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Intention of getting pregnant and breastfeeding: an integrative review

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INTENTION OF GETTING PREGNANT AND BREASTFEEDING: AN INTEGRATIVE REVIEW

Intenção de engravidar e amamentação: revisão integrativa

Intención de quedarse embarazada y amamantar: revisión integrativa

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ABSTRACT

Objective: To analyze the relationship between the intention of getting pregnant and breastfeeding. **Methods:** An integrative review of the literature was carried out by searching the PubMed and LILACS databases following the recommendations of the Preferred Reporting Itens for Systematic Reviews and Meta-Analyses (PRISMA) protocol. Two independent researchers used the combination of the descriptors Pregnancy (Unplanned OR Unwanted) AND Breastfeeding in June 2016 without restricting the publication period. After applying the pre-established criteria and the qualitative evaluation, six articles were included in the study. **Results:** There was an association between unplanned pregnancy and low breastfeeding rates, with unwanted pregnancies associated with worse outcomes compared with untimely pregnancies. Socioeconomic and cultural circumstances affected this relationship. **Conclusion:** Given the predisposition of women with unplanned pregnancies to unfavorable behaviors regarding the establishment and continuity of breastfeeding, it is necessary to strengthen prenatal care to promote and support breastfeeding as a strategy to promote maternal and child health, especially when pregnancy is unwanted.

Descriptors: Pregnancy; Maternal Behavior; Breastfeeding; Health Promotion.

RESUMO

Objetivo*: Analisar a relação entre a intenção de engravidar e a prática da amamentação.* ***Métodos****: Realizou-se revisão integrativa da literatura por meio de busca nas bases de dados PubMed e LILACS, segundo recomendações do protocolo Preferred Reporting Itens for Systematic Reviews and Meta-Analyses (PRISMA). Dois pesquisadores independentes utilizaram a seguinte combinação dos descritores: Pregnancy (Unplanned OR Unwanted) AND Breastfeeding, em junho de 2016, sem restringir período de publicação. Após aplicação dos critérios preestabelecidos e avaliação qualitativa, seis artigos foram incluídos no estudo.* ***Resultados****: Verificou-se associação entre gravidez não planejada e baixos índices de amamentação, sendo que gravidezes indesejadas associaram-se a piores resultados comparadas às inoportunas. Circunstâncias socioeconômicas e culturais afetaram essa relação.* ***Conclusão****: Diante da predisposição de mulheres com gravidezes não planejadas a comportamentos desfavoráveis quanto ao estabelecimento e continuidade da amamentação, é necessário o fortalecimento da atenção pré-natal de modo a promover e apoiar o aleitamento materno como estratégia de promoção da saúde materno-infantil, principalmente quando a gravidez for indesejada.*

Descritores: *Gravidez; Comportamento Materno; Amamentação; Promoção da Saúde.*

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RESUMEN

Objetivo*: Analizar la relación entre la intención de quedarse embarazada y la práctica de amamantamiento.* ***Métodos****: Se realizó una revisión integrativa de la literatura a través de una búsqueda en las bases de datos PubMed y LILACS según las recomendaciones del protocolo Preferred Reporting Itens for Systematic Reviews and Meta-Analyses (PRISMA). Dos investigadores distintos utilizaron la siguiente combinación para los descriptores: embarazo (no planeado OR no deseado) AND amamantamiento, en junio de 2016 sin limitarse al periodo de publicación. Se incluyeron seis artículos en el estudio después de la aplicación de los criterios preestablecidos y la evaluación cualitativa.* ***Resultados****: Se verificó la asociación entre el embarazo no planeado y los bajos índices de amamantamiento y los embarazos no deseados se asociaron con los peores resultados al comparar con los embarazos inoportunos. Las circunstancias socioeconómicas y de la cultura afectaron esa relación.* ***Conclusión****: Ante la predisposición para conductas desfavorables sobre el establecimiento y el seguimiento del amamantamiento de parte de las mujeres con embarazos no planeados, se hace necesario el fortalecimiento de la atención prenatal de modo a promocionar y apoyar el amamantamiento como estrategia para la promoción de la salud materno-infantil, en especial cuando el embarazo no es deseado.*

Descriptores: *Embarazo; Conducta Materna; Lactancia Materna; Promoción de la Salud.*

INTRODUCTION

Although scientific evidence has shown the significant impact of breastfeeding on the mother-child binomial and global initiatives have contributed to the increase in breastfeeding rates, the recommendations established by the World Health Organization (WHO), which advocate exclusive breastfeeding in the first six months of life and its maintenance in a complementary way until the child reaches two years or more of life, have not been followed[1-3].

Breastfeeding is subject to the influence of several factors related to the mother, the child, the environment, and the living and working conditions of the mother[4]. An expressive part of the circumstances and factors related to the woman's life may explain the discontinuation of breastfeeding. These factors include the intention to become pregnant[5,6], which is categorized as intentional or planned pregnancy and unintended or unplanned pregnancy. The latter category is subdivided into 'mistimed' (at an inopportune moment) and unwanted[7].

The large percentage of pregnancies that occur without the woman's intention to become pregnant can constitute an important public health problem due to their association with harmful health behaviors and failures related to the family planning policy[8-10]. From this perspective, the intention to become pregnant has an influence on maternal behavior during and after pregnancy and may be associated with breastfeeding. Therefore, it is an important factor for the health and well-being of the child.

Understanding pregnancy intentions is essential for preventing the impact of unintended pregnancies on maternal and child health. In addition, it contributes to the effectiveness of family planning programs[7].

This study aimed to analyze the relationship between the intention of getting pregnant and breastfeeding.

METHODS

We carried out an integrative review[11] of the literature to analyze publications on pregnancy intention and its relationship to breastfeeding through searches on VHL [Lilacs (Latin American and Caribbean Health Sciences Literature), MedLine, PAHO and Repidisca] and PubMed (MedLine), according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)[12].

The studies were selected by two researchers who carried out independent searches in June 2016. To increase search coverage, no year of publication limits were set. To ensure methodological rigor, the Health Sciences Descriptors (*Descritores em Ciências da Saúde – DeCS*) and MesH (Medical Subject Headings) were consulted for the selection of terms. The search equation was the following combination: Pregnancy (Unplanned OR Unwanted) AND Breastfeeding.

The studies were selected based on the following eligibility criteria: fully available online studies addressing the subject analyzed published in Portuguese, English or Spanish. Exclusion criteria were: studies that did not address the subject analyzed and monographs, dissertations and theses that had not been published as an article.

After identifying the publications in the databases and applying the inclusion and exclusion criteria, the titles and abstracts were read and the studies that did not address the subject were excluded. After that, duplicate studies were excluded. The full-texts of the eligible studies were read and included in this review after qualitative assessment.

The qualitative assessment of the studies was based on the Checklist for Measuring Quality[13]. Therefore, the data were assessed with regard to their internal and external validity and the power to detect effect. The version of the instrument used is composed of 27 items; however, only 11 items remained after exclusion of the items that did not apply to the selected studies. The items allow yes or no responses, with scores of 0 to 2 in one of the items and 0 to 1 in the others, resulting in a maximum

score of 12 points. This review included articles with a classification above 70% (above 8 points) because they were considered to be more methodologically rigorous, according to similar criteria used by authors in review articles[14-17].

The aspects considered for the qualitative assessment were the following: description of the hypothesis and objective, description of the outcomes to be evaluated, description of the main confounding factors, clear description of the main results, presentation of estimates of dispersion and variability of results, presentation of the probability values for the results, representativeness of study participants, adequacy of the statistical tests performed in the analyses, accuracy of the outcome measures used, adequacy of adjustment of the analyses in relation to the confounding factors, the power of the study to detect clinically relevant difference considering p below 5%.

In order to intensify data collection, the findings were described in charts using the following variables: author/year of publication, location, design and population, categories or types of pregnancy intention, indicators used and main results.

RESULTS

The searches yielded 210 articles, 57 of which were fully available in the aforementioned databases. After a thorough reading of the abstracts, 10 articles that addressed unwanted pregnancies and breastfeeding were selected. After that, duplicates were excluded and six studies[18-23] were included for review (Figure 1).

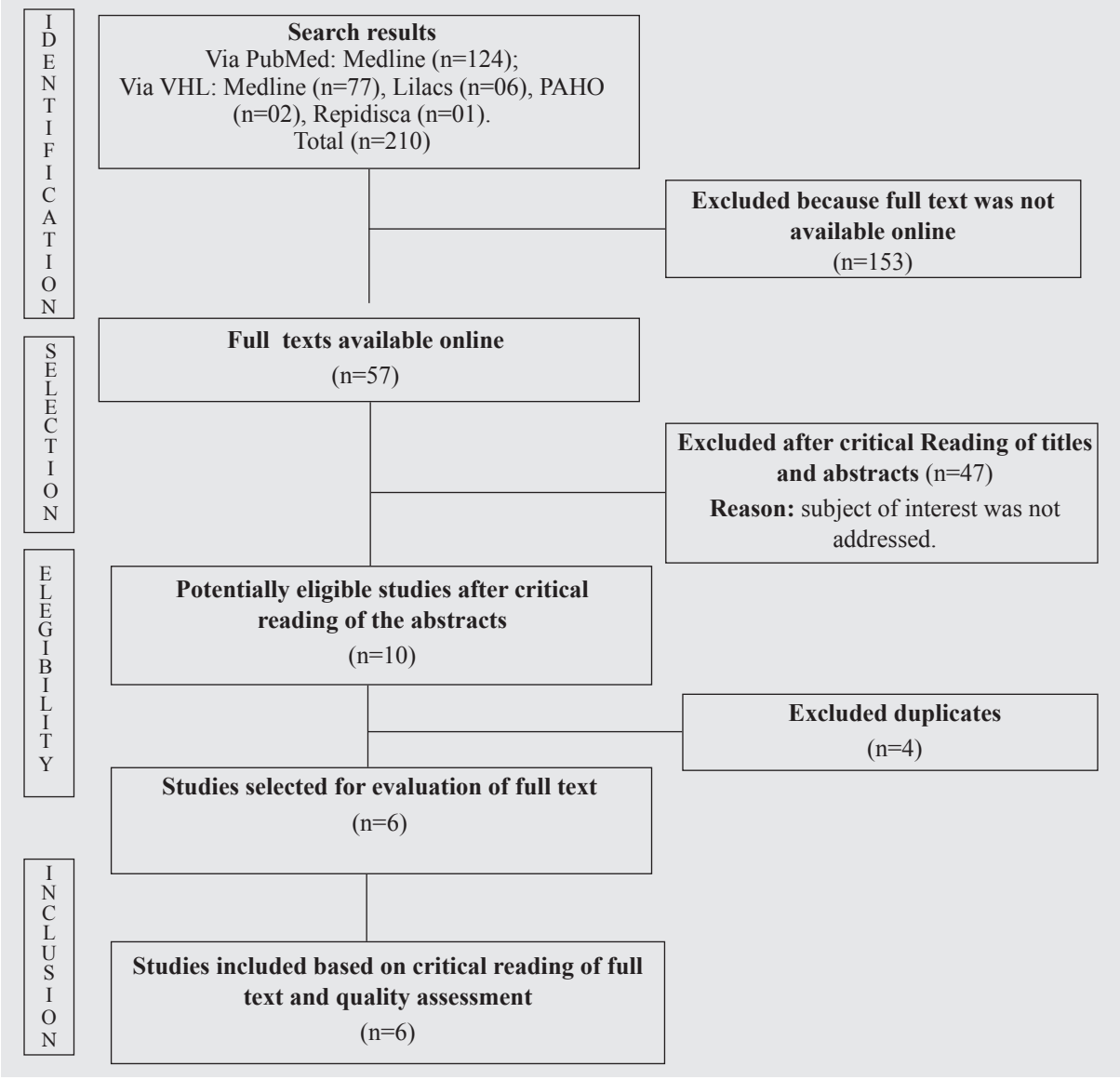

Figure 1 - Flow chart of the selection and inclusion of studies for review.

Chart I shows that the studies were published from 1997 to 2015 and were based on secondary data available from research institutions in the field of maternal and child health. Cross-sectional studies sought to check for possible consequences and impacts of unwanted pregnancy on maternal and child health[18-23].

The studies used similar classifications for pregnancy intention, thus allowing the comparison and generalization of some results. The categories considered were as follows: planned pregnancy, which included intended, wanted or intentional, and unplanned pregnancy, which included unwanted and untimely pregnancy (mistimed), the latter was subdivided into those occurring less than two years sooner than desired and those occurring two or more years sooner. In all, three studies[20,22,23] used three categories of pregnancy intention, two studies[18,19] considered four categories, and one study[21] used two categories. In addition, one[18] of the six studies also included a pregnancy desire scale[7] (Chart I).

The prevalence of breastfeeding exhibited worse results when pregnancies were not planned. Additionally, unwanted pregnancies were associated with less favorable breastfeeding results than the mistimed pregnancies as they reduced the chances of breastfeeding even after adjusting for confounding variables[18-20,22,23].

The studies showed that the percentage of children who start breastfeeding is lower when pregnancy is unwanted[18,19,22,23]. On the other hand, the percentage of discontinuation of breastfeeding before the six months of life is significant compared with both unwanted and mistimed pregnancies[19,20,21]. However, the literature showed that the negative effects of mistimed pregnancies were observed only in families living in unfavorable socioeconomic conditions[20]. Maternal factors, such as primiparity and cesarean delivery, were also reported as being associated with late initiation of breastfeeding[20,21].

Recognition of pregnancy in the first weeks and initiation of prenatal follow-up in the first trimester were less frequent in unwanted and mistimed pregnancies[18,19]. Likewise, low birth weight and prematurity were present mainly in newborns of unplanned pregnancies[18,22]. However, associations between pregnancy intentions, behaviors, and maternal and child health outcomes were more pronounced during prenatal care, limited in the postnatal period, and most often irrelevant after the child's two years of age[19].

In general, the studies agreed on the influence of pregnancy intention on behaviors related to maternal and child health care and, consequently, breastfeeding. Mothers with unwanted or mistimed pregnancies were the ones who breastfed their children the least and who started prenatal care later[18-20,22,23]. However, the socioeconomic and cultural context, parity and type of delivery were pointed out as modifying or confounding factors in the analysis of the relationship between pregnancy intention and breastfeeding[18-23].

The application of statistical methods to adjust confounding factors eliminated the statistical significance of some associations. However, many associations remained in the balanced models, i.e., births from intentional pregnancies were associated with better health behaviors and outcomes[18,19,22,23].

DISCUSSION

The findings reinforce the hypothesis that women's behavior towards maternal and child health practices, including breastfeeding, may be affected by their attitude towards pregnancy intention. When pregnancy is unwanted, the woman is less likely to seek health care, thus becoming more prone to late initiation of prenatal care[7].

In this context, prenatal care plays a key role in the adequate follow-up of pregnant women, providing them with access to diagnostic and therapeutic methods aimed at preventing, identifying and correcting any risks or complications that could affect maternal and fetal health[24,25]. Prenatal care is the best moment for providing guidance to pregnant women. When prenatal care is delayed, the opportunity to promote changes in maternal behaviors which do not favor breastfeeding and to strengthen practices that will benefit the health of women and children is lost[26]. Thus, unplanned pregnancies can contribute to both the non-establishment of breastfeeding and its early discontinuation, as well as to the late recognition of pregnancy and the initiation of prenatal care after the first trimester[18-20,22,23].

A study of women living in the United States showed that those who reported having unwanted pregnancies were more likely to not initiate breastfeeding and discontinue breastfeeding than women who reported having wanted pregnancies[8].

Research carried out in three countries (the United States, Ghana and Australia) has shown that unwanted pregnancies are a risk factor for the short duration of breastfeeding as they expose women to psychosocial stress and may inhibit desirable health behaviors[20].

Given the longer mean duration of breastfeeding among primiparous women with planned pregnancies and primiparous women with unplanned pregnancies, and the absence of significant differences in duration of breastfeeding among multiparous women in relation to pregnancy intention, it has been suggested that primiparous women are more exposed to pressure than multiparous women, as the latter have already passed through previous experience[20,21].

A systematic review study reported primiparity as a risk factor for discontinuation of breastfeeding. However, it suggested that the first birth is more subject to the influence of cultural factors that favor the interruption of breastfeeding[27]. Cesarean

Chart I - Description of the studies that addressed the relationship between pregnancy intention and breastfeeding.

Author and year	Location	Design and population	Categories of pregnancy intention	Indicators	Main results/qualitative assessment score
Kost K, Lindberg L. (2015)[18]	United States of America (USA)	Cross-sectional study Data from the 2002 and 2006-2010 NSFG survey conducted by the National Center for Health Statistics (NCHS). The population consisted of mothers of singleton live births in the three years prior to the survey aged ≥20 years (n=4,297)	1. Wanted (planned or intended); 2. Mistimed less than two years sooner; 3. Mistimed two years or more sooner; 4. Unwanted Desire scale	- Recognition of pregnancy in the first six weeks; - Initiation of prenatal care in the first trimester of pregnancy; - Breastfeeding; - Preterm birth; - Low birth weight	- Mistimed and unwanted pregnancies were less likely to be recognized early; - Unwanted births were less likely to have received prenatal care in a timely manner or to have been breastfed, with low birth weight being more likely to occur; - Lower levels of desire had a negative relationship with the early recognition of pregnancy and receipt of prenatal care in the first trimester; - Socioeconomic characteristics were predictive of maternal behaviors towards their own health and the care of the child at birth 11 points *
Lindberg L, Maddow-Zimet I, Kost K, Lincoln A. (2015)[19]	Oklahoma (USA)	Cross-sectional study Data from the Oklahoma Pregnancy Risk Assessment and Monitoring System (PRAMS 2004-2008) related to a population of postpartum women with live births and data from the Oklahoma Toddler Survey related to children aged two years (TOT) in 2006 -2010 (n=8,446 and n=5,808)	1. Intended (wanted or planned); 2. Mistimed less than two years sooner; 3. Mistimed two years or more sooner; 4. Unwanted	- Early recognition of pregnancy, prenatal care start in the first trimester and use of tobacco or exposure to smoke during pregnancy; - Child's health at birth (preterm birth, low birth weight); - Maternal postpartum behavior (initiation of breastfeeding, duration of breastfeeding for at least six months); - Measures for early childhood (presence of disease, exposure to cigarette smoke)	- The odds of recognition of pregnancy in the first eight weeks and the start of prenatal care in the first trimester in mistimed or unwanted pregnancies were lower, with a higher probability of exposure to cigarette smoke; - Women whose pregnancy was unwanted were less likely to start breastfeeding (OR=0.68); - Continuity of breastfeeding for at least six months was less likely in mistimed pregnancies (OR=0.70); - Associations between pregnancy intentions, behaviors, and maternal health outcomes were more evident in the prenatal period, limited in the postnatal period, and irrelevant after the age of two; - Effects of pregnancy intention may have less impact on maternal attitudes towards maternal and child care than the socioeconomic context 11 points *

Ulep VGT, Borja MP. (2012)[20]	The Philippines	Cross-sectional study Data from the National Demographic and Health Survey conducted in 2003 in the Philippines, where the population consisted of children aged 6 months to 3 years in the survey period (n=3,044)	1. Intended (wanted pregnancy); 2. Mistimed (wanted to wait longer to get pregnant); 3. Unwanted (no more children wanted)	- Start of breastfeeding in the first hour postpartum; - Duration of breastfeeding for at least six months of life; - Parity; - Socioeconomic status	- Children born from mistimed pregnancies were more likely to start breastfeeding late compared with those born from wanted pregnancies (OR=1.44), but this occurred only among children from families of low socioeconomic status; - Children born from unwanted pregnancies were less likely to have a breastfeeding duration of less than six months (OR=0.60); however, this occurred only among children from families of a high socioeconomic status; - There are different effects of pregnancy intention both in relation to the start and the duration of breastfeeding, but the socioeconomic context of the mothers strongly influenced maternal attitudes 12 points *
Chinebuah B, Pérez-Escamilla R.(2001)[21]	Ghana	Cross-sectional study Data from the Demographic and Health survey conducted in Ghana in 1993, where the population consisted of mothers of children aged 13-36 months (n=1101)	1. Planned; 2. Unplanned	- Duration of breastfeeding; - Parity	- Primiparous women with planned pregnancies had a significantly longer mean duration of breastfeeding than those whose pregnancy was unintended; - Among multiparous women, the mean duration of breastfeeding was similar in both planned and unplanned pregnancies 10 points *
Kost K, Landry DJ, Darroch JE. (1998)[22]	USA	Cross-sectional study Data from the 1988 National Maternal and Infant Health Survey (n=9,222) and the 1988 National Survey of Family Growth (n=2,548)	1. Intended (wanted, planned); 2. Mistimed; 3. Unwanted	- Health at birth disadvantages (prematurity, low birth weight, small child for gestational age); - Maternal care for the child; - Breastfeeding	- The proportion of newborns with health disadvantages was significantly lower when pregnancy was wanted; - The proportion of newborns receiving adequate care was higher when pregnancy was planned; - After controlling for the socioeconomic background of the mother, mistimed pregnancies had no significant effect on any outcome; - Even after controlling for the characteristics of the mothers' life context, unwanted pregnancies increased the odds of infant health impairment (OR=1.3) and reduced the chances of breastfeeding (OR=0.6) 9 points *

Dye T D, Wojtowycz MA, Aubry RH, Quade J, Kilburn H et al.(1997)[23]	New York (USA)	Cross-sectional study Data from the Regional Perinatal System, which included all women delivering a live birth between January 1, 1995 and July 31, 1996 (n=33,735) in central New York region	1. Planned; 2. Mistimed; 3. Unwanted	- Effect of unwanted pregnancy on breastfeeding	- Women whose pregnancies were mistimed or unwanted were significantly less likely to breastfeed than women whose pregnancies were planned; - After adjusting for confounding variables the odds ratio of non-breastfeeding remained high among women whose pregnancy was not planned (adjusted OR=1.15) or mistimed (adjusted OR=1.10) 9 points *

USA: United States of America; *Scale used for assessing the quality of the studies: Downs and Black Checklist for Measuring Quality[13]

delivery is also a risk factor for late initiation of breastfeeding due to the morbidity associated with cesarean section, which hinders the establishment of breastfeeding[28,29].

It is believed that the relationship between pregnancy intention and breastfeeding may vary according to socioeconomic and cultural influence[18,19,20,22]. There is a growing number of studies that reveal social and cultural determinants of breastfeeding, with low levels of education, employment and family being the factors that most influence breastfeeding in poorer communities[30].

Recently, a study reported a shorter duration of breastfeeding in high-income countries compared to low- and middle-income countries. It also showed that women with higher levels of education and better income are the ones who breastfeed the most in richer countries, while in low- and middle-income countries the poorest women are breastfeeding for longer[31]. These findings demonstrate the influence of sociocultural factors on breastfeeding.

Significant disparities in the rates of continued breastfeeding across countries point to the need to consider the context in which women are inserted in the study of breastfeeding. Given that, it is important to emphasize the importance of breastfeeding not only for the health of the child, but also for maternal health, as it considerably reduces infant morbidity and mortality, protects against infections during childhood, reduces dental malocclusion and contributes to cognitive development in addition to preventing the mother from breast cancer, increasing the interval between deliveries and reducing the risk of developing diabetes or ovarian cancer[26,31].

The reviewed literature corroborates the evidence that unwanted births are more exposed to social and mental disadvantages, including non-breastfeeding, than wanted births. Thus, the categorization of unplanned pregnancies into untimely (mistimed) and unwanted may facilitate the identification of women who are more vulnerable to behaviors that are harmful to maternal and child health, since there was considerable variation in maternal behavior according to pregnancy intention, with unwanted pregnancies being associated with negative health outcomes[18-23].

Knowledge about pregnancy intention and its relationship to breastfeeding is still scarce as there is a lack of publications on the subject. Therefore, it is necessary to carry out further studies that may contribute to the better explanation of this relationship and to support public policies aimed at reducing unwanted pregnancies and increasing breastfeeding rates given the importance of breastfeeding for maternal and child health.

Furthermore, investments in family planning are necessary to reach women in situations of vulnerability to unwanted pregnancies. On the other hand, women experiencing unwanted pregnancies require individualized follow-up to reduce their negative impact on the health of the child and the mother, especially with regard to breastfeeding.

CONCLUSION

Mistimed and unwanted pregnancies have been shown to predispose women to unfavorable health behaviors towards prenatal care and breastfeeding. The relationship between pregnancy intention and breastfeeding is strongly influenced by the characteristics of the life context in which the woman is inserted. Thus, it is important to consider the particularities of each woman when proposing care interventions during pregnancy and postpartum in order to foster and support breastfeeding as a strategy to promote maternal and child health in view of its benefits for the health of children and their mothers.

REFERENCES

1. Santana JM, Brito SM, Djanilson BS. Amamentação: conhecimento e prática de gestantes. Mundo Saúde. 2013;37(3):259-67.
2. Venancio SI, Giugliani ERJ, Silva OLO, Stefanello J, Benicio MHD, Reis MCG, et al. Associação entre o grau de implantação da Rede Amamenta Brasil e indicadores de amamentação. Cad Saúde Pública. 2016;32(3):e00010315.
3. Organização Mundial de Saúde. Planejamento familiar: um manual mundial para provedores. Genebra; 2007.
4. Faleiros FTV, Trezza EMC, Carandina L. Aleitamento materno: fatores de influência na sua decisão e duração. Rev Nutrição. 2006; 19(5):623-30.
5. Furtado LCR, Assis TR. Diferentes fatores que influenciam na decisão e na duração do aleitamento materno: Uma revisão da literatura. Rev Movimenta. 2012;5(4):303-12.
6. Conceição SP, Fernandes RAQ. Influência da gravidez não planejada no tempo de aleitamento materno. Esc Anna Nery Rev Enferm. 2015;19(4):600-6.
7. Santelli J, Rochat R, Hatfield-Timajchy K, Gilbert C, Curtis K, Cabral R, et al. The Measurement and Meaning of Unintended Pregnancy. Perspect Sex Reprod Health. 2003;35(2):94-101.

8. Taylor JS, Cabral HJ. Are women with an unintended pregnancy less likely to breastfeed? J Fam Pract. 2002;51(5):431-6.

9. McCoy SI, Buzdugan R, Ralph LJ, Mushavi A, Mahomva A, Hakobyan A, et al. Unmet need for family planning, contraceptive failure, and unintended pregnancy among HIV-infected and HIV-uninfected women in Zimbabwe. PLoS ONE. 2014;9(8):e105320.

10. Tsui AO, McDonald-Mosley R, Burke AE. Family planning and the burden of unintended pregnancies. Epidemiol Rev. 2010;32(1):152-74.

11. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto & Contexto Enferm. 2008; 17(4):758-64.

12. Moher D, Liberati A, Tetzlaff J, Altman DG. The PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA Statement. J Clin Epidemiol. 2009;62(10):1006-12.

13. Downs SH, Black N. The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and nonrandomised studies of health care interventions. J Epidemiol Community Health. 1998;52(6):377-84.

14. Araújo DMR, Vilarim MM, Sabroza AR, Nardi AE. Depressão no período gestacional e baixo peso ao nascer: um revisão sistemática da literatura. Cad Saúde Pública. 2010;26(2):219-27.

15. Thiengo DL, Santos JFC, Mason VC, Abelha LA, Lovisi GM. Associação entre apoio social e depressão durante a gestação: uma revisão sistemática. Cad Saúde Colet (Rio J). 2011;19(2):129-38.

16. Thiengo DL, Fonseca D, Lovisi GM. Satisfação dos familiares com os serviços de saúde mental para crianças e adolescentes: uma revisão sistemática. Cad Saúde Colet (Rio J). 2014;22(3):233-40.

17. Nunes JT, Gomes KRO, Rodrigues MTP, Mascarenhas MDM. Qualidade da assistência pré-natal no Brasil: revisão de artigos publicados de 2005 a 2015. Cad Saúde Colet (Rio J). 2016;24(2):252-61.

18. Kost K, Lindberg L. Pregnancy intentions, maternal behaviors, and infant health: investigating relationships with new measures and propensity score analysis. Demography. 2015; 52(1):83-111.

19. Lindberg L, Maddow-Zimet I, Kost K, Lincoln A. Pregnancy intentions and maternal and child health: an analysis of longitudinal data in Oklahoma. Matern Child Health J. 2015; 19(5):1087-96.

20. Ulep VGT, Borja MP. Association between pregnancy intention and optimal breastfeeding practices in the Philippines: a cross-sectional study. BMC Pregnancy Childbirth. 2012;12:69.

21. Chinebuah B, Pérez-Escamilla R. Unplanned pregnancies are associated with less likelihood of prolonged breast-feeding among primiparous women in Ghana. J Nutr. 2001;131(4):1247-9.

22. Kost K, Landry DJ, Darroch JE. The effects of pregnancy planning status on birth outcomes and infant care. Fam Plann Perspect. 1998;30(5):223-30.

23. Dye TD, Wojtowycz MA, Aubry RH, Quade J, Kilburn H, et al. Unintended pregnancy and breast-feeding behavior. Am J Public Health. 1997; 87(10):1709-11.

24. Kirkham C, Harris S, Grzybowski S. Evidence-based prenatal care: part I. general prenatal care and counseling issues. Am Fam Physician. 2005;71(7):1307-16.

25. Ministério da Saúde (BR), Secretaria de Atenção à Saúde, Departamento de Atenção Básica. Atenção ao pré-natal de baixo risco. Brasília: Ministério da Saúde; 2013.

26. Ministério da Saúde (BR), Secretaria de Atenção à Saúde, Departamento de Atenção Básica. Saúde da criança: aleitamento materno e alimentação complementar. Brasília: Ministério da Saúde; 2015.

27. Uema RTB, Souza SNDH, Mello DF, Capellini VK. Prevalência e fatores associados ao aleitamento materno no Brasil entre os anos 1998 e 2013: revisão sistemática. Semina Ciênc Biol Saúde. 2015;36(1 Supl):349-62.

28. Berde AS, Yalcin SS. Determinants of early initiation of breastfeeding in Nigeria: a population-based study using the 2013 demograhic and health survey data. BMC Pregnancy Childbirth. 2016;16:32.

29. Esteves TMB, Daumas RP, Oliveira MIC, Andrade CAF, Leite IC. Fatores associados ao início tardio da amamentação em hospitais do Sistema Único de Saúde no município do Rio de Janeiro, Brasil, 2009. Cad Saúde Pública. 2015;31(11):2390-400.

30. Henry BA, Nicolau AIO, Américo CF, Ximenes LB, Bernheim RG, Oriá MOB. Factores socioculturais que influenciam a prática da amamentaçao entre mulheres de baixa renda em Fortaleza, Ceará, Brasil: uma perspectiva a partir do modelo do sol nascente de leininger. Enferm Glob. 2010;9(2):1-13.

31. Victora CG, Barros AJD, França GVA, Bahl R, Rollins NC, Horton S, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet. 2016;387(10017):475-90.

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