Nursing Interventions to Support Initiation and Continuation of Breastfeeding for Low-Income Mothers within a Community Setting

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Abstract

The purpose of this paper is to determine factors related to socioeconomic status that affect a mother's ability to breastfeed and the role that nurses play in breastfeeding promotion within a community setting. Research is conducted through a review of the literature and interviews with licensed lactation consultants and Women, Infants, and Children (WIC) employees in order to determine various nursing interventions that are most effective in promoting breastfeeding of the specified population. Contributing factors that enhance breastfeeding rates will be included in the review of literature and discussion of findings. Current statistics suggest that there is a disparity in breastfeeding rates between the general population and those women enrolled in supplemental feeding programs such as Women, Infants, and Children (WIC). Per WIC, in 2015 only 30.9% of WIC infants were exclusively breastfed nationally and only 12.9% of those infants were exclusively breastfed until 6 months of age. This paper will examine the various influences that affect breastfeeding rates and how nurses can be utilized in community settings to support mothers of low socioeconomic status.

Keywords: breastfeeding, low-income, WIC, nursing, community

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Introduction

This study asks the questions: What factors are related to socioeconomic status and a mother's ability to breastfeed?" and What are the most effective nursing interventions to support breastfeeding of low-income mothers within a community setting. The World Health Organization (WHO; 2016) recommends that all infants are exclusively breastfed until six months of age due to the developmental, health, and lifelong benefits that come from exclusive breastfeeding (2017). Exclusive breastfeeding is defined as the administration of only breastmilk as a form of nutrition without the supplementation of formula or other liquids such as water – except for oral rehydration solution, or drops/syrups of vitamins, minerals or medicines (WHO, 2017). Breastmilk is the ideal nutrition for infants and allows for optimal growth, development, and health of the newborn. Benefits associated with exclusive breastfeeding include protection against common childhood illnesses such as pneumonia and diarrhea and prevention of obesity and other non-communicable diseases such as asthma and diabetes (WHO, 2017). In addition, breastfeeding provides a bonding experience between the mother and infant that can lead to increased weight loss, decreased risk of ovarian cancer, and prevention of future pregnancies for the mother (MacGregor & Hughes, 2010).

Healthy People 2020 (national objectives for improving the health of all Americans) goal for 2020 is for over 80% of all infants to be breastfed at some point, over 60% of infants will be breastfed until they are six months of age, and 25% of infants will be exclusively breastfeed until they are six months of age. As of 2014, the Centers for Disease Control and Prevention recorded, nationally, that 79.2% of infants in the United States were breastfed at some point, 49.4% of

infants were breastfed until they were six months of age, and 18.8% of infants were exclusively breastfed until they were six months of age. Unfortunately, there is a disparity in breastfeeding rates between the general population and those women enrolled in supplemental feeding programs such as Women, Infants, and Children (WIC). Per WIC, in 2015 only 30.9% of WIC infants were breastfed nationally and only 12.9% of those breastfed were exclusively breastfed. There are several influences and personal characteristics that affect breastfeeding rates amongst certain populations.

Healthcare providers play a major role in health promotion efforts through community engagement and patient education. Patients who present with a lack of education rely on health professionals as a source of knowledge and expertise. For this reason, healthcare providers must provide up-to-date and accurate information that favors optimal patient outcomes. Nurses provide patient education on breastfeeding in postpartum units and act as a major determinant on whether breastfeeding continues outside of the hospital setting. Nurses in the community have the job of providing prenatal education and continued support to mothers regarding breastfeeding promotion and continuation. Healthcare providers must be aware of the specific factors that impact a mother's ability to exclusively breastfeed in order to provide optimal, patient-centered care.

Methods

Research Design

A systemic review allows for extensive analysis of current research surrounding a topic while interview allows for personal acquisition of qualitative information. Research took place through the use of search engines such as CINAHL and Google Scholar. The combination of the two provides complete synthesis of evidence-based information and personal experience

surrounding a topic. The review of literature was completed on nine articles focused on breastfeeding rates and promotion for low-income mothers and within WIC programs. Three interviews were completed with professionals in the field that included two lactation consultants, a nutritionist, and a registered nurse at DeKalb County WIC. The review of literature and interview were completed in order to determine the objectives of this study such as factors associated with low-breastfeeding rates of low-income women and how nurses can be utilized in the community setting to promote breastfeeding practices of low-income women.

Data Sources

The inclusion and exclusion criteria were set in order to determine the most accurate and relevant data sources (See Appendix A). Searches were completed in the summer and fall of 2016 on a number of data bases with various search criteria set (See Appendix B). Interviewees were determined based on their experience in the field and their willingness to be interviewed on the topic. Interviews were completed in February of 2017 and each interview was conducted by one interviewer from a standardized set of questions previously established by the researcher and adviser (See Appendix C).

Quality Assessment

Accuracy and relevancy of data sources were determined based on a number of factors: publication within ten years, authored by nursing professionals, presence of a peer review, and the degree to which the data source relates to the topic of interest. The quality of interviews was ensured through the selection of nursing professionals, predetermining a set of standardized questions, and completing thorough examination of interview data in comparison to information found in data sources. Ensuring the quality of data sources and findings from interviews ensures

that accurate information is included and synthesized in presentation of findings and discussion of conclusions.

Results

Nine research articles met the inclusion criteria (See Appendix A) and three interviews were completed with professionals who have experience in breastfeeding support and promotion. Four themes were produced from analysis of data: benefits of breastfeeding, existence of breastfeeding disparity rates, barriers to breastfeeding for low-income women, and nursing interventions to promote breastfeeding practices of low-income women.

Benefits of Breastfeeding

All of the articles reviewed included benefits of breastfeeding practice when explaining the purpose of their research and the significance of existing low-breastfeeding rates. Benefits associated with exclusive breastfeeding relate to the nutritional and developmental needs of the newborn that are met through breastmilk and the bonding that breastfeeding practice provides between a mother and infant. According to MacGregor and Hughes (2010), breastfeeding provides a reduced risk of diabetes, respiratory and gastroenterological problems in infants, and increased weight loss and decreased risk of ovarian cancer in mothers (See Appendix D). Hannula, Kaunonen, and Tarkka (2008) mention the decreased risk of obesity, cardiac disease, and postmenopausal breast cancer associated with exclusive breastfeeding practice. Jenson (2011) discusses the decreased risk of asthma, acute otitis media, atopic dermatitis, childhood leukemia, and Sudden Infant Death Syndrome (SIDS) associated with breastfeeding practice. In addition, Godfrey and Lawrence (2010) found that breastfeeding practice in the immediate post-partum period is associated with a decreased risk of postpartum depression due to the continued release of oxytocin and prolactin that occurs with lactation. Each of the nursing professionals

interviewed brought up the benefits of breastfeeding and agreed that breastfeeding promotion is a priority in their practice. In 2005, The American Academy of Pediatrics established the nutritional, immunological, and developmental benefits of breastfeeding for infants. It is for that reason that The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of life and then continued breastfeeding with supplementation for at least the first year of life. Promoting exclusive breastfeeding practice has been made a priority by WIC and other nutrition assistance programs because of the health, nutritional, economical, and emotional benefits it provides to both the mother and child (USDA, 2015). It is necessary to include the benefits of breastfeeding when discussing breastfeeding promotion measures in order to validify and signify the importance of the behavior itself.

Existence of Breastfeeding Disparity Rates

Of the nine articles analyzed, six discussed the disparity of breastfeeding rates amongst low-income women and women of ethnic and racial minorities. MacGregor and Hughes (2010) include teenage mothers when discussing breastfeeding practices of disadvantaged groups. According to their study, teenage mothers are 50% less likely to breastfeed in comparison to adult women in other developed countries (2010). Another study found that African American and socio-economically disadvantaged women had the lowest breastfeeding rates (Hurley et al, 2008). This study also found that the rates of breastfeeding at six and twelve months for low-income mothers remains far below the national goals (Hurley et al.). Nationally, 79.2% of infants were breastfed at some point, 49.4% of infants were breastfed until they were six months of age, and 18.8% of infants were exclusively breastfed until they were six months of age (CDC, 2014). Compare this with the 30.9% of WIC infants who were partly breastfed and the12.9% of WIC

infants who were exclusively breastfed (USDA, 2015). This disparity results from several barriers that relate specifically to socioeconomic status.

Barriers to Breastfeeding for Low-Income Women

The literature and nursing professionals provided many reasons as to why a disparity of breastfeeding rates exists amongst low-income women. The lactation consultants who were interviewed related it to family support and influence. If the woman comes from a family that never practiced breastfeeding or does not support it then it is unlikely she will engage in the behavior. The registered nurse at WIC suggested that decreased breastfeeding rates may be due to the need to immediately return to work after having the child in order to support their family. Breastfeeding is time consuming as it may not be feasible for some women to miss work in order to stay at home and exclusively breastfeed their newborn. Each of the nine articles suggest barriers to exclusive breastfeeding such as perceived pain of breastfeeding, lack of education, and a complete disinterest in breastfeeding. Barriers specific to low-income women include the lack of time and resources that are needed for exclusive breastfeeding in the first six months of the infant's life (Pugh et al., 2010).

Jensen (2011) found that WIC participation may be associated with lower rates of breastfeeding initiation compared to the control group. The intervention group was comprised of those women partaking in the WIC program while the control group was women not enrolled in WIC. When asked about this in interview, the WIC nurse stated that "mothers know that they will receive formula for free if they qualify for WIC. It is a lot easier and less time consuming to use formula rather than breastfeed." The formula industry has created their own barrier to exclusive breastfeeding. In the United States, it is legal for formula companies to market formula as compared to other developed countries per The World Health Organization's International

Code of Marketing of Breastmilk Substitutes (1981; See Appendix E). The marketing of formula normalizes its use and perpetuates standards of infant feeding in America. In an interview, a lactation consultant discussed how this standard negatively affects immigrants and those who wish to assimilate to American culture. “In their countries, it is the norm to exclusively breastfeed but they want to be like Americans and Americans do not breastfeed” stated the lactation consultant. MacGregor and Hughes (2010) found that many women express embarrassment and a lack of confidence when they need to breastfeed in front of others, even family members and friends. Introducing measures that normalize breastfeeding, such as making formula marketing illegal, help to decrease the stigma associated with breastfeeding which, in turn, help increase the number of women who feel less embarrassed about breastfeeding and chose to exclusively breastfeed their infants.

Recognizing the barriers associated with exclusive breastfeeding practice is necessary in the implementation of programs and interventions that aid to promote and ensure exclusive breastfeeding for the first six months of an infant’s life.

Nursing Interventions to Promote Breastfeeding Practices of Low-Income Women

Nurses in the community have been effective in promoting breastfeeding because of their educational expertise, experience with psychosocial issues, treatment advice for unpleasant symptoms, and mother-baby assessment skills (Pugh et al., 2010). Nurses have found to be effective promoters of breastfeeding in the hospital and community setting. A best-practice model for breastfeeding mothers has yet to be determined; but interventions with nurses and peer counselors show promise (Pugh et al., 2010). The study completed by Pugh et al. (2010) found that intensive community nurse peer counseling increased six week breastfeeding rates for low-income mothers compared to the control group. Hannula, Kaunonen, and Tarkka (2008) found

that nursing interventions to support breastfeeding are more effective when initiated from pregnancy to the intrapartum period and throughout the postnatal period. In addition, methods using various methods of education and support from multidisciplinary professionals are more effective than those interventions that focus on using a single method (Hannula, Kaunonen, & Tarkka, 2008).

All of the nurses interviewed agreed that the best intervention to support breastfeeding is education. “Mothers must be educated on the benefits of breastfeeding and given support if we want them to exclusively breastfeed” said one lactation consultant. The WIC registered nurse gave several examples of how their program works to promote breastfeeding: such as holding free educational seminars, creating support groups lead by mothers, giving free handouts with information, and continuously checking up on mother’s progress in the postpartum period. One of the lactation consultants said that one of the most effective interventions they have seen in their practice was the creation of a breastfeeding support group that was led by new mothers for new mothers. The program consisted of mothers who were only a couple of weeks into breastfeeding while other mothers were still breastfeeding after two years. “The program gave these mothers support and education. They could see what successful breastfeeding looked like and ask other moms their questions directly” said one of the lactation consultants. The combination of education and continuous support from healthcare professionals and family members shows to be the most effective interventions aimed at promoting exclusive breastfeeding for low-income women.

Conclusion

Breastfeeding promotion that is aimed specifically towards low-income women considers barriers to exclusive breastfeeding and works to find specific solutions to help that specific

population. The benefits associated with exclusive breastfeeding for the first six months of a newborn's life are prevalent and can be utilized to advocate for health promotion activities centered around exclusive breastfeeding. The disparity in exclusive breastfeeding rates among low-income women represents continued participation in unhealthy activities that can be changed with continued support and education. Healthcare providers, especially nurses, have the ability to provide continuous support and education to new mothers and should provide that support to ensure best practices and promote optimal health.

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Appendix A

Inclusion and Exclusion Criteria of Data Sources

Inclusion Criteria	Exclusion Criteria
Source was published by nursing professionals within the last 10 years	Source was published before 2006
Source was authored by nursing professionals and was published in a reputable professional journal	Source was not authored by nursing professionals
Source discusses the benefits of breastfeeding	Source does not discuss importance of breastfeeding and its necessity in care
Source includes factors that affect breastfeeding rates; specifically, breastfeeding rates of low-income women	Source does not discuss factors that affect breastfeeding rates
Research was carried out in the United States and published in English	Research carried out outside of the United States; source not published in English
Breastfeeding support and promotion techniques for nurses were included in the research	Source does not address breastfeeding promotion measures

Appendix B

Search Criteria

Database	Keywords
EBSCO including CINAHL	‘low-income women’ or ‘women of low socioeconomic status’ or ‘WIC members’ and ‘breastfeeding rates’ or ‘breastfeeding promotion’ or ‘breastfeeding support’ and ‘nurses’ or ‘community setting’
MEDLINE	‘nursing interventions’ or ‘breastfeeding support’ and ‘women of low socioeconomic status’ or ‘low-income women’ or ‘WIC members’
Google Scholar	‘nursing support’ or ‘nursing interventions’ and ‘breastfeeding support’ or ‘breastfeeding promotion’ for ‘women of low socioeconomic status’ or ‘WIC members’
Cochrane Library	‘nursing support’ or ‘nursing interventions’ and ‘breastfeeding promotion’ or ‘breastfeeding support’ and ‘women of low-socioeconomic status’ or ‘low-income women’ or ‘WIC members’

Appendix C

Interview Questions

1. What are your credentials and what experience do you have supporting breastfeeding practice of low-socioeconomic women?
2. There currently exists a disparity between the national breastfeeding rates and the breastfeeding rates of those mothers enrolled in a WIC (Women, Infants, Children) program*. Why do you believe this disparity exists?
3. Throughout your practice, what factors have you found significantly influence breastfeeding rates amongst mothers of low-socioeconomic status?
4. What interventions can nurses use in the immediate postpartum period to assist mothers with breastfeeding initiation?
5. What interventions can nurses use in the community setting to promote breastfeeding continuation?
6. Have you utilized any of the above interventions in your practice? How effective are these interventions?

**As of 2014, the Centers for Disease Control and Prevention recorded that 79.2% of infants were breastfed at some point, 49.4% of infants were breastfed until they were six months of age, and 18.8% of infants were exclusively breastfed until they were six months of age. According to WIC, in 2015 only 30.9% of WIC infants were breastfed nationally and only 12.9% of those breastfed were exclusively breastfed.*

Appendix D

Benefits of Breastfeeding

(World Health Organization, 2016)

Appendix E

International Code of Marketing of Breastmilk Substitutes

Definition: An international code created by The World Health organization in 1981 to regulate the marketing of breastmilk substitutes.

Stipulations:

I. There will be no marketing of breastmilk substitutes

II. No free samples of breastmilk substitutes are to be provided to mothers

III. No promotion of products through healthcare facilities

IV. No gifts or samples are to be given to healthcare professionals in exchange for formula promotion

V. No words or pictures idealizing artificial feeding are to be present on the products (this includes images of a mother feeding a baby with a bottle)

VI. All of the information on artificial feeding should promote breastfeeding and explain the benefits of its practice while showing the costs and hazards associated with artificial feeding

VII. Unsuitable products, such as sweetened condensed milk, should not be promoted for babies. All products should be of high quality

(World Health Organization, 1981)