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THE FACTORS THAT DETERMINE EXCLUSIVE BREASTFEEDING AMONGST BABIES BELOW SIX MONTHS OLD AT CHITUNGWIZA CENTRAL HOSPITAL IN ZIMBABWE

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ABSTRACT

Worldwide, efforts are being made to promote exclusive breastfeeding as it has some benefits in ensuring healthy kids. These efforts are not being realized as there is resistance to the call because of socio-cultural and religious factors. The research employed both primary and secondary data. Interviews, group discussions and key informants interviews were conducted. (to collect demographic, knowledge on exclusive breastfeeding and the reasons for mothers to embark on mixed feeding) Key informants interviews gave information on the government and hospitals policy on exclusive breastfeeding. Secondary data sources provided information on researches done locally and internationally on exclusive breastfeeding. Data was presented in tables and charts then analysed. The research found out that the child bearing age of most mothers interviewed was between 22 and 30 years and the majority are literate. Many of them feel that exclusive breastfeeding is not enough for the babies. Thus socio-cultural and religious factors prompted mothers to give extra feedings to the babies under the age of six months which poses a great challenge to their health. Employed women have little time for their children during the day which leads to mixed feeding. Thus the research recommends that the government, hospitals, nurses, mothers and family members all make a combined effort in promoting exclusive breastfeeding by proving adequate health education, moral support and favorable conditions so that the programme is effective.

Keywords: breastfeeding, maternal health, infant, mortality, housewives, mixed feeding

INTRODUCTION

Exclusive breastfeeding is encouraged and recommended to all mothers worldwide with efforts being made both in the private and public sector as a way of achieving the Millennium Development Goal (MDG) on improving maternal health. These efforts are also directed at reducing infant morbidity and mortality related to mixed-feeding as breast milk is very vital for the newly born babies. According to UNICEF (2010), exclusive breastfeeding is giving baby breast milk only and nothing else, not even sips of water except for medicines prescribed by the doctor or nurse for the first six months of life. A research done by Johns Hopkins Bloombery school of public health under the School of Public Health at the University of Zimbabwe in 2005 states that exclusive breastfeeding reduces the risk of diarrhea, respiratory tract infections and allergies three times as compared to mixed feeding, (Humphrey, 2005).

According to World Health Organization (2006), in 1991, United Nations International Children's Fund (UNICEF) and World Health Organization (WHO) began an international campaign called Baby Friendly Hospital Initiative. This initiative was meant to promote, protect and support breastfeeding. Most hospitals in Zimbabwe have Baby Friendly Initiative. One of the ten steps for Baby Friendly Initiative states that there should be no advertising of formula products used for babies under six months. In line with this agreement, Zimbabwe prohibits the advertisement of such products on all media in an effort to promote exclusive breastfeeding.

Globally, the first week of August commemorates breastfeeding as the safest way of infant feeding. This shows that worldwide people are aware of the importance of exclusive breastfeeding although some choose not to practice it for some different reasons. A research done in America revealed that 60% of mothers leave hospitals planning to breastfeed their babies exclusively, however only 22% of this 60% were still breastfeeding exclusively for six months (American Academy of Paediatrics, Committee on Nutrition, 2004).

According to Jelliffe and Jelliffe (1978), early ceasing of exclusive breastfeeding predisposes the infant to diarrhea, malnutrition and respiratory tract infections. Thus lack of exclusive breastfeeding results in increased infant morbidity and mortality especially in developing countries.

SCOPE OF THE STUDY

The study seeks to identify factors determining exclusive breastfeeding amongst babies below six months at Chitungwiza Hospital Pediatric ward so as to improve on the body of knowledge and encourage mothers to exclusively breastfeed their babies. Thus this in the end will help in reducing infant morbidity and mortality through promotion of exclusive breastfeeding.

The research is guided by the following objectives:

a) To determine the knowledge of mothers on the importance of exclusive breastfeeding in pediatrics at Chitungwiza Central Hospital.

b) To analyse the effects of socio-cultural factors on exclusive breastfeeding at Chitungwiza Central Hospital Pediatric Ward.

c) To evaluate the attitude of mothers towards exclusive breastfeeding at Chitungwiza Central Hospital Pediatric ward.

d) To provide information on exclusive breastfeeding as this is crucial for decision making and policy formulation by the government.

MATERIALS AND METHODS

There are a set of logical steps followed by a researcher to answer research questions and in this study, the researcher used a descriptive survey to identify factors determining exclusive breastfeeding. This is a systemic manner which allows for description and explanation of beliefs, attitudes and knowledge of mothers towards exclusive breastfeeding. The researcher opted for this method because of its precision (Dempsey and Dempsey, 1986; Brink, 1998).

A group of mix feeding mothers with babies below six months admitted in Pediatric Ward at Chitungwiza Central Hospital aged from fifteen years and above constituted the target population. The sample size consisted of twenty mixed feeding mothers aged fifteen years and

above which according to Morse, (1991) is true representative of the population as it is above 20% of the target population which is mothers admitted with their children at the hospital.

Random sampling was used to ensure that all age groups in the target population had an equal chance of being included in the sample. Twenty five mixed feeding mothers were made to pick YES/ NO papers. Among these, twenty had yes and five had no. Twenty mothers who picked YES papers were selected for the study. Questionnaires were used for data collection and according to Bennett and Sebrechts (1997), questionnaires give true feelings and there is no pushing of the respondents in responding. Also data is gathered from a natural setting and from a wide coverage. A questionnaire ensures respondents unanimity and requires fewer skills to administer hence there is limit on bias. In this research, a pilot study was done on five mixed feeding mothers on Chitungwiza Central Hospital Pediatrics Ward.

STUDY AREA

The study was done at Chitungwiza Central Hospital pediatrics Ward which is for babies whose mothers are still breastfeeding. Chitungwiza lies in Harare metropolitan province with three other government central hospitals namely Harare Hospital and Parirenyatwa Group of Hospitals. There are other private and government hospitals in the province as well as some clinics. Chitungwiza lies on the South Western part of the capital city of Harare with the majority of the people housed in the high density areas. Chitungwiza is a high-density dormitory town in Zimbabwe which houses people who commute to Harare for work on a daily basis. Chitungwiza Central Hospital caters for the people in Chitungwiza as well as surrounding peri-urban areas of Marondera, Seke, Dema and Mahusekwa as well as others.

DISCUSION AND RESULTS FINDINGS

Analysis of mixed breastfeeding

According to UNICEF (2010), exclusive breastfeeding means giving breast milk only and nothing else not even sips of water except for medicines prescribed by a doctor or nurse until the

baby is six months old. The advantages of exclusive breastfeeding include: maintaining the health of the child, reduce child morbidity and promotes the bondage between the mother and the child (Fisher, 1984). Mixed feeding is combining breast milk with other milks, water, liquids such as gripe water, cooking oil, and oral concoction and any other (UNICEF, 2010). Mixed feeding is discouraged worldwide as it negatively impacts the health of the children. Despite campaigns and promotions done on breastfeeding worldwide, 30% of breastfeeding mothers discontinue exclusive breastfeeding prematurely Satter, (1986). There is an increase in mixed breastfeeding among babies below the age of six months at Pediatric Ward at Chitungwiza Central Hospital. This is evidenced by the number of babies below six months who were admitted at the hospital between January and June 2011 in the pediatric because of illnesses associated with mixed feeding.

The table 1 below illustrates the statistics of the mixed fed babies below six months admitted from January to June in the Pediatric Ward of Chitungwiza Central Hospital for 2011.

Table 1 Statistics of mixed breastfeeding babies at Chitungwiza Central Hospital

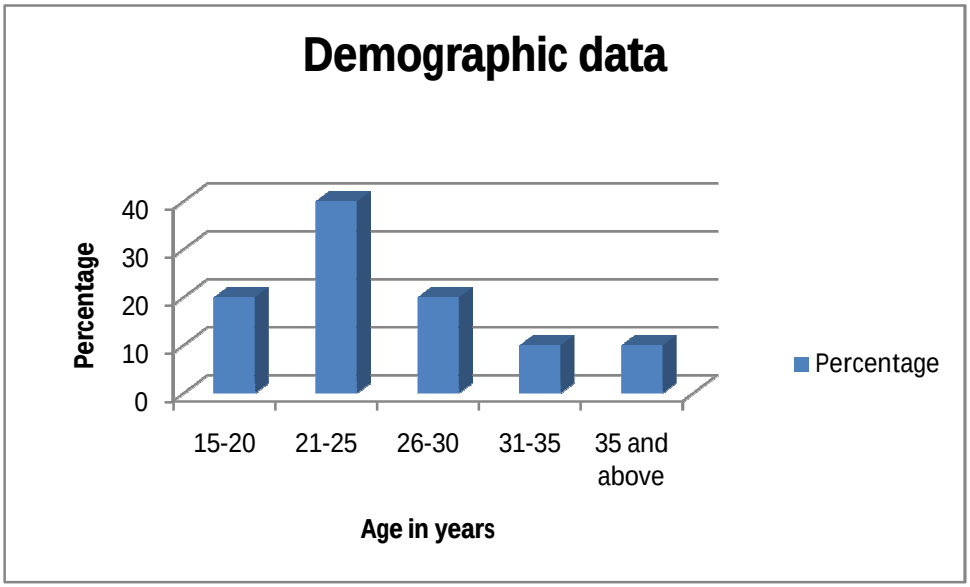
MONTH	Total number of babies below six months admitted	Number of mixed fed babies below six months	Percentage of mixed fed babies
JANUARY	34	10	29.4%
FEBRUARY	29	8	27.5%
MARCH	38	12	31.5%
APRIL	37	19	51.3%
MAY	55	24	43.6%
JUNE	63	30	47.6%
TOTALS	256	102	39.8%
CASE FATALITY		4	3.9%

Of the 256 (39.8%) of the babies below six months admitted from January to June 2011, 16.5% were admitted with diarrhea while 22.9% had respiratory tract infections. 10% of infant mortality is attributed to mixed feeding as it increases the risks of diarrhea, respiratory tract infections and malnutrition. It was also pointed out that mixed feeding is associated with 50% more sick visits to the clinic with prolong hospital stay especially in malnutrition cases as compared to exclusive

breastfeeding (http://www.iycn.org/resource/zvitambo-infant-feeding-materials). These prolonged stays results in overuse of hospital resources as well as creating shortages of hospital facilities for other cases to be attended to. At the pediatrics wards of Chitungwiza Hospital, the minimum stay of admitted babies on mixed feeding from January to June in 2011 was five days whilst the maximum was 42 days and this could have been avoided by exclusive breastfeeding babies. This was straining the hospital budget since children less than five years old are treated for free in all state owned hospitals and clinics. Socially the other babies at home have no one to look after them and this strains family relationships as mothers and relatives will be frequently visiting the patient admitted at the hospital.

Demographic data

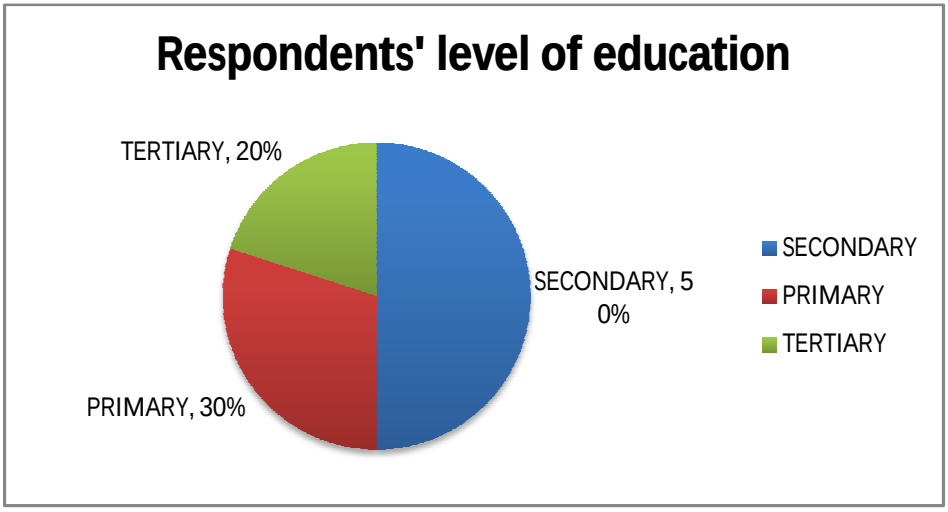
Fig 1: Distribution of respondents according to age



The above bar chart shows that 6 (20%) of the respondents were aged between 15-20 years, 8 (40%) were aged between 21-25 years, 4 (20%) were aged between 26-30 years, 2 (10%) were aged between 31-35 years while 2 (10%) were above 35 years. This shows that the majority of child bearing women are 21-30 years which is 60%. The least group is those aged from 31 years going up. Thus the majority of child bearing women are within the age group of 20-35 which is

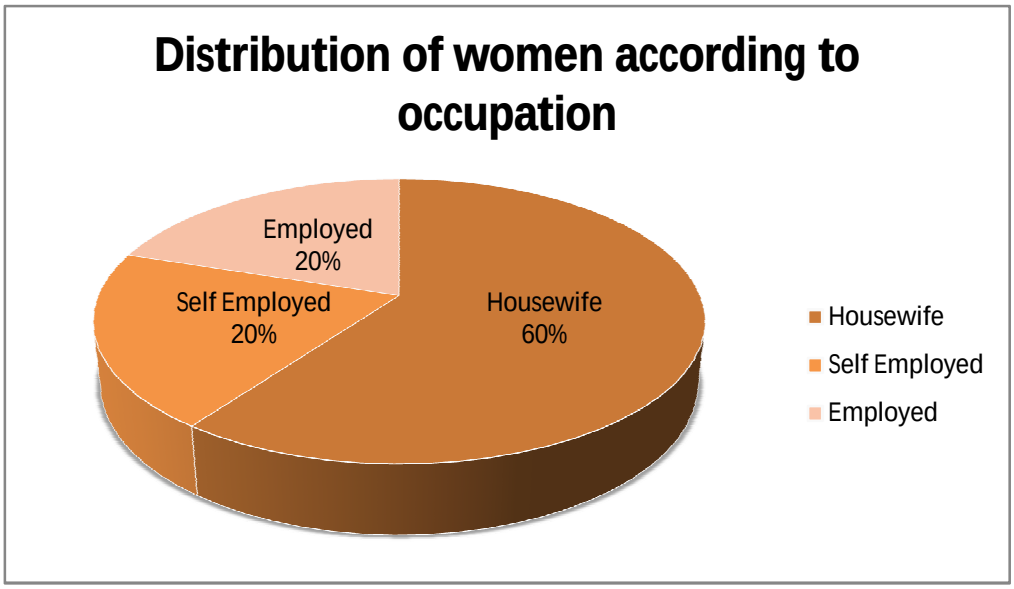
the recommended age. According to Bailey (1976), the child bearing age of most mothers is between 20 and 30 years old as this is the fertile age group who are more sexually active.

Figure 2: Distribution of women according to level of education



The above pie chart shows that 6 (30%) of respondents obtained primary education, 10 (50%) attained secondary education while 4 (20%) attained tertiary education. This shows that most women attained secondary education that 50%. The research concludes that all the women interviewed are literate and this indicates that girl child education is being practiced in Zimbabwe. According to the Zimbabwe Human Development Report (2003), the literacy rate in Zimbabwe is 99% and this is depicted by the study which shows over 70% of the mothers having gone through secondary education.

Figure 3: Distribution of women according to occupation



The above pie chart shows that 12(60%) of the respondents were housewives, 4(20%) were self employed while 4(20%) were employed. This shows that the majority (60%) of the respondents are housewives. These have enough time to exclusively breastfeed their babies although they are not doing that. According to the Government of Zimbabwe, (2000), traditionally women's place is considered to be at home doing domestic duties and this is reviewed in the study whereby 60% of the respondents are just housewives. Worthington-Robert, Vermeersch, and Williams, (1985) points out that woman's employment influences early cessation of exclusive breastfeeding on 65.4% of the working women. This research revealed that 80% of the respondents ceased exclusive breastfeeding because they were going back to work. A study carried out in the United States of America by Worthington-Robert, Vermeersch, and Williams, (1985) revealed that the duration of breastfeeding exclusively was more negatively affected by maternal employment rather that attitude towards breastfeeding. It was discovered that only 19.8% of full time employed mothers were still breastfeeding exclusively at six months of age. About 65.4% had already started mixed feeding because of the employment reasons. It was also noted that when an employed breastfeeding mother opt for exclusive breastfeeding, its maintenance was based on the person who remained with the baby whilst the mother was at work. The baby can be mixed breastfed even after the mother had expressed breast milk for the day before leaving for work.

This shows that mothers' nature of employment can affect exclusive breastfeeding negatively. Guyton (1976) echoed the same sentiments saying if a mother fails to breastfeed her baby during the first weeks of life, she is likely to be tempted to try various feeds for the baby. This is more common in first time mothers due to poor breastfeeding techniques. This research recommends that first time mothers should be assisted on breastfeeding during the first weeks of post delivery to promote exclusive breastfeeding.

Knowledge on exclusive breastfeeding

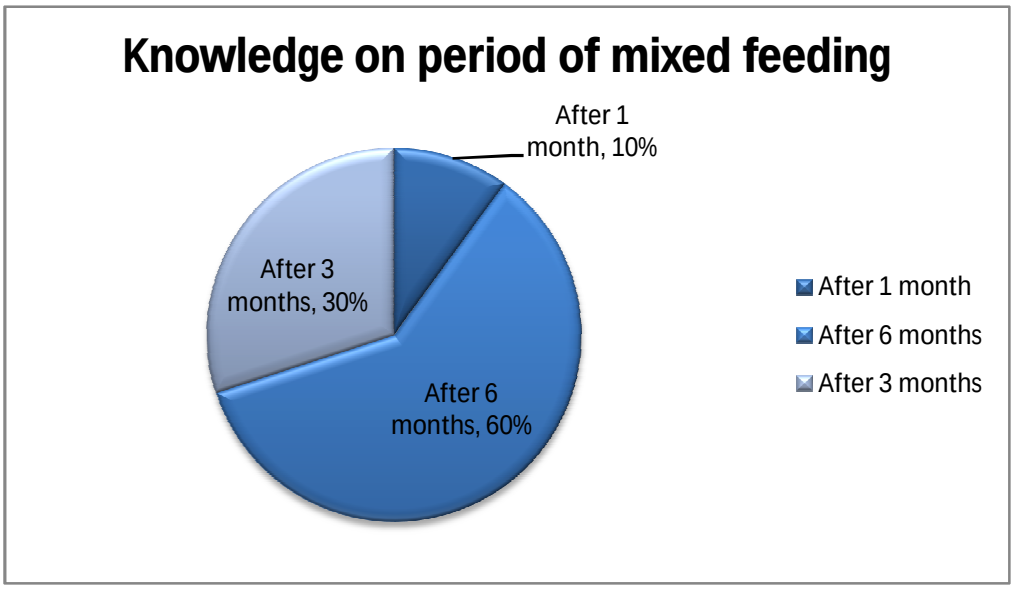
Table 2: Distribution of respondents according to their knowledge on exclusive breastfeeding

RESPONSE	**NUMBER OF RESPONDENTS**	**PERCENTAGE**
Giving the baby breast milk only and nothing else	6	30%
Giving the baby NAN and Lactogen only	2	10%
Giving the baby milk and water only	8	40%
Giving the baby breast milk, porridge and water only	4	20%
TOTAL	**N=20**	**100%**

The above table shows that 6(30%) of the respondents know what exclusive breastfeeding is while 14(70%) did not know what is exclusive breastfeeding. This shows that the majority of women were not aware what exclusive breastfeeding is because Health Education was not given during antenatal care. The Ministry of Health and Child Welfare Health Magazine (2010) says the health education and community outreach programmes in Zimbabwe equips mothers with the skills and knowledge of breastfeeding and they implement it to a greater extent. According to Al-Akour et a l (2010), a research was carried out in North Jordan to evaluate knowledge and attitudes of mothers towards exclusive breastfeeding. The study revealed that 68% of mothers are aware of the importance of exclusive breastfeeding but are not breastfeeding exclusively because about 30% believed that they are unable to produce adequate milk for their babies. About 21% cited reasons like short maternity leave days from workplaces and lack of breastfeeding facilities at the workplaces. The other 17% cited breastfeeding difficulties due to poor breast attachment and negative attitude towards breastfeeding. This study reveals that most mothers have

knowledge on the importance of breastfeeding but have attitude problems towards exclusive breastfeeding.

Figure 4: Distribution of respondents according to knowledge on when baby should be given other foods



The pie chart shows that 2(10%) of the respondents think babies should be given other foods after one month of birth, 12(60%) think food should be given after three months while 6(30%) think food should be given after six months. This shows that the majority of women think food should be given to the baby at three months because they think the baby is mature enough to tolerate solids which then predecease these babies to diarrhea.

Table 3: Distribution of respondents according to knowledge on how HIV is transmitted

Response	**Number of respondents**	**Percentage**
True	16	80%
False	4	20%
Total	20	100%

The above table shows that 16(80%) of women agree that exclusive breastfeeding reduces the risk of HIV transmission while 4(20%) disagree to that. More information has to be given on

how HIV can be transmitted as this is crucial for reproductive health as well as to reduce the transmission of the virus to the babies through the Prevention of Mother to Child Transmission (PMTCT) programmes.

Table 4: Distribution of women according to knowledge on adequacy of breast milk only for the first six months

Response	**Number of respondents**	**Percentage**
True	6	30%
False	14	70%
Total	20	100%

The above table shows that 6(30%) respondents agrees that breast milk only satisfy a baby for six months while 14(70%) think breast milk only for six months is not enough for the baby. This indicates that they think breast milk alone is not enough due to lack of information on components of breast milk. Fisher, C. (1984) says breast milk only is sufficient for the baby but the problem is mothers feel it is not enough hence they end up giving supplementary feeds for the babies. According to World Health Organization (2006), adequate information is given on exclusive breastfeeding during antenatal and post natal care. This does not concur with the results of the research as only 30% of the research's respondents have knowledge on exclusive breastfeeding. The other 70% lacked information on exclusive breastfeeding. This could be because 50% of the participants did not book for antenatal care.

Table 5: Distribution of respondents according to knowledge on advantages of exclusive breastfeeding

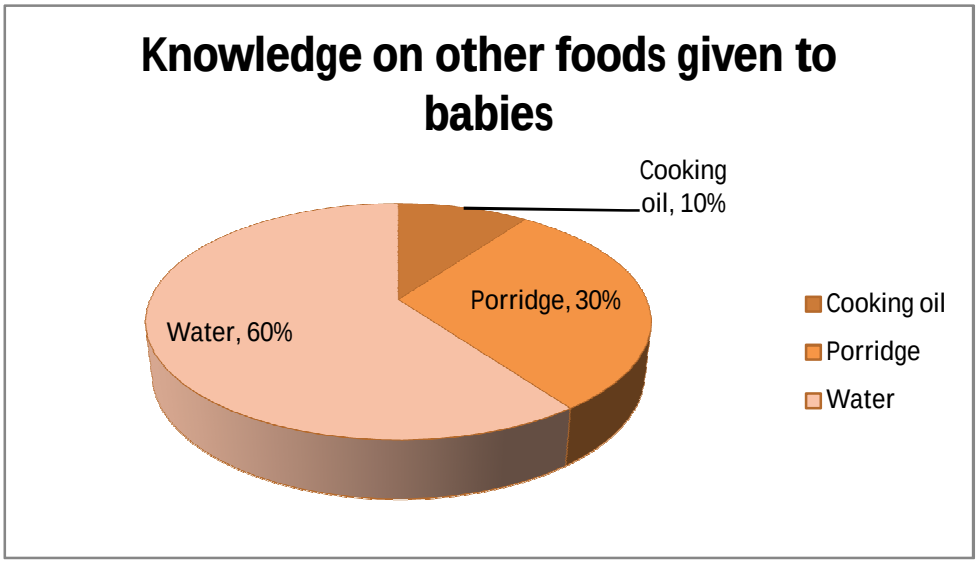
Response	**Number of respondents**	**Percentage**
True	10	50%
False	10	50%
Total	20	100%

The table above shows that half of the subjects are aware of the advantages of exclusive breastfeeding while the other half does not know them. Health education stress the advantages of

exclusive breastfeeding which must be followed always, (American College of Obstetricians and Gynecologists, 1982).

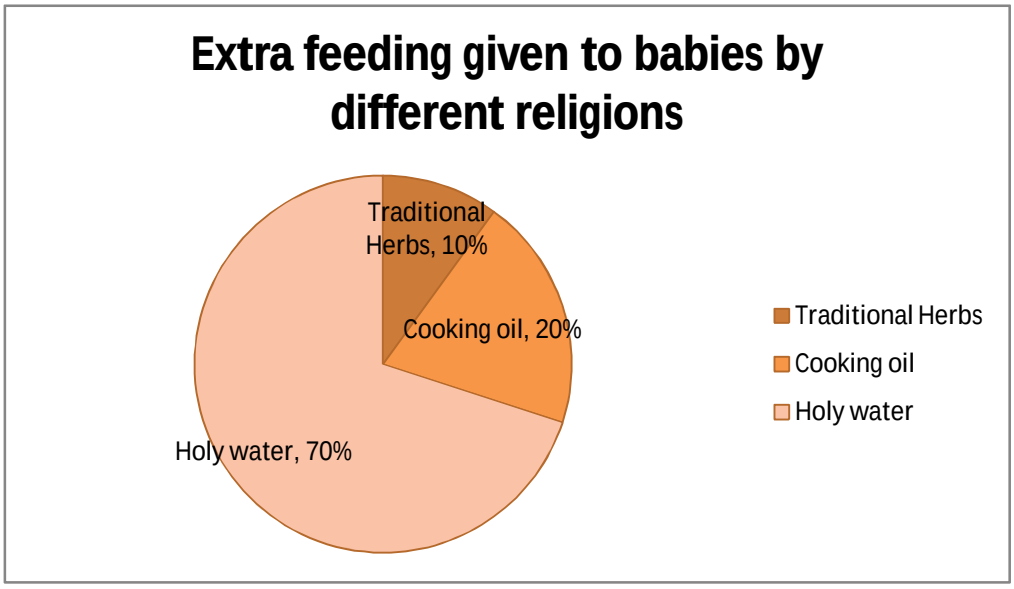
Effects of socio-cultural beliefs on exclusive breastfeeding

Figure 5: Distribution of respondents according to other foods given to babies after birth in their cultures



The above pie chart shows that 6(30%) of babies are given porridge at birth, 12(60%) are given water and 2(10%) are given cooking oil. This shows that most cultures give new born babies water. This reveals that culture has some negative impacts on reproductive health as people stick to the religious and traditional beliefs when it come to reproductive health issues (Ministry of Health and Child Welfare Health Magazine, 2010).

Figure 6: Distribution of respondents according to what they give babies in their religion when they are ill



The above pie chart shows that 2(10%) of the respondents give ill babies traditional herbs, 4(20%) give cooking oil while 14(70%) give ill babies holy water. This shows that most religions give ill babies holy water. This indicates that campaigns on exclusive breastfeeding should be done even in churches.

Table 6: Distribution of respondents acording to how they interpret continous crying of babies in their cultures

Response	**Respondents**	**Percentage**
Hunger	15	75%
Illness	5	25%
Total	20	100%

The above table shows that 15(75%) of respondents interpret continuous crying of babies in their culture as hunger and 5(25%) interpret it as illness. This explains why there are high incidences of mixed feeding.

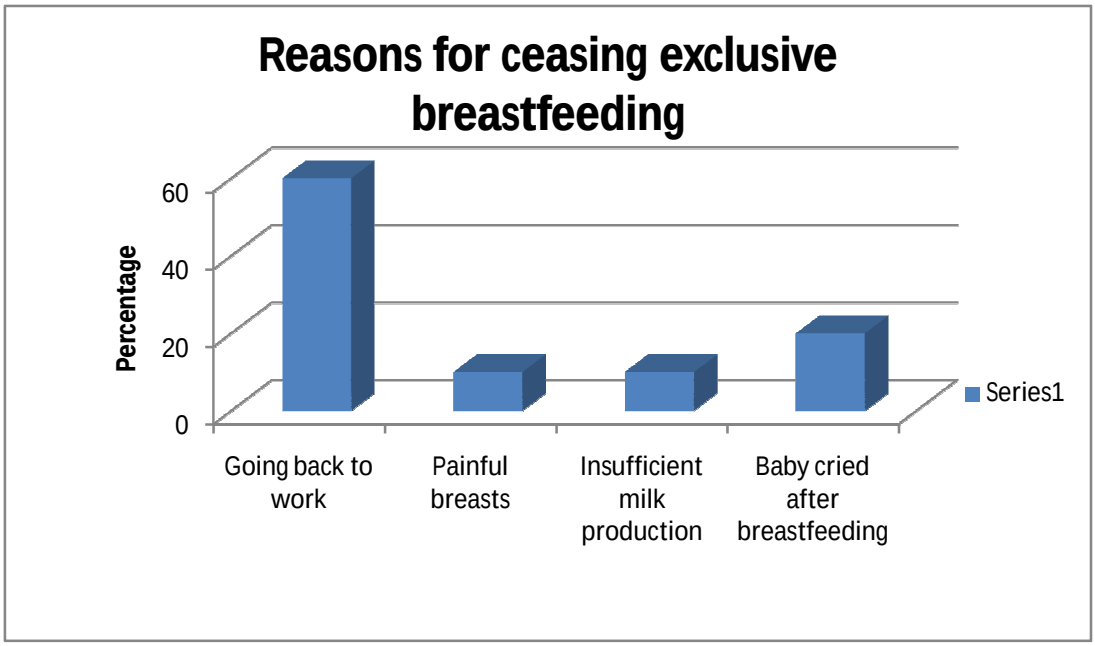
Attitude towards exclusive breastfeeding

Table 7: Distribution of respondents according to attitude towards exclusive breastfeeding in all mothers

Response	Number of respondents	Percentage
Agree	4	20%
Disagree	16	80%
Total	20	100%

The above table shows that 16(80%) of the respondents do not agree to the fact that exclusive breastfeeding is practical while 4(20%) agree that it's practical. This shows that most mothers do not believe that they can breastfeed their babies exclusively for six months. According to American College of Obstetricians and Gynecologists, (1982), efforts are being done worldwide to educate mothers on exclusive breastfeeding as it is crucial and practical.

Figure 7: Distribution of respondents according to why they ceased exclusive breastfeeding



The above table shows that 12(60%) of respondents ceased exclusive breastfeeding because they had to go back to work, 2(10%) had painful breasts, 2(10%) had poor milk production and

4(20%) babies were crying continuously after breastfeeding. The study reveals that the majority, 60% stopped exclusive breastfeeding because they had to go back to work. This means maternity leave days have to be reviewed to allow exclusive breastfeeding. Of the babies admitted at the hospital, 90% of the babies were admitted with diarrhea or respiratory tract infections in this research which is attributed to early cessation of exclusive breastfeeding. Jelliffe and Jelliffe (1978), revealed that early cessation of exclusive breastfeeding predisposes the infants to diarrhea, respiratory tract infections and allergies. The results of this study agree with those findings. American Academy of Paediatrics, Committee on Nutrition, (2004) researched on the effects of exclusive breastfeeding and discovered that exclusive breastfeeding reduces the risks of allergies, gastrointestinal tract and respiratory tract infections in the babies. It also showed that exclusively breastfed babies were able to maintain adequate growth. The research shows that infant morbidity and mortality can be reduced by exclusive breastfeeding as the babies have lowered risk of infections and stunted growth.

In Zimbabwe, a research was carried out to evaluate the knowledge of mothers towards the importance of exclusive breastfeeding. It was discovered that adequate information on exclusive breastfeeding was given during antenatal and post natal periods but those mothers received conflicting advice from decision makers at home. This shows that socio-cultural factors also have very strong impacts on exclusive breastfeeding (Iliff et a l, 2005).

Thus the above findings clearly showed that lack of knowledge on the advantages of exclusive breastfeeding, socio-cultural factors and the attitude of the mothers towards exclusive breastfeeding contributed to mixed breastfeeding.

Table 8: Distribution of respondents according to their view of exclusive breastfeeding in relation with HIV

Response	**Number of respondents**	**Percentage**
Agree	13	65%
Agree	7	35%
Total	20	100%

The above table shows that 7(35%) of respondents agree that exclusive breastfeeding should be done by all mothers despite HIV status while 65% argue that it should be done by HIV mothers. This revealed that the majority of the respondents 65% still believe that exclusive breastfeeding should only be done by HIV positive mothers. Awareness has to be done on exclusive breastfeeding to all women despite their HIV status. A research conducted by Zvitambo Project in Zimbabwe confirms that exclusive breastfeeding reduces the chances of postnatal HIV transmission and increases HIV free survival in children born of HIV positive parents (Iliff et al, 2005).

CONCLUSION AND RECOMMENDATIONS

According to the research, exclusive breastfeeding is very crucial for the health of babies as mixed feeding results in diseases among babies. Despite the health education done at hospitals and communities on awareness of exclusive breastfeeding up to six months, mothers are reluctant to stick to the teachings. Failure to follow exclusive breastfeeding is attributed to social, cultural and religious factors which promote other feedings as a way of safekeeping of the babies. Working mothers also showed that they have a problem in exclusive breastfeeding their babies since the maternity leave is short and they will have to supplement breast milk with other feeds when they are at work which includes porridge and baby milk bought in shops. The greater number of child bearing mothers is aged between 20-30 years and the research reveals that the mothers are literate but they think that exclusive breastfeeding is associated with the mother being HIV positive. There is also a perception by junior mothers who feel breast milk alone for less than six months is not enough to satisfy the baby.

In a way to improve exclusive breastfeeding, the research came up with the following recommendations:

- Health education on exclusive breastfeeding should be given in antenatal care, post natal and in pediatric wards on a daily basis.

- Husbands and family members should be involved in the promotion of exclusive breastfeeding so that mothers are helped to adhere to exclusive breastfeeding since they are decision makers and offer support in most households.

- The ministry of health has to promote Hospital Friendly Initiative in all hospitals to promote exclusive breastfeeding.

- Campaigns to discourage socio-cultural beliefs which promote mixed feeding to be done to promote exclusive breastfeeding.

- Maternity leave should be increased to 6/12 months post delivery to make exclusive breastfeeding practical to working women.

- Nurses to consider health education as an important aspect in promotion of exclusive breastfeeding.

- Hospitals and nurses to work towards discouraging habits which affects exclusive breastfeeding.

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