and talk openly rather than having to, out of cultural practice let the older participants voice their experiences exclusively. The groups were also dividing family members to ensure participants to speak freely without family constraints.
Although the original plan had been to manage groups of 5-8 women, cultural considerations led us to conduct smaller sessions as very few women managed to come to the time slot they had been given. This resulted in a total of 4 pair interviews[16] and 3 group discussion sessions[17]. Giving a total of 20 women participating in group or pair discussions. Thus, the original plan of bigger group discussions did not work for this research context. However, this did open up for more in- depth descriptions and increased risks of the most vocal participants leading the discussions or being the only one to share their experience. This as the research partner now could focus on each individual participant and enable her to share her experience.

Table 4: Description of the empirical data collection

	Type of interview	**Number of conducted interview/ group discussion**	**Number of participants**
1	Individual interview	7	7
2	Key informant individual interview	5	5
3	Pair interviews	4	8
4	Group discussions	3	12
	Total	**19**	**32**

[15] This was the case during all conducted interviews
[16] two participants in each.
[17] four participants in all of them.

4.4.6 Managing the data and limitations

All interviews were audio-recorded[18], translated and transcribed by the trained research partner. To ensure data confidentiality and anonymity participants were given a unique identifying number only known by me and all information collected was held confidential and secure (Bryman, 2012: 137). In order to ensure a transparent research process, validity and to note errors in translation, a data collector with seven years of experience and translating from isiXhosa to English was used to check the transcripts (Bujra, 2006; Bryman, 2012: 49). When conducting research together with a research partner, it does add another level of how data is interpreted, something that will come to have effect on how the data will be analyzed. The data translation process will always be affected by the person who is conducting the translation. The process thus is influenced by the person's background and experiences (Creswell, 2009: 176ff; Bujra, 2006). As the data for this study was first translated by one person, then overlooked by another, and then analyzed by me it will have influenced how the interviews and discussions are understood and interpreted (Creswell, 2009: 176ff; Bujra, 2006).

As discussed earlier, language and power dimensions have come to play a role in this research as I conducted research in a culture different to my own. Thus, the use of a translator, and research partner was vital for the research process. Furthers limitations could include the scope of the data, this since all the research participants were collected from the same clinic. However, this cut off was made due to time and infrastructural limitations. Further, as these women were recruited at the clinic this could have skewed the data as they all were there receiving vaccination for their babies and thus accessing infant feeding information. A hinder to participate was discovered after two discussion sessions. We noted that participants would walk to the training center and thus those living far away would not come to the discussions. Thus, a limitation of the study was the choice of venue as it showed to be excluding for those having to pay for Taxi-fare. As a means to enable participation a small contribution towards taxi fare was made and thereby more participants could participate. The research design thus had to be sensible to the local context to improve the research process and data collection (Ragin & Amoroso, 2010).

4.4.7 Ethical considerations and reflexivity

To conduct research in a setting and context different from one´s own was proven to be a difficult task as research never is value neutral. Power imbalances due privilege and as mentioned earlier and my ethnicity became a hinder when discussing infant feeding (Hammett et al, 2014: 51). As mentioned, this first became clear during the pilot of the study that took place in the maternity ward. Therefore, power relations and authority issues was critically looked upon and considered (Sultana, 2007). This lead to me figuring more in the background, not taking an

[18] Audio was only taken after the consent of each participants.

active role during the interviews or group discussions. These were instead conducted by my research partner a trained isiXhosa dietitian whom had, together with me constructed the interview guide and format. However, I was constantly available if questions arose but took more of an active part in logistically preparations and childcare during the interview sessions (Bujra, 2006; Hammett et al, 2014).

Although considerations were made throughout the research process to try and counteract these power imbalances, one has to understand that this affected the outcome of the research. Although stating clearly that I was a student, several participants asked if I was a doctor or someone representing the company Nestlé, and although unwanted, this might have influenced how the participants answered. (Hammett et al, 2014; England, 1994).
Considerations were made on the level of risk that participating in a study on infant feeding could have for the participants. However, no physical risk and minimal social risk to individual participants was found. The act of participating in a study on infant feeding and supplements could have social risks as infant feeding choices may be questioned by other participants. However, to mitigate these potential risks, data confidentiality, privacy, and respect for oneself and other participants was emphasized during the whole process. Further, the research partner was highly observant of any tensions or discomfort from participants during the interview sessions and breaks were provided as well as the opportunity to withdraw at any time. As she was a community service dietitian, participants were free to approach her at any stage to ask questions or raise concerns (Bryman, 2012: 135).

As mentioned earlier, the pilot resulted in a further development of the research design and an ice-breaker activity was introduced in order to get the group to warm up to discussing and sharing experiences. These above-mentioned examples show the importance of being open to the context of where you place yourself and the research at hand (Ragin & Amoroso, 2010).

4.5 Analytical process

As an analytical tool this paper used a thematic analysis as explained by Braun and Clark. This method helped to identify an analyze the qualitative data collected through interviews and discussions (Braun & Clark, 2014). The choice of thematic analysis was done as it is seen useful when searching for patterns across language and interviews (Clark & Braun, 2013). The paper followed the six steps of analysis as presented by Braun and Clark. They include 1. Familiarization with the data, 2. Coding, 3. Searching for themes, 4. Reviewing themes, 5. Defining and naming themes, 6. Writing up. The Nvivo-program was not used as I found it to complicate the possibility for overviewing the data and themes presented. This as comments made by participants could be taken out of context and thus analyzed differently if not given the whole picture. The themes found in the data consisted of: Perceptions

of breastfeeding, formula feeding and Nestum®. Normalization of bottle-feeding, demographic hierarchies, social and cultural norms affecting motherhood.

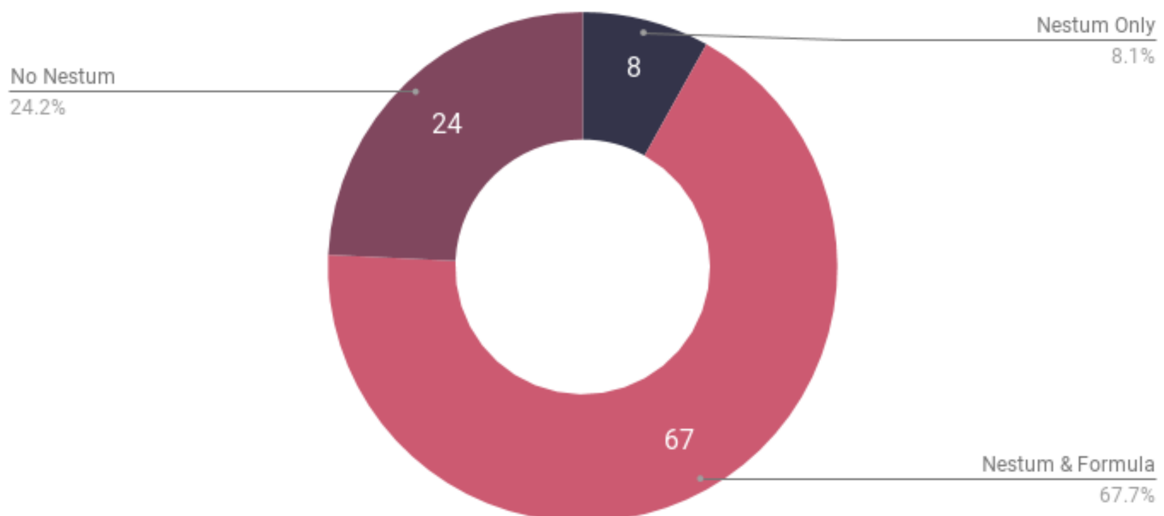
5 Analysis and Discussion

This section will consist of a presentation of the data collected from the field and then this data will be analyzed with the lens of the theories presented in the theoretical framework. Starting with the findings from the screening interviews that were carried out on a total of 99 women. A presentation of the results from the Ice breaking activity will be given, this as it will contribute to the understanding of the general knowledge found around infant feeding practices as well as common misconceptions amongst the participating women. Then the analysis will move to look at the feeding practices described by the participants, how power relations and demographic hierarchies intersect and affect infant feeding and then social and cultural norms on motherhood will be discussed.

5.1 Outline of the women screened for this project

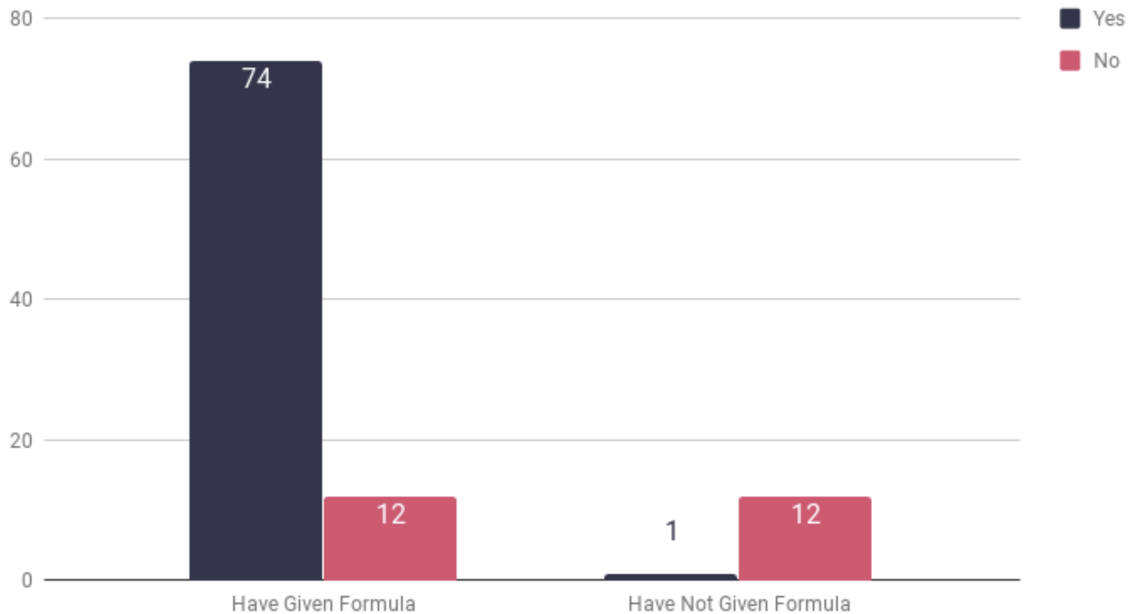
This paper seeks to understand the introduction of solids and the usage and experience of Nestum®. The women participating were between 18- 49 years old and were all living in the catchment area close to Zithulele Hospital in Ginyitsimbi. The data collected showed that 76 % of the 99 screened women had given their children Nestum® at one stage or the other.

Figure 1. Number and percent of women giving their children Nestum®.



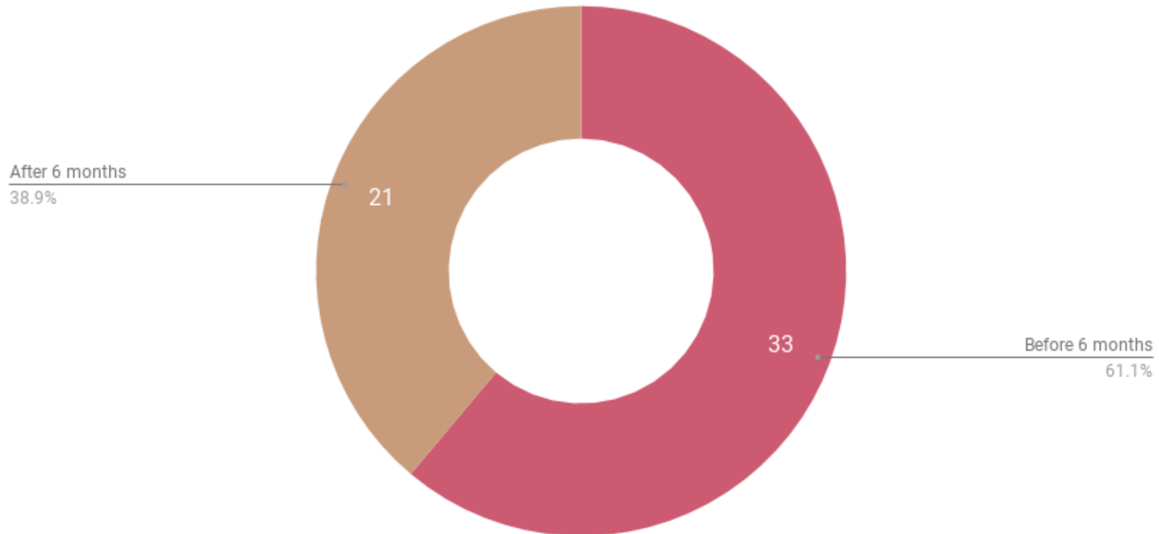
As seen in Figure 2, there is a relation between formula feeding and the introduction of Nestum®. This as 86 % (74 mothers) stated that they both had been formula feeding and introduced Nestum® to their children.
Out of the women stating not to be given formula only one had introduced Nestum®. She introduced Nestum® after her child was older than the recommended 6 months.

Figure 2: Number and percent of women giving formula and Nestum® to their children



As seen in Figure 3, a majority of the women giving Nestum® had introduced this solid earlier than the WHO recommended 6 months. In the recruitment process no clear question was asked to the women when the introduction of Nestum® had been made, however 54 participants stated when they had introduced Nestum®.

Figure 3: Number and percent of women and infant age at Nestum® introduction



When the data was analyzed to see if the age of the mother was influencing the early introduction of solids, this factor did not seem to matter. Looking at the educational level of the mothers, the majority of the women screened had passed grade 6 and up. However, as we did not ask what level of education she had passed at the point of introduction, we are unable to determinate if this factor influenced the introduction age.
The majority, 84 women, stated to have breastfeed at some point of their life and 86 of the women stated to have given their babies infant formula.

5.1.1 Ice breaker

The Icebreaker activity was only performed with participants recruited at the clinic or walk ins. This was not done during the key informant interviews. A table of the compiled answers can be found in attachment 7.3.1
What can be seen from this exercise is that women do believe that breastfeeding is easy, and that all women are capable of breastfeeding their children. This would then suggest that the mothers would have been breastfeeding to a larger extent.
Further, the majority did not believe that modern formula is better than breast milk and they did not find that babies needed other types of milk after 3 months. The participants did know that they should not stop breastfeeding if the baby was sick.
When looking at the common misconceptions about breast milk and breastfeeding this activity suggests that the majority believed breast milk to not be enough food

for babies[19] and that frequent breastfeeding and holding your baby spoils them. More than half of the participants expressed that sick mothers should not breastfeed, showing the engraved fear of HIV positive mothers breastfeeding. Over half of the participants also thought that breastfeeding mothers lost more sleep and expressed that babies whom east Nestum® are stronger, further 25 % answered that they were not sure if the babies that eat Nestum® are stronger than other babies.

5.1.2 Outline of the women participating in the qualitative interviews and discussions

The 32 women whom participated were in the ages between 20-48 and all stated to have had experiences with Nestum®. By having women and mothers of a variety of ages this enabled for some women to think back on how motherhood had been and some mothers to express their preset. Of the women, 27 stated that they had given their youngest babies Nestum®. Of the remaining 5 participants, the women stated to have given one of their children Nestum®. 23 of the participants explained how they mixed Nestum® with formula into a liquid consistency that could be served out of a bottle and the remaining mixed it thicker so that it could be given with a spoon. A majority of the participants stated that they had breastfed their children at some point and all but one participant stated to have given their children formula.

In this study 7 participants had direct or indirect contact to infant feeding information. Of these, 5 of the participants were employed by Zithulele Research and Training Center and classified as key informants as they interview women everyday on infant feeding or childhood development. The other two stated in their interviews that they either had a sister whom was a Philani mentor mother or were employed by another non-governmental organization that educated health workers in the area.

5.2 Feeding practices found among participants

This section will showcase the perceptions found around infant feeding and also lift how women are introduced to Nestum®.
Mothers find that breast milk is enough for their babies and there is a strong belief that breastfeeding is easy for new mothers. The participants expressed that they were informed by healthcare professionals that they should breastfeed their babies and the majority stated that this should be done exclusively for 6 months.

[19] this however is a question that should have been more detailed as the term "baby" could mean children at an older age than 2 years.

Their attitudes toward breastfeeding changes when they come home, mothers are now faced with conflicting information. Mothers express that although they are being told at the clinics, at the hospital and by mentor mothers that breast milk is enough they start doubting that information and shift to trust their surrounding environments.
The majority stated that they first heard of or saw Nestum® at home. That it was either being used by relatives or by neighbors and some stated that they saw advertisement for the product or that they first saw Nestum® in local stores.

"I learned about it [Nestum®] from home and my neighbors. It thickens the milk so the baby gets full. I see that it is being given to every child. The breast milk is not enough, it is too weak"
(Young mother whom introduced Nestum® at 2 months. Interviewed January 28th, 2017)

Mothers expressed how seeing Nestum® in the stores, in the houses of your neighbors or as some were receiving Nestum® as a gift from the baby's father then the use of Nestum® becomes normal and the right thing to do.

"It is the people around me, my neighbor and even people working at SASSA, where I get my grant, advise me to use Nestum® because they saw how my baby was crying. They said that even the nurses themselves give Nestum® to their own babies, it´s just part of their jobs to advise us otherwise. I was convinced when everyone was telling me the same thing"
(Older mother whom introduced Nestum® at 2 months. Interviewed February 11th, 2017)

There are some minor movements against Nestum®. This is mainly found amongst women whom receive support from Philani mentor mothers. Although not all participants in this study stated to have support form mentor mothers, those who had a mentor mother, noted to be 3 women, expressed how they trusted them for information and showed skepticism toward Nestum®. Other women were negative to Nestum® as their babies had fallen ill due to the early introduction of Nestum®.

"I was 14 when I had my first child, I had tried to give Nestum® to my first child but he developed a chest infection. The hospital advised me to stop. Now I am motivated to breastfeed my babies as they are healthy and as I can notice if the baby is sick as they latch on to the breast differently and I can feel the baby´s temperature"
(Older mother whom introduced Nestum® at 1 month, interviewed January 21st, 2017)

There is little knowledge on what Nestum® actually is, people do not consider Nestum® as a solid food but rather as a product that can be used to "make babies full". The use of Nestum® has become normalized amongst people in the community and thus the attitude is mainly positive towards using Nestum®. Women expressed how you "top up" the formula with Nestum®.

"I breastfed my baby at birth as instructed by my [Philani]mentor mothers and hospital, but because I produced little milk I would top up with formula/ Nestum® mix. I would have given them more formula/Nestum® if I had money to give them but as I have bad financial problems I could only afford this sometimes… It was my mother that told me to give Nestum® in the bottle as we did not

have allot od money to keep buying formula… my babies were crying of hunger, I did not know what else to do"
(Older mother whom introduced Nestum® around 3 months. Interviewed January 16th, 2017).

What we see form these examples are that mothers are faced with different information from their families and start trusting that instead of the recommendations given by healthcare professionals. Key informants expressed their concern as the mothers, at the hospital, receives information on breastfeeding and the importance of breastfeeding but little information on other products and what harm they could cause.

"The mothers are not getting information on Nestum® from the hospital or clinics. We only talk about breastfeeding. When they later come home, they listen to their mother's learnings"
(Key informant, interviewed February 28th, 2017)

When asking participants about the information they had received from healthcare professionals, they explained how they understood the information on how to introduce solids as if their children needed to be taught how to eat solids by 6 months rather then start at 6 months. This is a misconception of when to start weaning the baby and the information is either given to them incorrectly or they are understanding it wrong. Further, some participants expressed how they were informed to breastfeed to 6 months and then start with formula and mix in Nestum® by healthcare professionals.

Healthcare professionals are seen as higher in the hierarchy and thus many women feel inferior to them, a power imbalance that has caused a level of mistrust that was expressed as the majority stated that they trusted their mothers or relative to a higher degree when it came to infant feeding information. Participants stated that women do not fully tell the truth to staff. There is a built-in guilt that they are doing the wrong thing as participants knew that breastfeeding is best but still they started formula feeding.

"Mothers do trust healthcare professionals but they do not know how our situation as mothers are"
(Young mother, introduced Nestum at 4 months, Interviewed February 3rd, 2017)

This was further voiced during key informant interviews as the majority of them had experienced how women would hide the Nestum® or formula tins and state to be breastfeeding. This was even stated by a participant that said:

"*When the professionals come and the baby starts to cry, we pretend to be breastfeeding them even if no milk is coming out"*
(Older mother whom introduced Nestum® at 2 months. Interviewed February 16th, 2017)

Further participants explained how Nestum® is usually mixed in together with the formula in one tin. This then makes it difficult to know the exact ration of Nestum® versus Formula that is in the bottle. By preforming this practice, mothers are not

able to know how much the baby actually can absorb from the formula/ Nestum® mixture. The participants explained how they are mixing the two products together as they find it to be the best way to ensure that one does not run out of the formula and get left with too much Nestum® or the other way around. Women are not reading the information on the boxes but rather looking at the pictures and doing what their mothers, friends or care-givers are telling them. Mixing it together with the formula, until the mixture feels right or shows the right consistency for the baby. Further mothers explained how it was easier to use Nestum® and formula mix as it does not require heating.

To summarize this section, women are positive towards breastfeeding when leaving the hospital but that they when coming home are faced with conflicting information on infant feeding by their surrounding environment. By applying Kabeers (1999, 2005) discussion of agency to the analysis, the preconditioning's of her choice of infant feeding method is affected by many factors. By this, women are not able to actively choose an infant feeding method as the majority of the participants claimed to have been influenced by their surroundings when choosing infant feeding method. Mothers stated that they knew that breastfeeding was the best, but as shown, they are not active agents when making the choices how to feed their babies. Women start doubting their ability to nurture their children and believe that their milk is not enough. As a result, attitude towards using formula and Nestum® is seen to be positive or neutral amongst the majority of the participants. The consequence of this, as stated by several participants, is that they stop breastfeeding. Similar results were found amongst women whom had participated in the earlier ZibFus-data. Here women also stated to have stopped breastfeeding early as, in this dataset, 84 % of the women had stopped exclusively breastfeeding at the 6 months follow-up interview. When asked why they had not EBF until the 6 months cut off age they answered that they had stopped breastfeeding as "the baby did not get enough milk"[20], "that breast milk is not enough for the baby"[21] or "Baby was crying all the time and not getting enough milk"[22].
Women are thus under the perception that breast milk is not enough and that in order to ensure that the baby is full one should introduce Formula and Nestum®.

When further studying the results from both the screening interviews and group discussions, formula feeding seems to be the first point of entry to the early introduction of solids. In the interviews and discussions, participants explained how they experienced difficulties in breastfeeding together with the surrounding pressures of people telling them how milk is not enough for their babies pushed them away from breastfeeding. They then switched to formula feeding and introduced Nestum® in the formula mix after some time. As explained by the women, this is done as a means to afford formula feeding as well as the practice being normalized. Women stated that Nestum® does not go bad as quickly as formula, and that it helps to thicken the formula mixture and thus makes the baby

[20] 29 % out of the 312 respondents
[21] 15 % of the 312 respondents
[22] 20 % out of the 312 respondents

full. The liquid consistency of breast milk and formula is not seen as enough, that they need to give a thicker produce in order for the baby to get full. These results were analyzed against the ZibFus-dataset and it was noted here that: 86 % of the women stopped breastfeeding before 6 months and 88 % of them had introduced formula between week 1 and 5 months. Further 77 % of these women answered that their baby was receiving Formula and Nestum® mixed as their main source of food[23].

5.3 Power relations and demographic hierarchies.

As shown in the previous section there are several factors that intersect and affect women in their choice of infant feeding practice. With Naila Kabeers readings on agency (1999, 2005) and intra household responsibilities (2016, 2017) in mind this section will discuss intra household responsibilities and power relations. Participants explained how gendered responsibilities was a factor contributing to the choice of feeding practice. A main issue was described as the responsibility of the household. This lies on the women, with tasks that includes child care, care of the elderly, gardening, water supplies, animals and many other tasks tied to the household. Further, demographic hierarchies play a huge role in this context where young women are to listen to their elders. Mothers are not just mothers they are young women needing to find jobs, complete their education and respect the views of their elders.

"*Now we are faced with wanting to be like modern women, out in the community as we are becoming more moveable. However, this is hard. We are now not just responsible for the home, now we also have to help to make money and at the same time we have to feed our babies".*
(Young mother whom introduced Nestum® at 3 months, interviewed January 21st, 2017)

When becoming mothers, many women stated that they were left by their partners, either as their partners moved away to look for job opportunities in the cities or they just did not want to claim the child as theirs. This put the mother in a situation where she has to find help from her relatives and the family has to come together and save. Traditionally, it is the younger women who are sent to find jobs as they are more moveable and often have a higher level of education. By doing this, the babies are often left with the grandmothers. The participants expressed how this was pushing them into introducing bottle feeding with formula and away from breastfeeding.

"*When the baby was 3 months I had to find a job in order to support my family. My mother then took care of him and I had no say in what the baby was getting. My mother gave a mix as she put both Nestum® and formula in a tin*"

[23] Question: What are the main foods you would say you are giving your baby at the moment? 77 % out of 419 respondants claimed Nestum and formula mix

(Young mother whom introduced Nestum® at 3 months, interviewed February14th, 2017)

Another complicating factor is that education is seen as of high importance in the area and young mothers return back to school quickly after birth so that they do not risk missing out on their education. This then also leaves the young mothers to leave their babies with their grandmothers also here pushing babies into bottle feeding.

"*I left my daughter when she was 4 months so that I could go back to school. My mother then gave her formula and mixed it with Nestum®. I tried to give her the breast when I came back during the weekends, but then she would only cry and want the bottle… It was my mother who chose what to give my baby at that point*"
(Key informant, interviewed February 17th, 2017)

A majority of the participants explained how they were not in an economical position to have either electricity or a fridge. By this the possibility to pump out milk becomes more difficult than buying formula.

Age was also seen as a factor inflicting on their power to choose feeding practice. Many mothers did express that they knew that they should breastfeed exclusively for 6 months and stated that formula was not seen as good for the babies. However, as they were young when they had their first child they did not have the power to stand up for the information given to them in the clinics or at the hospital. Thus, when they were faced with the sayings of their in-laws or mothers, they have no other choice but to listen to their instructions. This was then stated to lead the mothers into introducing formula and then Nestum®.

"My mother in law thought I was acting up against her, she said, 'I gave that baby's father formula and Nestum®, do you not think he turned out alright? Is he not well?' I could not go against her and I started mixing Nestum® and formula"
(Older mother, introduced formula at 4 months, interviewed January 21st, 2017)

The role of parenting is highly gendered in this area, women are seen as the care givers and should be responsible for child care. The majority of the participants explained how they, together with their mothers or other female care givers were responsible for their children's upbringing. Thus, the choice of infant feeding is highly affected by gender norms. What further became clear, was that although parenting is seen as a woman's responsibility, the way that one feeds or raises one's child is a matter that anyone can have a say in.

"It is hard being married. You have to hide allot from your in law, or they will think you're a bad partner for their son"
(Older mother whom introduced Nestum® at 2 months interviewed January 28th, 2017

This is however different for if it is a man taking care of the babies. One participant explained how her child had been taken care of by the father, and how this was very sad. He should not have had to take care of the baby but she had to go back to work

and he was unemployed. Interesting in this case was that she described how, when she was seen as the caregiver of the child, both her in-laws and the surrounding community had comments on that she should give the baby more to eat and told her to introduce Nestum®. When her husband took over the responsibility, he did not encounter any pressure to change feeding practice. They trusted his knowledge and although offering to help, they did not question his decision to give pure formula.

"My second baby was breastfed only 4 months, then I had to go back to working. Thus, my husband started giving the baby formula. When my baby had tasted the formula, she did not want to come back to the breast. I had intended to give her breastmilk but it did not work. Now the baby did not get Nestum®. They [the in-laws] did not harass my husband and try to convince him to use Nestum®".
(Key informant whom introduced Nestum® to first child at 4 months. February 16th, 2017)

Participants explained how they during their first child lived home and were under the pressure from their in-laws or mothers to use formula and Nestum®. But this changed as they moved in to their own homes or became older, however then they had already started using formula and Nestum® and thus did the same with the next child, but the pressure from in laws was decreased.

"I wanted to breastfeed for six months as I had been advised by my [Philani] mentor mother, however I lived with my mother in law and she did not believe that my baby was getting full. She brought the Nestum® and told me to use it and as I live with her I have to follow her instructions. It was a struggle to show my mother that breastfeeding was enough and at 5 months I could not go against her anymore and although we had little money we gave the baby a mix of formula and Nestum®. Now that I have my own house I can make my own decisions for feeding my babies"
(Mother that introduced Nestum® at 5 months, interviewed February 11th, 2017)

As explained by Kabeer (1999, 2005, 2016, 2017) active agency is a necessity for individuals to be able to make "real life choices" and participate in decision making. In this context, women and young mothers have to listen to their mother and are not in power to break traditions in fear of being seen as bad wives or bad mothers. Further, the participants express their lack of both material, human and social recourses and how this together with the burden of household responsibilities and power dimensions are effecting how they feed their babies.

Pressure from the surrounding environment and their limited access to resources is hindering women to act upon their choice. As expressed by many participants, they know that breastfeeding is the best but their access and control over resources inflicts on their agency. Further, grandmothers are using negative agency to influence mothers in their feeding choice. As many mothers become pregnant at an early age they are usually still students in school and are thus not educated or in work and as a young mother, her power within the home is constricted as she is seen as low in hierarchy against her parents, in laws and husbands. Although this might change when they have their second or third child, the feeding practice that you chose for your firstborn usually transits over to your next child. Thus, the

mother's ability to choose infant feeding practice is inflicted upon and her agency low as the majority of the participants explained how the choice of feeding was not really theirs.

5.4 Socio cultural norms on motherhood and their effect on agency and choice of infant feeding.

As explained by Bourdieu (1977, 1986, 2001) the dispositions that shape our habitus will also affect our ability to act in certain fields with regards to practices and norms that shape the doxa around us. For these participating women, the social structures that have been constructed by cultural norms have come to influence on their self-worth and in turn, inflict on the perceptions of what motherhood is. By these everyday structures of domination women's possibility to choose infant feeding methods is affected.

Many households in this area rely on government grants in order to make ends meet. A majority of the women stated that they were facing economic hardships being either single mothers or still in school. It became clear during the interviews that from the day that you reveal that you are pregnant your family starts saving for your unborn child. This as you need to provide well for your family and as a community you come together to ensure that the family has what it needs. Material goods become of importance and here baby food and bottles are a common, easy accessible gift. When the mother is unmarried, still in school or unemployed her economic power is very low. Thus, she has little power to reject these gifts that are given to her in all well-meaning. One mother explained how she had felt pressure from the father of her child to start mixing Nestum® into the formula. He came home from working in a big city, for the first time since the baby's birth with a package of Nestum®, him believing this was the most appropriate gift to give as that was what had been told to him by his work colleagues. She had to start giving it to her child.

He [the father] came home with Nestum® and gave it as a gift. He had seen other giving it to their children and now he wanted to be a good parent and give this to his son. I then started giving it to our child. I wanted to be a good mother.
(Older mother, introduced Nestum® at 1 month, interviewed February 4th, 2017)

As noted in the previous section, mothers have to listen to their in-laws and the upbringing of a child is seen as a matter to the community as a hole. When mothers are out in the community and their baby is crying they are being told that the milk is not enough for the babies to become full. Mothers are being told "Uyarhala", they want more. This is a common saying around people in the community and in the family.

"*The community believes in mixed feeding [Nestum® and Formula]. That breastmilk is not enough and everywhere you go, people tell you to give the baby the bottle so that it is quiet. You feel ashamed when you cannot get the baby quiet"*

(Older mother whom introduced Nestum® at 3 months. Interviewed February 11th, 2017)

The participating women were expressing how gender inequality is inflicting on their everyday life. The doxa of the community, the norms and traditions that exist are influencing how women are feeding their babies and moving in the community (Bourdieu, 1977, 2001). These power inequalities are shaping the habitus and limiting the agency of the mothers and further inflicting on the choice of feeding practice (Kabeer, 2016). Women expressed how their movement into the public sphere was challenging the doxa of the community as social expectations on mothers with young infants restricted them from leaving the home. However, participants expressed how the domestic responsibilities forced them to leave the home but, when trying to perform their household duties they would face pressure from the community on how to feed their babies.

"One is face with the old beliefs that a mother should stay at home with her child, but I need to leave my home to shop for food. If you are seen with a child in the community and that child is crying, then you are a bad mother and people will stare and tell you that the child is not getting enough food. Then you must do what is acceptable by the community and give the baby something to make it stop crying"

(Young mother, whom introduced Nestum® at 2 months. Interviewed January 28th, 2017)

"We need to question why mothers are being shamed by having their babies out with them. It is normal for a baby to cry. We should not blame the mother for this, We [the community] are almost forcing them to bottle fed!"

(Key informant, Interviews February 15th, 2017)

When asking participants to share their experiences of motherhood several participants expressed how they did not feel as they were good enough mothers to their children. Women expressed how they, prior to becoming mothers had received very little information regarding sexual and reproductive health and that they prior to becoming pregnant did not know how one becomes pregnant.

"*Motherhood had never crossed my mind before I gave birth to my first child at 14. When the doctor told me, I was having a child, I was so surprised. I had to give birth right then... I wish I had gotten more information on how to become a parent as I now have 4 children and am only 24 years*"

(Young mother introduced Nestum® at 3 months. Interviewed February 11th, 2017)

As stated previously mothers expressed very low self-esteem with regards to the motherhood role. They do not think that their ability to nurture is enough and do not think that their milk is good enough. Several women expressed the need to learn how to play with their babies or learn how to teach their babies to speak. This shows a level of insecurity of the mothering task, the trust in one's own capacity to breastfeed and be a good mother helping one's child to grow. As explained by

Bourdieu (1977,1986, 2001) women are seen as less capable of mothering and are affected by demographic hierarchies and practices that inflict on their power to choose infant feeding practice and how they perceive motherhood.

"We need more teaching on how to be good mothers, how to play with our children, how to teach our babies to talk"
(Young mother, whom introduced Nestum® at 4 months. February 23rd, 2017)

I want the babies to be screened more frequently. They [healthcare professionals] should not rely on what the parent says. They should ask to see the child themselves and to the screening"
(Older mother, whom introduced Nestum® at 5 months. Interviewed February 3rd, 2017)

What can be drawn from this section is that the doxa of the community is creating a social pressure on motherhood and infant feeding that is disempowering mothers in their nurturing role. As explained by Bourdieu's (1992) for these women, the field is their home or the surrounding community and how they can act here is influenced by a number of context specific factors shaped by social practice, normalized by historical and cultural perceptions on infant feeding and motherhood. The social pressure expressed by mothers of being told by healthcare professionals one thing and then pressured into doing something different has shown to be very stressful for these women, pushing them away from breastfeeding and their ability to choose feeding practice.

6 Concluding discussion

This paper has had the ambition to increase understanding of the early introduction of solids as well as the social and cultural norms that impact women's choices around infant feeding in the Eastern Cape, South Africa. Further, the study has wished to showcase how power relations and demographic hierarchies intersect on women's choice of feeding practice as well as how social and cultural norms affect motherhood and women's agency.

To conclude the findings from this study, infant feeding can be seen as a social practice influenced by social and cultural norms. Women's choice of infant feeding practice and the introduction of solids are affected by broader contextual factors that through normative expectations on motherhood and demographic hierarchies impact on women's agency.

Women are receiving feeding information but due to social and cultural norms attached to motherhood together with demographic hierarchies and power, it is not given in a way where the individual women can utilize this information. This as young mothers and women are seen as less capable and with little knowledge on infant feeding. This is as explained by Bourdieu (2001) influenced by everyday structures of domination. Both key informants and participants argued for the inequalities found around decision making in the household. In this context, women, especially young mothers, are affected by demographic hierarchies prohibiting them from being active agents when choosing infant feeding practice. As explained by Kabeer (1999, 2005) this is an example of how in-laws are exercising negative agency as they are overriding the infant feeding choice of mothers by using their authority.

Further, the lack of or limited access to resources is hindering women to breastfeed or afford pure infant formula for the whole duration of 6 months. As women are seen as responsible for ensuring for the household as well as for childcare, this economic pressure, in many cases, leave women with no other choice than to leave their children with relatives. When doing so, demographic hierarchies inflict on the mother's decision power and women are faced with contradicting infant feeding methods or even pressure to change feeding practice all together. Historic marketing and policies together with social practices have come to decrease breastfeeding practices in the area. This has also come to affect the motherhood role as it has been undermined by the social pressure of the community on how a mother should act and how a baby should be fed or taken care for. This is an example of how women´s infant feeding choice is constrained by her access to resources and

by the normative rules found in the community as argued by Weber (1978), Bourdieu (1986) and Kabeer (1999).

As a result of this, women are disempowered when making infant feeding choices and need to get proper support. Women should be active agents and given the right tools in order to succeed with breastfeeding or the feeding method of their choice. Feeding information needs to be distributed throughout the pregnancy, birth and during the babies first year if we are to build the trust needed to ensure for a good maternal and infant care. This should not only be given to the mother but should include those closer to her and the community as a whole. This could be done by actively talking about infant feeding practices in the community. As shown by participants, mentor mothers could be a sufficient way to build the trust needed amongst the families and surrounding communities as these women enter the mother's homes. The mindset of the mothers and family as well as the community needs to be changed if this harmful practice of mixing solids into formula earlier than the recommended age is to be stopped.

7 Attachments

7.1 Screening interviews

Questions for recruitment

- How old are you?
- How many children do you have?
- How old is your youngest baby?
- Have you breastfed your children?
- Are you breastfeeding your youngest baby?
- Are you bottle-feeding your youngest baby?
- Have you given your baby anything else apart from breastmilk in the past 24 hours? What?
- Have you given your baby anything apart from breastmilk in the past month? What?
- Do you give your baby formula?
- Do you mix Nestum with formula? When did you start mixing?
- Do you give your baby Nestum?
- Are you the main care-giver of your child?
- If not, who takes care of the baby the most?
- What is the highest level of education you have?
- Can I have your phone nr?

7.2 Informed Consent Form

The use of Nestum® as a supplement to infant formula in mothers bottle-feeding their infants in the OR Tambo District of the Eastern Cape

Reference Number:
Contact Number: 0621855339 (Ask for Sofia Rubertsson)

You are invited to participate in a research project about infant feeding practices. We are working with Zithulele Research and Zithulele Hospital. Please read or listen to the information here about the details of the project, and ask the interviewer any questions about what you do not fully understand. It is very important that you completely understand the project and your role. Your participation should be fully voluntary, and no one is making you participate. If you choose not to participate, you are free to leave, and there will be no negative consequences. Thank you very much for your time. Your responses make it possible for us to work on improving clinical services and understanding in response to your ideas and concerns.

This study has been approved by the Health Research Ethics Committee at the University of Cape Town and will be conducted according to South African and international ethical guidelines.

What is this study about? This study investigates attitudes, infant feeding practices and the introduction of solids such as Nestum among women over 18 years in Zithulele and surrounding communities.

How will the study be conducted? Focus group interviews will be conducted in the ……. Clinic with 6-10 participants each.

Why have I been invited to participate? You have been invited because you live in the Zithulele or surrounding communities and have expressed interest by attending this informational meeting.

Will you benefit from participating? There are no personal benefits, but the study will hopefully contribute to better understanding of feeding practices and infant health in relation to Nestum.

What risks might result from participating? There are minimal risks, and any concerns can be reported to Sofia Rubertsson, student researcher, at 0621855339.

If you do not want to participate, what happens? You are free to leave, and there are no negative consequences. This is absolutely fine. You can also change your mind at any point.

Who will access your information? All of your information will be kept fully confidential, secured, and will only be accessed by research team members.

Will you be paid to participate? No. However, you will receive airtime incentives up to R30 per focus group session.

What else should you know? Please keep your copy of this document. If you have any further questions or concerns, feel free to ask Sofia Rubertsson, student researcher, at 0621855339 at any point, or Dr. Karl le Roux at 0728589751.

Participant declaration

I, ____, voluntarily agree to participate in the research study, **"The use of Nestum® as a supplement to infant formula in mothers bottle-feeding their infants in the OR Tambo District of the Eastern Cape".** I have read or listened to all of the information contained within this consent form. I have understood this information. I have been able to ask any questions and receive adequate answers. I understand that I am voluntarily participating and will not be penalized in any way for leaving the study. I can also be asked at any point to leave the study for my best interests or if I do not cooperate with the researchers. I am providing my signature as indication of informed consent and voluntary participation.

Signed at ____ on date ____________________

Signature, Participant ____
Signature, Witness____

7.3 Interview guide and icebreaker activity

Thank you for joining us today. My name is Sofia Rubertsson and I am from Sweden and I come here to South Africa to study what communities think about how they feed their babies and what women like you face when becoming mothers. I am not a doctor or a nurse but I am a young woman looking to understand what mother think about and how communities support mothers when they raise a child.

Introduction of Khanyisa: My name is Khanyisa and I am here to talk to you about your experiences as mothers. I have no children of my own, so I am here to learn from you and listen to your stories. I have been working with infant feeding so if you have any questions about this please feel free to ask. Today we are here to share.

We have gathered you all here to talk about and share our experiences on how we feed our babies. I want you all to know that there are no right or wrong answers as we want to hear your stories.

Interactive session, Ice breaker activity

Yes, no or I am not sure.

Let's start with some questions where you can answer, Yes, No or I am not sure

I like the beach

I like guwnjas

I like sampbeans

I Like lightening

All women should give birth at hospital

Babies cry when they are hungry

All women are capable of breastfeeding

Breast milk is not enough food for babies.

Babies who eat breastmilk become fat

Babies who eat Nestum® are stronger

My mother knows best how to feed my babies.

Breastfeeding is easy

Breastfeeding too often leads to weaker milk

Modern milk formulas are better than breast milk

Breastfeeding moms get less sleep

Frequent breastfeeding and holding your baby too much will spoil them

Breastfeeding moms have to be careful about what they eat/drink

Sick moms shouldn’t breastfeed

You should stop breastfeeding if your baby has diarrhea or vomiting

Breastfeeding babies will need other types of milk after 3 months

7.3.1 Compiled answers from Ice breaker

Question	**Yes**	**No**	**Not Sure**
All women should give birth at hospital	27		
Babies cry when they are hungry	27		
All women are capable of breastfeeding	25		2
Breastmilk is not enough food for babies	27		
Babies who eat breastmilk become fat	11	10	6
Babies who eat Nestum® are stronger	16	4	7
My mother knows best how to feed my babies	21	4	2
Breastfeeding is easy	24	2	1
Breastfeeding too often leads to weaker milk	10	11	6
Modern milk formulas are better than breast milk		24	3
Breastfeeding moms get less sleep	16	4	7
Frequent breastfeeding and holding your baby too much will spoil them	22	3	2
Breastfeeding moms have to be careful about what they eat/drink	27		
Sick moms should not breastfeed	15	5	7
You should stop breastfeeding if your baby has diarrhea or vomiting	7	20	
Breastfeeding babies will need other types of milk after 3 months.	4	23	

7.4 Questions for interviews and discussions

- Before you became mothers, what did you think motherhood would be like? How did you think it would be to be a mother?
- Who do you trust about infant feeding information?
- Who would you describe has influenced you in choosing a feeding practice for you child?

- How were you recommended to breastfeed?
- Who (healthcare givers, friends and family) told you about breastfeeding recommendations?
- Did anyone talk to you about breastfeeding and infant feeding during pregnancy? Tell us about that
- How did you start breastfeeding?
    - Within one hour after birth?
    - Did your newborn received anything else than breastmilk at the hospital?
    - Who decided about giving formula/water/fluids/vitamins?
- Have you experienced that your breastmilk was not enough? Can you tell me more about that experience?
- Have you experienced that infant formula was not enough? Can you tell me more about that experience?
- What If you want to produce more breastmilk what can you do? Can you show me?

- Why do you think that women stop exclusively breastfeeding?
- Why did you stop breastfeeding exclusively?

- How do you know that a baby does not want milk?
- How did you substitute for breastmilk?
- When should one start giving a baby solids? What are the recommendation?

- Who told you about introducing solids. Can you tell me more about your experience when introducing solids?

- What kind of food should one start to give to a child? Tell me more about what to start with and how you prepare the food (mashed fruit, mashed potatoes with butter)
- Where have you learned about how to feed a baby?
- Can you tell me about you experience about giving your baby Nestum®

- How did you hear about Nestum®?
- What is the purpose of Nestum®?
- What do you get from Nestum® that other food would not give you?
- What do you get from Nestum® that is not included in breastmilk?

- What made you start introducing Nestum®?
- Have you given all your children Nestum®?

- How do you prepare the bottle?
- Why do you think women mix Nestum® in the bottle with formula?
- Do you read the instructions on the package?
- How much water vs powder do you use?

- How often does your baby eat?
- How do you know that your baby is full?
- How do you know if a baby is hungry?

- What is a healthy baby? What does that baby look like and act?
- What is a sick baby? What does that baby look like and act?
- What causes malnutrition (wasting) / (overweight)
- What have you learned from today?

8 Bibliography

Abel, T., Frohlich, K L. (2012). “Capitals and Capabilities: Linking Structure and Agency to Reduce Health Inequalities”. *Social Science & Medicine*. Vol 74. 236-244.

Avishai, O., Gerber, L., & Randles, J. (2013). “The Feminist Ethnographer’s Dilemma Reconciling Progressive Research Agendas with Fieldwork Realities”. *Journal of Contemporary Ethnography*, 42(4), 394-426.

Bloemen, S. (2012). “In a major policy shift, mothers in South Africa are encouraged to exclusively breastfeed instead of using formula” *Published by UNICEF South Africa*

Bode, L., McGuire, M., McGuire, M., et al (2014). “It´s alive: microbes and cells in human milk and their potential benefits to mother and infant”. *Advances In Nutrition*. Vol 5. No 5:571-573

Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

Bourdieu, P. (1986). “The forms of capital” *J.G. Richardson (Ed.), Handbook of theory of research for the sociology of education*. Connecticut. Greenwood Press

Bourdieu, P. (2001). *Masculine Domination*. Cambridge. Polity

Bourdieu, P. and Wacquant, L.J.D. (1992). *An Invitation to Reflexive Sociology*. Chicago, IL: Chicago University Press.

Braun, V., Clark, V. (2014). “What Can “Thematic Analysis” Offer Health and Wellbeing Researchers?” *International Journal of Qualitative Studies in Health and Well-being*. Vol 9.

Bryman, A. (2012). *Social Research Methods*, 4th edition. Oxford: Oxford University Press.

Bujra, J. (2006). “Lost in Translation? The use of Interpreters in Fieldwork” *Desai, Vandana & Potter, Robert B. (eds.) (2006): Doing Development Research*, SAGE Publications, London, pp. 172-179.

Clarke, V., Braun, V. (2013). “Teaching Thematic Analysis: Overcoming Challenges and Developing Strategies for Effective Learning” *The Psychologist*. Vol 26. No 2:120-123

Collyer, F. M., Wills, K. F., Lewis S. (2017). “Gatekeepers in the Healthcare Sector: Knowledge and Bourdieu's concept of field”. *Social Science & Medicine*. Vol 186:96–103

Coovadia, H. M., Rollins, N. C., Bland, R. M., Little, K., Coutsoudis, A., Bennish, M. L., Newell, M. L. (2007). “Mother-to-child transmission of HIV-1 infection during exclusive breastfeeding in the first 6 months of life: an intervention cohort study” *The Lancet*. Vol 369: 1107-1116

Coutsoudis, A., Kubendran, P., Spooner, E., Kuhn, L. Coovadia, H. M. (1999). “Influence of infant-feeding patterns on early mother-to-child transmission of HIV-1 in Durban, South Africa: a prospective cohort study” *The Lancet*. Vol 354: 471-476

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 3rd ed., Sage Publications, Los Angeles.

Dahl, R. A. (1957). “The Concept of Power”. *Behavioral Science*. Vol 2. No 3:201–215.

Davies, K. (2008). “Intersectionality as Buzzword, A sociology of science perspective on what makes a feminist theory successful”. *Feminist Theory*. Vol 9. No 1:67-85

Dillabough, J. (2004). “Class, Culture and the 'Predicaments of Masculine Domination': Encountering Pierre Bourdieu”. *British Journal of Sociology of Education*. Vol 25 No 4. 489-506.

Eastern Cape Health Department (ECHEALTH) (2016). [Accesssed via http://www.echealth.gov.za on 23/10 2017]

England, K. V. L. (1994). “Getting Personal: Reflexivity, Positionality and Feminist research”. *The Professional Geographer*. Vol 46. No 1. 80-89

Hammett, D., Twyman, C., & Graham, M. (2014). *Research and Fieldwork in Development*. Routledge. Oxford

Hesse-Biber, S. N., Leavy P. (2007). *Feminist Research Practice: a primer*. Thousand Oaks, California. Sage

Jones, P., Bradbury, L., Le Boutillier, S. (2011). “Social Structures and Social Action”. *Introducing social theory*. 2. Ed. Cambridge. Polity press.147-172

Kabeer, N. (1999). “Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment”, *Development & Change*, Vol. 30, No 3, 435-464

Kabeer, N. (2005). “Gender equality and women’s empowerment: a critical analysis of the third Millennium Development Goal”. *Gender and Development*. Vol. 13, No 1, Millennium Development Goals. 13-24

Kabeer, N. (2016). “Gender equality, economic growth, and women´s agency: the “endless variety” and “monotonous similarity” of patriarchal constrains”. *Feminist Economics*, 2016 Vol. 22, No. 1, 295–321

Kabeer, N. (2017). “Economic Pathways to Women’s Empowerment and Active Citizenship: What Does The Evidence From Bangladesh Tell Us?”. *The Journal of Development Studies*. Vol 53. No. 5. 649-663

Kapoor, I. (2004). “Hyper-Self-Reflexive Development? Spivak on Representing the Third World 'Other'”. *Third World Quarterly*, Vol 25. No 4. 627–647

Le Roux, K. (2014). Zithulele Births Follow up Study - What happens to infants outside the gate of the rural district hospital? [Internet]. Presentation of unpublished data of the Zithulele Births Follow up Study (ZibFus) presented at 2014 Rural Health Conference, Worcester. Available from: http://www.zibfus.org/findings.html

Le Roux, K. Akin-Olugbade, O., Stansert Katzen, L., Laurenzi, C., Mercer, N., Tomlinson, M., Rotheram-Borus, M. J. (2017). “Immunisation coverage in the rural Eastern Cape- are we getting the basics of primary-care right? Results from a longitudinal prospective cohort study”. *South African Medical Journal*. Vol 107, No 1.52-55

Lykke, N. (2010). *Feminist studies: a guide to intersectional theory, methodology and writing*. New York. Routledge

Moses, J. W., Knutsen, T. L., (2012). *Ways of knowing competing methodologies in social and political research*. 2. [rev. and expanded] ed. Basingstoke: Palgrave Macmilian

National Integrated Early Childhood Development Policy (NIECDP) (2015). [Accessed online via https://www.unicef.org/southafrica/SAF_resources_integratedecdpolicy.pdf on 13/10 2017]

Nestlé (2016). “The Versatile choice- Nestum”. [Accessed online via https://www.nestle.co.za/brands/nutrition/nestum on 13/8 2016]

Pease, B. (2010). *Undoing privilege: unearned advantage in a divided world*. London: Zed

Philani a (2014). Mentor Mother Program [Accessed via http://www.philani.org.za/wp-content/uploads/2014/08/Mentor-Mother_D9-2.pdf on 20 /8 2016]

Philani b (2014). Annual Report 2013 [Accessed online via http://www.philani.org.za/wp-content/uploads/2014/08/Annual-Report-2014.pdf on 14 /10 2017]

Philani c (2014). The Mentor Mother Program [Accessed online via http://www.philani.org.za/what-we-do/the-mentor-mother-programme/ on 15/4 2016]

Ragin, C. & Amoroso, L. (2010). *Constructing Social Research, The Unity and Diversity of Method*. Thousand Oaks: Pine Forge Press. (248 pages).

Research and Population Unit of the Eastern Cape Department of Social Development (RPUECDSD) (2010). “The people matter- the state of the population in the Eastern Cape”. [Accessed online via http://www.ecprov.gov.za/Pages/default.aspx on 12/8 2017]

Researchgate (2013). “Map of Mthatha, Eastern cape province, South Africa” [Accessed online via https://www.researchgate.net/figure/259500213_Map-of-Mthatha-Eastern-cape-province-South-Africa-http-www-routes-co-za-maps-rsa-ipg on 26/11 2017]

Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., Piwoz, E. G, Richter, L. M., Victoria, C. G. (2016). “Why invest, and what it will take to improve breastfeeding practices?”. *The Lancet*. Vol 38. No 7:49-504

Shisana, O., Labadarios, D., Rehle, T., Simbayi, L., Zuma, K., Dhansay, A., Reddy, P., Parker, W., Hoosain, E., Naidoo, P., Hongoro, C., Mchiza, Z., Steyn, N. P., Dwane, N., Makoae, M., Maluleke, T., Ramlagan, S., Zungu, N., Evans, M. G., Jacobs, L., Faber, M., & the SANHANES-1 Team (2014b). *South African National Health and Nutrition Examination Survey (SANHANES-1): 2014 Edition*. Cape Town: HSRC Pres*s* [Accessed online via http://www.hsrc.ac.za/uploads/pageNews/72/SANHANES-launch%20edition%20(online%20version).pdf on 23/ 11 2017]

Shisana, O., Labadarios, D., Rehle, T., Simbayi, L., Zuma, K., Jooste, S., Zungu, N., Labadarios, D., Onoya, D. (2014a). *South African National HIV Prevalence, Incidence and Behavior Survey (SANHPIBCS): 2014 Edition*. Cape Town: HSRC Press [Accessed online via http://www.hsrc.ac.za/en/research-data/view/6871on 27/ 12 2017]

Siziba, L. P., Jerling, J., Hanekom, S. M., Wentzel-Viljoen, E. (2015) “Low rates of exclusive breastfeeding are still evident in four South African provinces” *The South African Journal of Clinic Nutrition*. Vol 25, No 4. 170-174

South Africa Demographic and Health Survey (SADHS) (2016). “South Africa Demographic and Health Survey 2016: Key Indicator Report” Published by Statistics South Africa, Private Bag X44, Pretoria 0001 [Accessed online via http://www.statssa.gov.za/publications/Report%2003-00-09/Report%2003-00-092016.pdf on 15/11 2017]

South African Department of Health (2012). “Strategic Plan for Maternal, Newborn, Child and Women’s Health (MNCWH) and Nutrition in South Africa 2012-2016” Published by Statistics South Africa. [Accessed via https://extranet.who.int/nutrition/gina/sites/default/files/ZAF%202012%20MNCWHstratplan.pdf on 13/11 2017]

South African History (2013). “Eastern Cape” [Accessed online via: http://www.sahistory.org.za/places/eastern-cape on 23/10 2017]

South African History Online (Sahistory) (2011). "Nelson Rolihlahla Mandela" [Accessed online via http://www.sahistory.org.za/people/nelson-rolihlahla-mandela on 14/12 2017]

Spivak, G. C. (1988). "Can the Subaltern Speak?". *Nelson C. Grossberg L. Marxism and the Interpretation of Culture*. Macmillan Education. Basingstoke. 217-313

Statistics South Africa (STATSSA) (2015). "Statistical release; Mid-year population Estimates 2015". [Accessed online via https://www.statssa.gov.za/publications/P0302/P03022015.pdf on 20/11 2016]

Statistics South Africa (STATSSA) (2016). "Statistical release; Mid-year population Estimates 2016". [Accessed online via http://www.statssa.gov.za/publications/P0302/P03022016.pdf on 17/9 2017]

Sullivan, A. (2002). "Bourdieu and Education: How useful is Bourdieu´s theory for researchers?" *The Netherland´s Journal of Social Sciences*. Vol. 38. No. 2. 144-166

Sultana, F. (2007). Reflexivity, positionality and participatory ethics: Negotiating fieldwork dilemmas in international research. *ACME: An International E-Journal for Critical Geographies*. Vol 6. No 3

United Nations (UNa) (2015). "Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture". *Sustainable Development Goals: 17 Goals to transform our world*. [Accessed online via http://www.un.org/sustainabledevelopment/hunger/ on 13/9 2017)

United Nations (UNb) (2015). "Goal 3: Ensure healthy lives and promote well-being for all at all ages". *Sustainable Development Goals: 17 Goals to transform our world.* [Accessed online via http://www.un.org/su2stainabledevelopment/health/ on 13/9 2017]

United Nations International Children Emergency Fund, UNICEF (2013). "Health and Nutrition" In U Annual Report 2013. Published via UNICEF South Africa via Pattison RC. "Saving babies 2008-2009: Seventh Perinatal Care Survey of South Africa". In Tshepesa Press, Pretoria, 2011

United Nations International Children Emergency Fund, UNICEF (2014). "Convention on the rights of a child" *UNICEF for every child*. [Accessed online via https://www.unicef.org/crc/index_73549.html on 11/9 2017]

Van Den Berghe, P. L. (1965). *South Africa, A Study of conflict*. Wesleyan University Press. Middleton Connecticut

Wacquant, Loïc. (1998). "Pierre Bourdieu" *Stones, Rob (red.) (1998). Key Sociological thinkers*. New York: New York University Press. 215-229

World Health Organization, WHO (1989). "Protecting, promoting and supporting breast- feeding: The special role of maternity services". A joint WHO/UNICEF

statement. [Accessed online via http://www.who.int/nutrition/publications/infantfeeding/9241561300/en/ on 10/8 2016]

World Health Organization, WHO (2010). Guidelines on HIV and infant feeding: "Principles and recommendations for infant feeding in the context of HIV and a summary of evidence". [Accessed online via http://www.who.int/maternal_child_adolescent/documents/9789241599535/en/ on 13/10 2017]

World Health Organization, WHO (2017). Infant and you child feeding. [Accessed online via http://www.who.int/mediacentre/factsheets/fs342/en/. On 24/11 2017]

Yin, R. K. (2003). *Case study research: Design and methods*. (3rd Ed.) Thousand Oaks: Sage Publications

Zibfus Study (2013). "Project Zibfus study". *Prevention Research for Community*. [Accessed online via: http://www.preventionresearch.org.za/project/zibfus-study/ On 18/9 2016]