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Effects of Decline Exclusive Breastfeeding Practice among Saudi Adolescent Mothers and its Risks on the Mothers' and Infants' Health at Jouf region

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Abstract

Background: Breastfeeding is viewed as the optimal method of infant feeding that provides many benefits to both the infant and the mother. The health risks associated with formula feeding and early weaning from breastfeeding. Infants who are not breastfed experience more episodes of diarrhea, ear infections, and lower respiratory tract infections and are at higher risk of sudden infant death syndrome, diabetes, and obesity. Breastfeeding also helps protect mothers from breast and ovarian cancer. Aims were: Study the reasons of decline exclusive breastfeeding practice among Saudi adolescent mothers at Jouf region. Study the impact of decline exclusive breastfeeding practice on Mothers' and Infants' Health at Jouf region.

Research questions: 1- What are the reasons behind spreading the phenomena of decline exclusive breastfeeding practice at Jouf region? 2- Is decline exclusive Breastfeeding Practice among Saudi adolescent mothers has impact on mothers' and infants' health? **Design was:** A cross sectional descriptive survey.

Setting was: Five family medical health care centers in Al Jouf region: Shalhoub Health Center, Almokhatat health center. Qara health Center, Sawyer Health Center and Zallum Health Center.

Sample: A Convenience sample of 200 mothers and their 200 infants.

Data collection tools: Likert scale data collection that answers the first objective study. An interview sheet that answers the second goal of the study and guiding brochures to show the importance and benefits of breastfeeding.

Results: The highest percent cause of feeding delay the next pregnancy which agree, non-availability of milk in nursing mother's breast and work mother, was 57.0%, 56.5%, 56.0%,then the cause of affecting breastfeeding sagging breasts (47.5%), breastfeeding mother limit freedom share in social events (47%)

Conclusion : The result showed presence of significant statics (P< 0.05) in the causes of breastfeeding sagging strength of the mother's body and affect, non-availability of milk in nursing mother's breast, feeding delay the next pregnancy, work mother, breastfeeding mother limit freedom share in social events and breastfeeding retard a child's growth (high significant p< 0.001) Recommendations : It is recommended that breastfeeding patterns and practices in the KSA be re-assessed using a more appropriate research design .This is necessary to inform the breastfeeding promotion programs in this country. It is hoped that this review will serve as baseline information for any upcoming longitudinal studies on breastfeeding in Saudi Arabia or a part of it.

Keywords: Decline Exclusive Breastfeeding, Saudi Adolescent Mothers', Infants' health outcomes

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Introduction

Breastfeeding is characterized by a number of benefits to both mother and infant. The benefits for the infant are protection from diseases and provide immunity by all important nutrients and maintain weight in the rate. Suitable industrial unlike the child that may earn excess weight, rather than increased intelligence and cognitive developmental rate than infant fed by artificial formula feeding as well as strengthen the jaws of the baby during the sucking process itself rather than the process of breast feeding burn some calories for the baby, which helps in keeping the mother's weight after delivery.[1, 2, 3]

As a rapid development pace of life some mothers in the Arab world, especially Saudi women where some mothers are forced to stop breastfeeding early, and left her children because of work or study or to maintain the aesthetic appearance of her body and breast or for unknown reasons .[4,5,6] So the present research was aimed to Study the reasons of no exclusive breastfeeding practice among Saudi adolescent mothers at Jouf region. As well as study the impact of no breastfeeding practice on the Health of Mothers and Infants at Jouf region .[7,8,9]

Agency for Healthcare Research and Quality (AHRQ) published a summary of systematic reviews and meta-analyses on breastfeeding and maternal and infant health outcomes in developed countries. The AHRQ report reaffirmed the health benefits of breastfeeding and the health risks associated with formula feeding and early weaning from breastfeeding. Infants who are not breastfed experience more episodes of diarrhea, ear infections, and lower respiratory tract infections and are at higher risk of sudden infant death syndrome, diabetes, and obesity. Breastfeeding also helps protect mothers from breast and ovarian cancer.[10, 11]

Approximately 44% of infants will have at least 1 episode of otitis media in the first year of life, and the risk among formula-fed infants is doubled (95% confidence interval [CI], 1.4–2.8) compared with infants who are exclusively breastfed for more than 3 months. Human milk oligosaccharides and antibodies to common respiratory pathogens in the infant's environment are thought to provide protection from infection.[12, 13]

The IMR in the Kingdom Saudi Arabia (KSA) had declined significantly over the last decade to 22 per 1000 live births Neonatal mortality. Due to perinatal and post-natal conditions, was the leading cause of death for children less than 5 years in 2001. Several efforts to reduce infant mortality, therefore, must focus on the pattern and causes of neonatal deaths since neonatal mortality accounts for about 50-71 % of deaths in infancy.14, 15 Neonatal mortality accounted for 65.6%, of the infant mortality according to the findings of a regional study at North West Armed Forces Hospital. In Tabouk KSA. These results raised concern since many of the causes in this report such as prematurity. Birth asphyxia, and sepsis are preventable with available low-cost interventions by maintain exclusive breastfeeding.[16, 17]

Adolescent mothers represent a specific cultural group among new mothers because of their cognitive and psychological immaturity compared with adult mothers. They also tend to possess different anxieties and concerns regarding breastfeeding than adult mothers. As a specific cultural group, Adolescent mothers require more concerted prenatal anticipatory guidance, better-focused lactation education efforts, and more face-to-face postpartum support to ensure that the breastfeeding rate among adolescents rises.[18,19]

Aims of the study

1- Study the reasons of decline exclusive breastfeeding practice among Saudi adolescent mothers at Jouf region.

2- Study the impact of decline exclusive breastfeeding practice on mothers' and Infants' health at Jouf region.

Research Questions

1- What are the reasons behind spreading the phenomena of decline exclusive breastfeeding practice at Aljouf region?

2- Is decline Breastfeeding Practice among Saudi adolescent mothers has impact on the mothers' and infants' health?

Subjects and method

Design:

Cross sectional descriptive survey was .

Setting:

Five family medical health care centers in Al Jouf region: Shalhoub Health Center, Almokhatat health center. Qara health Center, Sawyer Health Center and Zallum Health Center.

Sampling:

A Convenience sample of 200 mothers and their 200 infants.

Characterization of the study sample:

1- Mothers between the ages of 20-25 years.

2- Mothers have a baby.

3-Working and nonworking mothers.

3-Mother with all levels of education.

4-Infant age in breastfeeding period.

Tools of the study:

1-Likert scale data collection that answers the first objective study.

2-An interview sheet that answers the second goal of the study and guiding brochures to show the importance and benefits of exclusive breastfeeding.

Validity test:

Was done by five faculties' staff nursing who were expertise from the pediatric specialists. The design of data collection and verification tools of honesty and reliability by test retest of data collection tools on the same sample.

Ethical consideration:

The researcher emphasized to the mothers that the study was voluntary and anonymous. Mother had the full right to refuse to participate in the study at any time. Verbal and informed consent was obtained from each mother in the study to precede the study.

Pilot study

A pilot study was carried out on a sample of 20 nursing mothers and their 20 infants to try out the data collection tools. Pilot sample was excluded because tools were modified.

Method

An official permissions were obtained from the dean of the faculty of Applied Medical Science as well as head of nursing department to get the agreement of the administrators of Maternal and child health care centers. The study lasted two months; it was started at first November to the end of December 2016.

Each mother was interviewed individually .The interview lasted 10 minutes to fill interview sheet. First: Personal data for mothers and infants were filled .Second: fill the Likert scale form for identify the reasons that lead to a lack of breast-feeding mother to child breastfed and the implications of not breastfeeding on the health of the mother and the health of the baby.

Statistical design:

The statistical analysis of data was done using the excel program and the statistical package for social science (SPSS) program version [17].

Results:

Table (1) showed biosocial data for mothers. The highest percent (53 %) of mothers were aged from 22 to 24 year, followed by 26% for mothers were aged less than 22 year and 21% for mothers were aged more

than 24 up to 25 years. Most of mothers74.0% was highly education, 17.5% were average education and 8.5% read and write educational level. 65.5% of mothers were work, but 34.5% for mothers not work. The majority 75.0% of mothers were medium social level, but 20.0% high and 5.0% were low social level. The most of mothers have from 2 to 4 child was 48%, but 39% for mother which have one child and 13% for mother which have more than 4 child.

Variables	No	%
Age(Years)		
< 22 years	52	26%
22-24 years	**106**	**53%**
> 24 years	42	21%
Level of Education		
reads and writes	17	8.5%
Average education	35	17.5%
higher education	**148**	**74.0%**
The state of the work		
Work	69	34.5%
does not work	**131**	65.5%
Social level		
Low	10	5.0%
Medium	**150**	**75.0%**
High	40	20.0%
How many children do you have		
One child	78	39%
2-4 child	**96**	**48%**
>4 child	26	13%
What is the current age of the child infant (months)		
< 4 months	57	28.5%
4 – 7 months	**73**	**36.5%**
8 – 11 months	35	17.5%
More than 11 months	35	17.5%

Table 1: Biosocial data for mothers (N = 200)

Table 2: showed the causes of decline breastfeeding practice. The highest percent cause of feeding delay the next pregnancy which agree, non-availability of milk in nursing mother's breast and work mother, was 57.0%, 56.5%, 56.0%,then the cause of affecting breastfeeding sagging breasts (47.5%), breastfeeding mother limit freedom share in social events (47%), breastfeeding effect on the intensity and length of hair mother (44.5%), breastfeeding sagging strength of the mother's body and affect (43.5%), breastfeeding weaken the fetus if the pregnancy occurred (38.5%), baby gets enough milk from the breast only (31.5%), The child's inability to effortlessly lactation (27.5%).

Variables	Agree		Neutral		Disagree	
	No	%	No	%	No	%
Does breastfeeding sagging strength of the mother's body and affect?	86	43.0%	50	25.0%	64	32.0%
The non-availability of milk in nursing mother's breast is the real reason behind the left breast feeding	113	56.5%	45	22.5%	42	21.0%
Baby gets enough milk from the breast only	63	31.5%	59	29.5%	78	39.0%
Feeding delay the next pregnancy	114	57.0%	55	27.5%	31	15.5%
Work mom or studied one hinder breastfeeding	112	56.0%	44	22.0%	44	22.0%
Breastfeeding affect on the intensity and length of hair mother	89	44.5%	61	30.5%	50	25.0%
Breastfeeding mother limit freedom share in social events	94	47.0%	53	26.5%	53	26.5%
Affecting breastfeeding sagging breasts	95	47.5%	41	20.5%	64	32.0%
Breastfeeding retard a child's growth	41	20.5%	36	18.0%	123	61.5%
Breastfeeding weaken the fetus if the pregnancy occurred	77	38.5%	52	26.0%	71	35.5%
I'm ignoring of the proper way of breastfeeding	44	22.0%	57	28.5%	99	49.5%
The child's inability to effortlessly lactation	55	27.5%	66	33.0%	79	39.5%

Table 2: Causes of decline exclusive breastfeeding practice among adolescent Saudi mothers at al jouf region (N = 200)

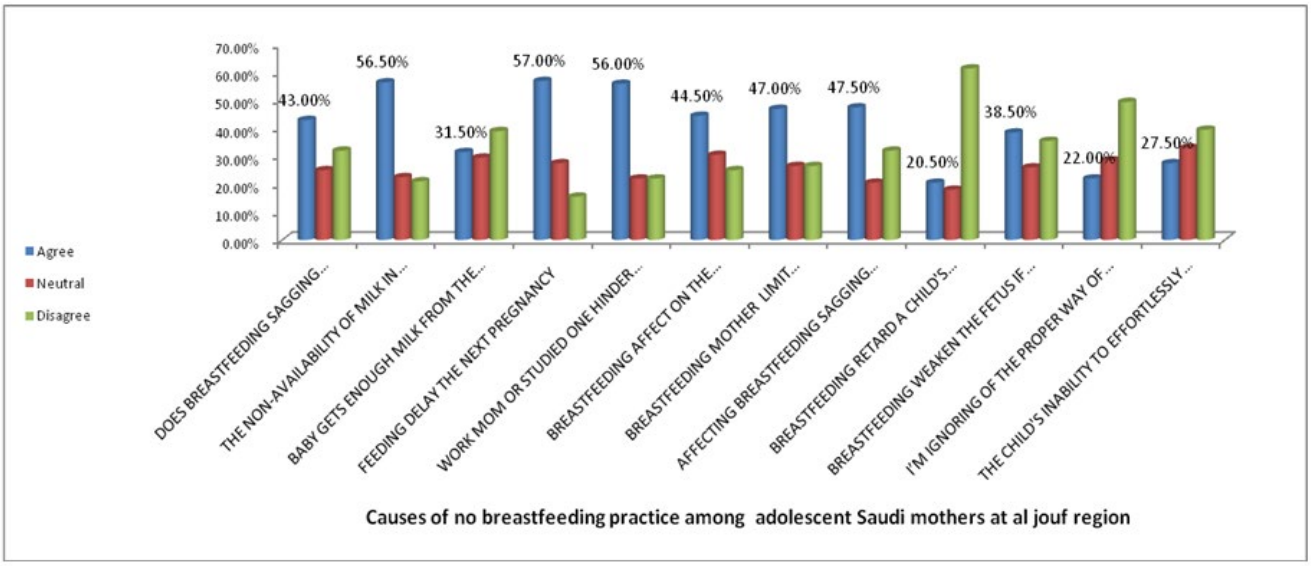

Fig 1: Showing causes of decline exclusive breastfeeding practice among adolescent Saudi mothers at al Jouf region.

Fig.1: Showing causes of decline exclusive breastfeeding practice among adolescent Saudi mothers at al Jouf region. The highest percent cause of feeding delay the next pregnancy which agree, non-availability of milk in nursing mother's breast and work mother, was 57.0%, 56.5%, 56.0%,then the cause of affecting breastfeeding sagging breasts (47.5%), breastfeeding mother limit freedom share in social events (47%), breastfeeding effect on the intensity and length of hair mother (44.5%), breastfeeding sagging strength of the mother's body and affect (43.5%), breastfeeding weaken the fetus if the pregnancy occurred (38.5%), baby gets enough milk from the breast only (31.5%), The child's inability to effortlessly lactation (27.5%).

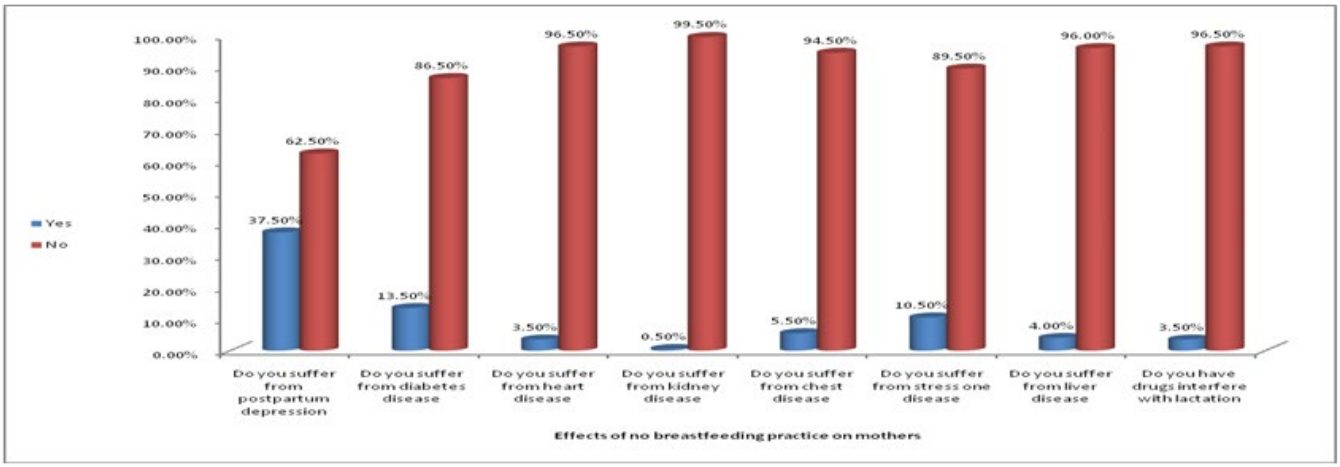

Fig 2A: Effects of decline exclusive breastfeeding practice on mothers

Fig. 2 A: Showing Effects of decline exclusive breastfeeding practice on mothers The percent 37.5%of mothers were, suffering from post-partum depression, but . The percent of mothers, which suffer from diabetes disease, was 13.5%, which do not suffer from diabetes disease. Only 3.5% of mothers were suffering from heart disease. The percent of 99.5 % mothers were not suffering from kidney the percent of mothers, 94.5 % of mothers were not suffering from chest disease. Only 4.0% of mothers were suffering from liver disease, was the percent of mothers, which suffer from liver disease.

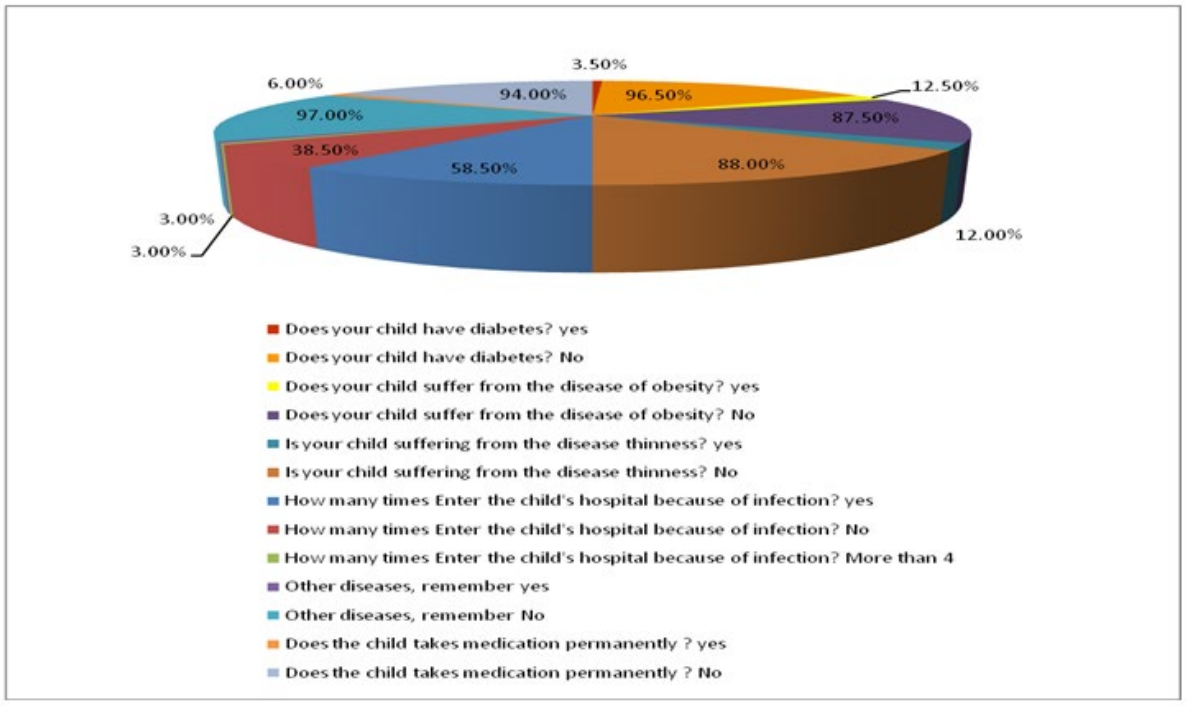

Fig 2B: Showing effects of decline exclusive breastfeeding practice on infants.

Fig 2B: Showing effects of decline exclusive breastfeeding practice on infants. The percent of children which suffer from respiratory diseases a lot (23.5%), but 24.0% for which suffer sometimes and highest percent 52.5% which suffer rarely. A lot (15.0%) percent of children which suffer from infection with iliac disease. Out of sample 13.0% of infants sample were suffering from otitis media. 10.0% of them were suffering from infection of the tonsillitis disease and the 12.5% of infants were suffering from obesity disease.12.0% of infants were suffering from malnutrition disease,(38.5%) of infants the percent (6.0%) of infants were admitted to the hospital with recurrent infection and take medication permanently.

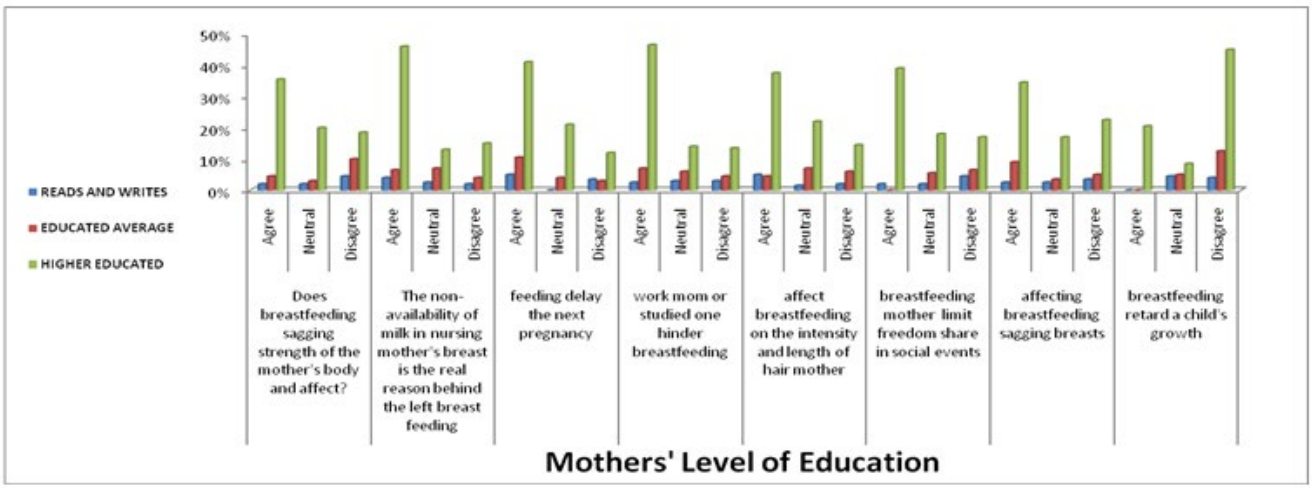

Fig 3: Correlations between decline exclusive breastfeeding practice and mothers' level of education.

Fig 3:Shows the Correlations between decline exclusive breastfeeding practice and mothers' level of education.. The presence of significant statics (P< 0.05) in the causes of breastfeeding sagging strength of the mother's body and affect, non-availability of milk in nursing mother's breast, feeding delay the next pregnancy, work mother, breastfeeding mother limit freedom share in social events and breastfeeding retard a child's growth (high significant p< 0.001), but there is no significant statistics (P> 0.05) in the causes of affecting breastfeeding on the intensity and length of hair mother and affecting breastfeeding sagging breasts. There was a strong correlation between high level of education and decline exclusive breastfeeding practice.

Discussion

Present research has focused on young mothers' experiences of breastfeeding9 and the reasons why adolescent mothers choose to bottle feed10, 11. Studies have found that young mothers are often well informed about the health benefits of breastfeeding10,12 but other factors, such as dominant social norms and embarrassment about feeding in public, are influential in leading adolescent mothers' to formula feed11. Few mothers aged under 20 year's breastfeed outside the home. 20 The results obtained in the present study confirms an earlier report on Saudi population who reported that feeding in Saudi infants was very far from compliance with the World Health Organization of exclusive breastfeeding for 4–6 months.21,22,23

Three of the reasons analyzed for early breastfeeding stopping were insufficient milk, mothers' work and mothers' study. These results were corroboration to the observation of Li et al (2003), who showed that the Chinese-Australian mothers stopped breastfeeding due to insufficient milk or going back for work and/or studies. 11,24,25 Use of contraceptive pills was another reason for interference with breastfeeding; our results are in agreement with the study of Shawky and Abalkhail. The influence of breastfeeding on reducing the incidence of ovarian and breast cancers is well established.17–13,26

Some of the reasons of stopping breastfeeding are related to maternal illness, infant adapting to regular food, health of infants and their refusal to feeding confirms the results obtained by the study of Odom et al who found maternal or child health, infant nutrition, problems related with lactation and milk-pumping problems to interfere with breastfeeding.21,27Although most of the women know that breast milk protects against allergy and infections in the new-born (95.2%, p<0.001), and that breastfeeding may decrease the breast cancer risk in the general population yet their compliance is far below the recommendation.22, 24, 28

On income of family, we found the high social level were significantly more against breastfeeding than the lower income. Literature reports show that chronic malnutrition is often related to low income groups where there is possibility of greater impact on child growth. In view of the multiple causes of malnutrition, the interrelationship among its determinants should be taken into account when adopting strategies for its reduction and prevention of exclusive breastfeeding. It is generally observed that the higher the family income, the less preference towards breastfeeding 19, 28.

Conclusion

Research on breastfeeding in Saudi Arabia to date has been based on cross-sectional study designs and there was a need for cohort studies to more accurately measure breastfeeding and risk factors. The duration of any breastfeeding showed a decline over time, less educated and multiparous mothers who lived in rural communities and belonged to the low socio-economic class were more likely to breastfeed and has prolonged duration compared to high social class. The most common cause of breastfeeding cessation and introduction of alternative feedings was insufficient breast milk.

Recommendations:

It was recommended that exclusive breastfeeding patterns and practices in the KSA be re-assessed using a more appropriate research design like cohort studies which can analyze follow up data and present more accurate and valid results.

It was concluded that Saudi mothers had no problems in initiation of breastfeeding for their newborn but they have a major problem in exclusive breastfeeding and feeding for longer periods of time for reasons that can be controlled and modified by conducting intensive education of proper breastfeeding to all pregnant women with proper communication with lactation professionals to give more supporter to women during their breastfeeding period. There was a need to accelerate awareness of optimum infant feeding recommendations and augment the vigorous practice of the WHO Ten Steps to Successful Breastfeeding. Education and training on breastfeeding, especially targeting the adolescents in Saudi Arabia, should be made common.

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