Marital Adjustment and Prenatal Breastfeeding Efficacy of First Time Mothers in A Low-Income Community in the Philippines

Artemio Morado Gonzales Jr
Occidental Mindoro State College, Philippines

ABSTRACT

Introduction: All women should be offered support to breastfeed their babies to increase the duration and exclusivity of breastfeeding. This study aims to assess the level of marital satisfaction and its influence to prenatal breastfeeding self-efficacy in first time mothers during late pregnancy.

Methods: A descriptive correlational study was conducted among 128 systematically sampled primigravid women who agreed to participate and had prenatal care check-up in the health center at the time of data gathering. The instruments used were 15-item Marital Adjustment Test (MAT) to measure marital adjustment and 14-item Breastfeeding Self efficacy Scale-Short Form (BSES-SF) as a measure of breastfeeding self-efficacy. Pearson’s correlation coefficient was utilized to test the relationships between the sample’s marital adjustment scores to correlate with BFSE of the respondents. Fisher’s t test was utilized to determine the significance of correlations. A p-value of equal to or less than .05 was considered statistically significant.

Results: The study revealed that the sampled mothers have a high level of marital adjustment score (112.05± 21.83). Prenatal mothers responded in the study were highly confident and have high self-efficacy in breastfeeding first child currently bearing (4.55±.51). Lastly, it was found that there is no significant correlation between marital adjustment and prenatal breastfeeding self-efficacy (β=.052, p-value=.280).

Conclusion: It was found that there is a high level of marital adjustment and breastfeeding self-efficacy among sampled mothers. However, there is no significant correlation between marital adjustment and prenatal breastfeeding self-efficacy. The study suggests incorporating co-parenting intervention involving father’s involvement and assistance with breastfeeding when creating interventions in breastfeeding.

INTRODUCTION

In 2012, the World Health Assembly Resolution 65.6 endorsed a comprehensive implementation plan on maternal, infant and young child nutrition, which specified six global nutrition targets for 2025 (World Health Organization, 2014). It urges developing or, where necessary, strengthening nutrition policies so that they comprehensively address the double burden of malnutrition and include nutrition actions in overall country health and development policy, and establishing effective intersectoral governance mechanisms in order to expand the implementation of nutrition actions with particular emphasis on the framework of the global strategy on infant and young child feeding (Jones et al., 2014).

All women should be offered support to breastfeed their babies to increase the duration and exclusivity of breastfeeding. Support is likely to be more effective in settings with high initiation rates, so efforts to increase the uptake of breastfeeding should be in place. Support may be offered either by professional or lay/peer supporters, or a combination of both. Strategies that rely mainly on face-to-face
support are more likely to succeed (Renfrew, McCormick, Wade, Quinn, & Dowswell, 2012). Although health care professionals offer timely support to breastfeeding women (Bäckström, Wahn, & Ekström, 2010; Radzyminski & Callister, 2015), the more constant presence and immediate support of the baby’s father, or mother’s partner offers an opportunity to influence the maintenance and duration of breastfeeding. In a study with primiparous mothers, it revealed that high level of breastfeeding self-efficacy during postpartum predicted positive emotional adjustment and fewer depressive symptoms at six weeks postpartum, as well as more exclusive breastfeeding. On the other hand, breastfeeding concerns were among the most commonly named reasons for stress, along with lack of sleep, lack of social support, and overwhelming learning demands involved with being a new parent (Henshaw, Fried, Siskind, Newhouse, & Cooper, 2015). Also, many studies measure breastfeeding self-efficacy during early postpartum period (Chan, Ip, & Choi, 2016; McQueen, Dennis, Stremler, & Norman, 2011; Noel-Weiss, Rupp, Cragg, Bassett, & Woodend, 2006; Wu, Ho, Han, & Chen, 2018) and having less focus during prenatal period. There are studies focused on prenatal breastfeeding self-efficacy (McKinley et al., 2019), but evidence was limited to western countries and fewer studies conducted Asian mothers especially in the Philippine context.

Father or partner has been identified as an influencing factor in maternal decision-making (Ghose et al., 2017). Mothers reporting positive support from their partners had higher confidence in breast milk production and higher breastfeeding self-efficacy. If the mother feels that the father’s attitude toward breastfeeding is positive and supportive, there is a greater likelihood that she will continue breastfeeding (Mannion, Hobbs, McDonald, & Tough, 2013). This study aims to assess the level of marital adjustment and its influence on prenatal breastfeeding self-efficacy of the first-time mothers in late pregnancy period.

MATERIALS AND METHODS

Study design

The research design of the study was descriptive correlational to determine the relationship between marital satisfaction and the level of prenatal breastfeeding self-efficacy of the primiparous mothers. The assumption in this study is that marital satisfaction has an influence on prenatal breastfeeding self-efficacy, but there was no causal relationship assumed.

Study site

The study was conducted in the municipality of Rizal, Occidental Mindoro, which is considered a low income and third-class municipality. This area is near and accessible from the site in which many primiparous mothers receive prenatal care checkup with the healthcare provider.

Sample

A total of 128 primiparous women agreed to participate and had prenatal care check-up in the barangay health center at the time of data gathering. For each selected area, respondents were chosen using systematic sampling in the interval of 2. Inclusion criteria in the study were: 1) primiparous women, 2) pregnant women without known complication that may be contraindicated with breastfeeding, 3) pregnant women who were willing to participate in the research. The study assumes a 95% confidence interval, 50% expected frequency, design effect of 1 and a margin of error of 5%. The study needed 168 samples, but has a 76% response rate.

Instrument

The questionnaire was composed of three parts: socio-demographic section and the breastfeeding self-efficacy scale. The socio-demographic section includes age (ordinal); civil status (nominal); educational attainment (ordinal); income level (ordinal); number of prenatal visits (nominal).

The second part is the Marital Adjustment Test (Locke & Wallace, 1959), a 15-item scale that measures marital satisfaction. It was initially used to differentiate well-adjusted couples from distressed couples. The 15 items are answered on a variety of response scales and possible scores range from 0-158, showing higher scores indicate greater satisfaction.

The third part of the questionnaire was the 14-item Breastfeeding Self-efficacy Scale-Short Form (BSES-SF) by Dennis (2003). The BSES-SF is a self-support instrument containing two sub-scales: (1) the technique subscale, where items depict maternal skills and recognition of specific principles required for successful breastfeeding; and (2) the intrapersonal thoughts subscale, where 14 items are related to maternal attitudes and beliefs towards breastfeeding. Items are preceded by the phrase “I can always” and anchored with a 5-point Likert scale, where 1 means not at all confident and 5 means always confident. A study provided preliminary evidence that the BSES-SF may be an internationally applicable, reliable and valid measure to assist health professionals in caring for breastfeeding women. Cronbach’s alpha coefficient for internal consistency was 0.87. Antenatal and postnatal BSES-SF scores were significant predictors of breastfeeding duration and exclusivity at 12 weeks after the birth (Aluş Tokat, Okumuş, & Dennis, 2010).
Permission from the Municipal Health Officer was secured to conduct the study. Approved letter of request was presented to the rural health midwives where the study was conducted. The coverage of the data collection started every Thursday of the month of November 2018 during the scheduled prenatal care visit in the Barangay centre. The data collection technique was through a survey interview using a questionnaire. Postpartum mothers were approached during visits in the Barangay Health Center. Informed consent was attained from the mothers before the researchers conducted the interview.

Ethical consideration
This paper was technically reviewed and approved by the Research Council of the Occidental Mindoro State College under its Research Development and Extension Unit. Participation in the study was voluntary and it was explained to the mothers that they have the option to answer the questionnaire or not. Complete anonymity of the research participants was observed. The respondents were informed of the right to confidentiality and privacy. Any clarifications were entertained by the researcher to facilitate easy understanding of the statement in the research instrument. The questionnaire was coded and listed in a separate sheet; the code from the list was later matched after data collection. Specific information on the questionnaires could not be linked to specific individuals. Access to the data was limited only to the researcher.

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### Data analysis
Data collected were entered in Microsoft Excel and were analyzed with SPSS for descriptive and inferential statistics. Descriptive statistics used included percentages and frequencies for demographic profile and mean for BFSE. Pearson’s correlation coefficient was utilized to test the relationships between the samples’ marital adjustment scores to correlate with BFSE of the respondents. Fisher’s t-test was utilized to determine the significance of correlations. A p-value of equal to or less than .05 was considered statistically significant.

### RESULTS
Data presented in Table 1 show that most of the young adults were aged 19-24 (45.8%). It also reveals that the respondents were unmarried (53.1%), reached high school graduate and high school and college graduate (both 25.8%), earning ≤ 7,890 and considered poor (66.4%) and most had met the national prenatal visit minimum requirement (42.2%).

The results (Table 2) show that the respondents have a high level of marital adjustment (MAT scores;
112.05 ± 21.83). Further, prenatal mothers who responded in the study were highly confident and had self-efficacy in breastfeeding their first child (4.52 ± .64). It was also revealed that the respondents were both highly confident in breastfeeding technique (4.47 ± .64) and intrapersonal thoughts on breastfeeding (4.55 ± .51) (Table 3). The study revealed that there is no significant correlation in marital satisfaction and prenatal breastfeeding self-efficacy (β = .078, p value = .190). On the other hand, it also showed that there is a significantly negative and weak downhill linear relationship (β = -.148, p value = .047*) between marital satisfaction scores and intrapersonal thoughts on breastfeeding among prenatal mothers in their late post-partum period.

**DISCUSSION**

Majority of these respondents were at their early adult age. In the Philippines, fertility peaks at age 20-24 and falls after 25-39 (Bersales, 2014). The findings on the current study also suggest that the majority of them did not pursue at aiming for the highest level of formal education. Studies have revealed that educated women are more likely to use maternal care services than women with no formal education period (Adu, Tenkorang, Banchani, Allison, & Mulay, 2018; Dutamo, Assefa, & Egata, 2015; Hill et al., 2013; Pulok, Sabah, Uddin, & Enemark, 2016; Simkhada, Van Teijlingen, Porter, & Simkhada, 2008). According to the Philippine Statistics Authority, the national poverty threshold in 2015 is 10,969 per month. Poverty threshold includes basic non-food needs such as clothing, housing, transportation, health, and education expenses (PSA, 2015). This indicates that the majority of the respondents were below poverty threshold. Population who belong to low income family could hardly afford to subject themselves to adopt the recommendations required for health improvement due to economic status (Bircher & Hahn, 2017). One study of peer counseling support shows that breastfeeding duration was significantly associated with increased maternal age and personal breastfeeding experience (Bolton, Chow, Benton, & Olson, 2009). A pregnant woman has at least one visit for the first and second trimester and two visits for the third trimester. Campbell and Graham (2006) supported this and stated that quality prenatal care is an important indicator for maternal and infant health status. If a mother is equipped with adequate knowledge in prenatal care, she is most likely to comply with the prenatal check-up and habits to attain maximum health during pregnancy.

The results show that the respondents have a high level of marital adjustment score. There was a statistically significant relationship between the perception of spouses toward their marriage or their

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**Table 4. Correlation between Marital Adjustment and Prenatal Breastfeeding Self-Efficacy**

<table>
<thead>
<tr>
<th>BFSE Scores</th>
<th>Beta coefficient</th>
<th>MAT Score</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique</td>
<td>-0.078</td>
<td>.190</td>
<td></td>
</tr>
<tr>
<td>Intrapersonal thoughts</td>
<td>-0.148</td>
<td>.047*</td>
<td></td>
</tr>
<tr>
<td>Prenatal BFSE</td>
<td>-0.052</td>
<td>.280</td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (1-tailed)
level of satisfaction with their relationship and being sensitive parents. The consistency in the relationship between spouses is also important for the baby to understand relationship connections (Mutlu, Erkut, Yildirim, & Gundogdu, 2018). Further, it was also demonstrated that family functions, especially, problem solving, communications and family roles as well as marital adjustment, can explain more than half of the quality of life in women. Therefore, it is suggested that any intervention in increasing women’s quality of life should take these aspects into consideration (Basharpoor & Sheykhholeslami, 2015).

Lastly, in a couple expecting their first child, both women and partners’ coping behaviors contributed to higher marital adjustment, suggesting that risks for marital dissatisfaction may exist for couples not able to implement adaptive strategies, or for those unsatisfied with the implemented coping behaviors (Molgora, Acquati, Fenaroli, & Saita, 2019).

The results revealed that prenatal mothers who responded in the study were highly confident and had self-efficacy in breastfeeding their first unborn child. The results from the current study are consistent with the original BSES-SF study of Dennis (2003) and provide evidence that the BSES-SF is reliable measure of breastfeeding self-efficacy among a representative sample in Rizal, Occidental Mindoro. Pollard and Guill (2009) conclude that the score on BSES-SF was a statistically significant predictor of breastfeeding length. The use of the BSES-SF as the baseline assessment tool to identify women at high risk of weaning was also suggested. Using the BSES-SF as a screening tool, healthcare providers can target women at risk for early weaning and plan strategies that enhance mother’s knowledge and breastfeeding using Dennis’s breastfeeding self-efficacy framework. The BFSE-SF is also a useful tool in screening women who may need extra guidance and assistance once their children are born. If the individual leaves the class with a low self-efficacy score, the BSE-SF can be an effective tool in communication with breastfeeding support staff and lactation consultants in the clinic and hospital when the at-risk mother delivers and needs support and guidance in breastfeeding. Healthcare professionals can readily see the areas in which self-efficacy is low prenatally and help to empower the new mother to breastfeed successfully during the postpartum period. While previous research has found higher breastfeeding knowledge to positively impact both breastfeeding outcomes and breastfeeding intention (Cottrell & Detman, 2013; Kornides & Kitsantas, 2013), few studies have investigated the impact of breastfeeding knowledge on breastfeeding self-efficacy.

Lastly, the results revealed that there is no significant correlation in marital adjustment and prenatal breastfeeding self-efficacy. On the other hand, it also showed that there is a significantly negative and weak downhill linear relationship between marital satisfaction scores and intrapersonal thoughts on breastfeeding among prenatal mothers in their late post-partum period. On the contrary, in other studies, it was shown that women who reported active/positive support from their partners scored higher on the BSES than those reporting ambivalent/negative partner support when we controlled for previous breastfeeding experience and age of infant (Abbass-Dick, Stern, Nelson, Watson, & Dennis, 2015; Mannion et al., 2013). The studies suggested that a co-parenting intervention involving fathers warrants additional investigation to assess significant improvements in breastfeeding duration, paternal breastfeeding self-efficacy, and maternal perceptions of paternal involvement and assistance with breastfeeding. Lastly, paternal involvement and paternal breastfeeding self-efficacy could increase the feeling of confidence to a breastfeeding mother (Abbass-Dick et al., 2015; Dennis, Brennenstuhl, & Abbass-Dick, 2018). This suggests conducting future studies to measure breastfeeding self-efficacy among fathers, especially in the prenatal period.

A limitation of this study was the fact that the sample of the study was composed of women who presented to outpatient clinics and this does not include the pregnant women who do not seek consultation in the Barangay Health Center. This research does not claim findings representative of all Filipino women. It is difficult to state that the sample used fully represented the sociocultural groups who live in the province. It is important to conduct further studies to test the psychometric properties of the scale in samples representing different groups. Also, this study was limited by its cross-sectional nature, as a result of which the relationships between marital adjustment sociodemographic variables, and prenatal breastfeeding self-efficacy do not necessarily indicate causal relationships.

**CONCLUSION**

The study shows that the respondents are young adult, unmarried, literate, considered poor, and receive minimum antenatal care. The results show that the respondents have a high level of marital adjustment. Prenatal mothers who responded in the study were highly confident and had self-efficacy in breastfeeding their first unborn child. Lastly, it was found that there is no significant correlation in marital satisfaction and prenatal breastfeeding self-efficacy. This study recommends to create intervention focused on maximizing these psychosocial resources, mother-to-infant attachment and social support intervention to breastfeeding self-efficacy. There is also need to incorporate co-parenting intervention involving fathers, which warrants improvements in breastfeeding duration, paternal breastfeeding self-efficacy, and maternal perceptions of paternal involvement and assistance with breastfeeding.
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