



## SCIENTIFIC ARTICLE

### Motivation for breastfeeding: a matter of educational level?

Paula Nelas<sup>a,\*</sup>, Carla Santos<sup>b</sup>, João Duarte<sup>a</sup>, Emília Coutinho<sup>a</sup>, Cláudia Chaves<sup>a</sup>, Odete Amaral<sup>a</sup>, Manuela Ferreira<sup>a</sup>, Carla Cruz<sup>a</sup>

<sup>a</sup>Superior Health School, Polytechnic Institute of Viseu, CI&DETS, Viseu, Portugal

<sup>b</sup>Centro Hospitalar Tondela Viseu-EPE, Viseu, Portugal

#### KEYWORDS

Breastfeeding;  
Motivation;  
Educational level;  
Puerperal women

#### Abstract

**Background:** The incidence of breastfeeding at hospital discharge is high; however, its prevalence is low up to the age of 2 years.

**Objectives:** The aim of this study is to verify the relationship between motivation towards breastfeeding and sociodemographic and obstetric variables, and to analyse the influence of those variables on motivation for breastfeeding when compared to educational level.

**Materials and methods:** This is a quantitative, correlational, descriptive and analytic study. The sample is non-probabilistic with 479 puerperal women (on the day of hospital discharge). The data collection instrument is a questionnaire for sociodemographic and obstetric characterisation and includes the Breastfeeding Motivation Scale.

**Results:** In the sample, 59.5% have higher education, 73.9% are employed and 55.3% live in urban areas. 48.0% are first-time mothers, 92.4% have a planned pregnancy. Most deliveries were at term (68.4%). Almost all (9 in 10) are found to be highly motivated to breastfeed. Age, marital status, residence and educational attainment did not influence the overall motivation for breastfeeding. The unemployed are the most motivated. Multiparous mothers are more motivated. The relationship between the other obstetric variables and motivation for breastfeeding has not been proven. The mediator variable (educational level) only had an impact on residence, where those residing in urban areas and with higher education are more motivated in the physiological dimension, followed by residents in urban with qualifications up to secondary education.

**Conclusion:** We suggest that a working group is created with activities in the school community to elucidate young people about the importance of breastfeeding based on the guidelines laid out in the breastfeeding policy.

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\*Corresponding author.

E-mail: pnelas@gmail.com (P. Nelas).

## Introduction

The World Health Organization together with the United Nations Children's Fund recommend exclusive breastfeeding up to the age of six months and its maintenance up to the age of two years. Taking into account Portuguese data (Portugal, Ministry of Health, General Health Directorate,<sup>1</sup> the proportion of new-borns who initiated exclusive breastfeeding (EBF) is 98.57%; however, only 76.67% maintain EBF up to the day of hospital discharge and only 22.1% until the age of six months. This is far from the ideal values. There are multiple, complex and interrelated factors influencing early discontinuation of breastfeeding, including characteristics of the mother, child, family, society, policies and culture.<sup>2</sup>

Protecting and promoting breastfeeding are the responsibility of the mother/father, family, health professionals, society and governments. The existence of an enabling environment of family relationships, with a positive and motivating influence of society and the existence of the support of the father, who is motivated and knowledgeable of the advantages of breastfeeding, is fundamental in supporting the breastfeeding woman.<sup>3</sup>

Health professionals also play an important role in all phases of the breastfeeding process, as they are responsible for enabling the couple. It is also necessary to train health professionals to support breastfeeding, understanding the couple in all aspects of the process.<sup>4</sup>

Motivation is defined as an internal state required to initiate any action, maintain it or terminate it. It involves feelings and emotions, inhibits or fosters learning and gives meaning to experience; so, it is a dynamic aspect of the action.<sup>5</sup> Thus, in the path between the desire to breastfeed and the fulfilment of this practice, motivation is what permeates the mother's decision, favourably or unfavourably.<sup>6</sup> Consequently, motivation should be considered in the context of breastfeeding and in the process of the woman's learning/development.<sup>7,8</sup>

Based on the idea that school is the space where knowledge is acquired, where attitudes are perpetuated and influenced, the education of women from an early age about breastfeeding influences their attitudes and subsequently their performing it.<sup>9</sup> It is understood, therefore, that education can contribute significantly to constructing a culture that is favourable to breastfeeding, since both male and female education influences social norms.<sup>10</sup>

With this in mind, we asked how sociodemographic and obstetric variables influence motivation for breastfeeding, as well as how the education mediates the relationship between the motivation to breastfeed and the sociodemographic and obstetric variables.

## Material and methods

This is a nonexperimental, descriptive correlational and analytical study. Data collection was performed in a maternity in the centre region of Portugal from a non-probabilistic convenience sample of 479 puerperal women (mean age 30.56 years) who agreed to participate in the study. The data collection instrument was applied at the time of hospital discharge. The data were analysed using SPSS version 23.0 for Windows.

The data collection instrument was a five-part questionnaire. The first part enabled us to characterise the sample in sociodemographic and professional terms (age, marital status, cohabitation, employment status, nationality and residence). The second part characterises the obstetric history (number of pregnancies, number of births, pregnancy planning, pregnancy monitoring and full-term or early-term pregnancy). We also included the Breastfeeding Motivation Scale with three dimensions: physiological, cognitive and psychosocial.<sup>7</sup>

## Sociodemographic, employment and obstetric characterization of the sample

The participants' age ranges from 15 to 42, with a mean age of 30.56 years ( $\pm$  5.14 years). Most are married or living in civil unions (86.6%) and belongs to a nuclear family (89.1%). 59.5% have higher education and 73.9% are employed. Most of the participants are of Portuguese nationality (96.7%) and reside mainly in urban areas (55.3%). Most were pregnant only once (43.0%), with 34.4% having had a previous pregnancy and 22.5% with two or more previous pregnancies. Most are first time mothers, planned their pregnancies, monitored their pregnancies and their babies were born full-term.

## Results

We found that nearly all of the sample (9 out of 10) are highly motivated to breastfeed. Grouping the participants by level of motivation (slightly motivated, moderately motivated and highly motivated), we note that for these three groups most are married, live in a nuclear family, are employed, have a maternal age between 19 to 35 years and are of Portuguese nationality. The chi-square test shows that the differences between the groups and sociodemographic variables are not statistically significant.

In the relationship between motivation for breastfeeding and obstetric variables, we observe that both the slightly motivated and moderately motivated women have a similar profile, with participants who have been pregnant previously, have had one previous delivery, had a planned pregnancy, which was monitored and went to term. However, there were no statistically significant differences.

Participants who are 18 years old or younger have greater psychosocial motivation, 19-35 year-olds have greater cognitive motivation and those over 36 have greater physiological motivation; however, age does not influence motivation to breastfeed.

Participants who are married or in civil unions have greater physiological, cognitive, and overall motivation and lower psychosocial motivation, but without statistical significance.

As regards nationality, we found that the Portuguese participants showed greater motivation for breastfeeding but without statistical significance. The employed participants had a higher physiological motivation while the unemployed have higher cognitive and psychosocial and overall motivation. Statistical significance was found for psychological motivation.

Participants with higher education were more highly motivated to breastfeed, although the differences are not statistically significant. We found that cognitive, psychosocial and overall motivation is higher in nuclear families; however, the differences are not significant. Participants living in urban areas have greater motivation for breastfeeding but without statistical significance.

Respondents with two or more pregnancies have greater physiological, psychosocial and overall motivation. The differences are statistically significant between groups in the following dimensions: cognitive ( $P = .031$ ), psychosocial ( $P = .007$ ) and overall motivation ( $P = .050$ ).

Participants who had two or more deliveries have greater cognitive, physiological and overall motivation. We found statistical significance for cognitive motivation among the participants with (no previous deliveries vs one delivery  $P = .015$ ), (one delivery vs two deliveries  $P = .036$ ). For psychosocial motivation between those with (no previous deliveries vs one delivery  $P = .011$ ); but differences within the groups were not found for overall motivation.

We found that those who had planned their pregnancy were more highly motivated to breastfeed in all of the dimensions and the overall factor but without statistical significance. Those who had six or more pregnancy consultations had greater physiological, psychosocial and overall motivation, but the differences are not statistically significant. Those with full-term pregnancies have greater motivation for breastfeeding in all dimensions, however, without statistical significance.

In the analysis of the effects of education, age and their interaction on motivation for breastfeeding, results show that both schooling and age do not have significant effects. Moreover, the results showed no statistical significance for education, marital status and motivation for breastfeeding, finding that each of the factors individually and their multivariate composite do not influence the motivation for breastfeeding. Also, no interaction between education and cohabitation was observed in motivation for breastfeeding.

We found that unemployed women have higher psychological motivational indexes to breastfeed than employed women, with statistically significant differences ( $P = .004$ ).

Participants with higher education, residing in urban areas were found to be more physiologically motivated for breastfeeding compared to those with lower academic qualifications residing in rural areas, with statistically significant differences.

The following results seek to answer the research question, "Which obstetric variables influence motivation for breastfeeding when mediated by schooling?" In the interaction of education with number of pregnancies and deliveries, planned pregnancy, gestational age, number of consultations and motivation for breastfeeding, no statistical significance were found.

## Discussion of results

The results show that neither education level nor age have a significant effect on the motivation for breastfeeding. This is contrary to the results obtained in studies by<sup>7,11,12</sup> who reported that older women have a greater motivation to breastfeed and clearer, more well-defined and mature choices with regards to pregnancy and childcare.

As for marital status, most (86.6%) are married or living in civil unions, and of these, 89.8% have achieved higher education. We found that the former are moderately motivated to breastfeed and single/divorced/widowed participants are only slightly motivated, but without statistically significant differences. The composite multivariate education, marital status, and the interaction between the two factors showed that education had no significant effect, whereas we found a statistically significant effect with marital status.

Similar results were found in which puerperal women who are married or in civil unions were more motivated to breastfeed.<sup>13</sup> Also highlights the father as key support due to his strong influence the woman's decision to breastfeed.<sup>14</sup> Being duly informed and motivated he will have a key role in supporting the woman when dealing with problems in breastfeeding.<sup>15</sup>

Most participants (89.1%) live in a nuclear family and are more motivated to breastfeed, but without statistical significance. Similarly, the interaction between education and cohabitation on motivation for breastfeeding has no statistical significance. Highlight the puerperal woman's mother and the father of the newborn as the members of the household with an impact on breastfeeding<sup>16</sup> and highlight the grandparents.<sup>17</sup> In fact, mothers feel the influence of grandmothers on breastfeeding providing them with greater security and confidence in this practice.<sup>17</sup>

In the sample, 73.9% of the participants are employed. The average unemployment rate for women with education to higher education is 9.6% and the unemployment rate in women with the level of basic education is 13.4%, and the rate for women with secondary and post-secondary education is 15.5%.<sup>18</sup>

We found that employment status influences motivation for breastfeeding. Unemployed women have higher psychological motivational rates for breastfeeding than employed women.<sup>19</sup> Moreover, mothers working outside their area of residence increase the risk for early cessation of breastfeeding.<sup>20</sup> There is also interference in the perception about the practices of promoting BF, job activity factors, job, marital status and education.<sup>21</sup> However, contrary data were found in studies<sup>22,23</sup> where there was no statistically significant association between breastfeeding professional situation.

The results of our study reveal that among the moderately motivated puerperal women, half have an educational level up to secondary schooling, and the other half have higher education; however, the differences between the groups are not statistically significant. This is contrary to the results which found that women who have a degree are more motivated to breastfeed.<sup>13,21,24</sup> However, there is no consensus. Those mothers with higher education have breastfed more often in a group of 180-day-old children.<sup>25</sup> On the other hand, in a group of children aged over 180 days, the prevalence of breastfeeding was higher among less educated mothers.

The participants are mostly of Portuguese nationality (96.7%); this variable is not statistically significant in motivating breastfeeding. However, mothers who do not have Portuguese nationality have higher averages in all dimensions of attitudes towards breastfeeding, however, without statistical significance.<sup>26</sup>

In the group of puerperal women who are slightly motivated for breastfeeding, 50.0% live in rural areas and 50% in urban areas. Analysing the effects of schooling and place of residence on motivation for breastfeeding, the results obtained allow us to state that the urban residents who have higher education are the most motivated in the physiological dimension, followed by urban residents with up to secondary education. The least motivated in this dimension are rural residents with lower qualifications. A comparison study of BF practices between an urban population and a rural population in northern Portugal<sup>27</sup> shows that just over half of children are breastfed, at least until 6 months of age without statistical differences between the two groups. Also, 75% of mothers from rural areas began weaning before the age of 6 months.<sup>28</sup>

By analysing how the obstetric variables have statistically significant motivation for breastfeeding, we found that not all variables in study have statistical significance.

In the interaction of education with number of pregnancies, significant effects were not found. Similar results finding that women who had no previous pregnancy had higher cognitive, psychosocial and overall motivation.<sup>13</sup> The memory of negative emotions experienced during pregnancy or following previous pregnancies may determine assuming an inability to feed the new baby early. Successful breastfeeding experience of a previous child predisposes women to breastfeed a new baby for longer and exclusively.<sup>8</sup> Primiparity positively influences the initiation of breastfeeding.<sup>29</sup>

The number of births has a significant effect. However, for the interaction between the variables, the effect is not significant. Same results reported that multiparous mothers' babies are four times as likely to be breastfed exclusively as those of new mothers.<sup>30</sup> They also note that babies of mothers over the age of 20 years, with higher education, who did not work outside the home, or who were multiparous were more likely to be exclusively breastfed.

In the interaction of the variables, planned pregnancy and education, statistical significance was not found. When analysing the effects of the variables, education and preterm/term delivery, education was found to have statistical significance with the physiological dimension. For preterm/term delivery and the interaction between the variables statistical significance was not found. Another study, also notes, that there were no statistically significant differences in the education level the families of preterm children and the families of term children.<sup>31</sup> However, inferred that the mothers of premature babies were more highly motivated to breastfeed.<sup>32</sup>

Participants who monitored their pregnancies with six or more consultations denote greater physiological, overall and psychosocial motivation, but without statistical significance. The results show that with respect to the variable, schooling, the number of consultations and the interaction of this multivariate composite, the differences between the groups are not statistically significant, contrary to another study where a higher number of consultations meant higher motivation for breastfeeding.<sup>33</sup>

## Conclusion

The breastfeeding culture and its motivation is constructed throughout the woman's life. Traditionally, it was learned from

the mother, older sisters or family. Nowadays, it is up to health professionals to train young people to deal with problems that may influence the success of breastfeeding. For this, it is necessary to have appropriate training, to intervene in the community, helping to build a healthy breastfeeding culture, free of prejudices and myths. Raising the awareness of children and young people to the importance of breastfeeding, intervening in schools, and in this way reaching future parents, we think this is a project of paramount importance.

### What we known about the theme

The World Health Organization together with the United Nations Children's Fund recommend exclusive breastfeeding up to the age of six months and its maintenance up to the age of two years. The incidence of breastfeeding at hospital discharge is high; however, its prevalence is low up to the age of 2 years.

### What we get out the study

We suggest that a working group is created with activities in the school community to elucidate young people about the importance of breastfeeding based on the guidelines laid out in the breastfeeding policy.

## Acknowledgments

The Portuguese Foundation for Science and Technology (FCT) through the project PEst-OE/CED/UI4016/2011, and the Center for Studies in Education, Technologies and Health (CI&DETS).

## Conflicts of interest

The authors declare that there are no conflicts of interest.

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