



Contributing Factors on Breastfeeding among Nonworking Mothers Who Joined Mother Support Group (MSG) Program in Indonesia

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ARTICLE INFO

Article history:

Received: 23 April 2013;

Received in revised form:

20 September 2014;

Accepted: 17 October 2014;

Keywords

Breastfeeding,
Nonworking,
MSG,
Indonesia.

ABSTRACT

Background and objectives: The infant feeding decision is complex and involves the influence of psychological, social, and economic factors, and health care system. This study was examining a hypothesized model of relationship between social support, knowledge, attitude, self-efficacy in influencing breastfeeding practice. Methodology: This was a cross-sectional study which measuring all variables using questionnaires. All of the scales were translated into Indonesian language and the internal consistency reliability scores (Cronbach's alpha) were found to be above 0.7 for all scales. A total of 173 nonworking mothers with babies between 0-6 months who joined the mother support group (MSG) program participated in this study. Hierarchical multiple regression test was used to assess the influence of social support, knowledge, attitude, and self-efficacy on breastfeeding. In order to test the hypothesized model of relationship between social support, knowledge, attitude, self-efficacy, and breastfeeding practice, structural equation modeling (SEM) was used for. Results: The results showed that only knowledge has significant influence on breastfeeding practice among the non working mothers (beta= .21, p= .01). Conclusions and implications: For nonworking mothers who joined MSG program, there was only knowledge that has significant influence on breastfeeding practice. MSG may be a suitable method to promote breastfeeding among Indonesian mothers.

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Introduction

Background and objectives

Endorsement for breastfeeding has come from the World Health Organization, the International Pediatric Association, the British Department of Health and Social Security, the American Association of Public Health, and the Academy of Pediatrics. The justification for breastfeeding as the infant feeding method of choice continues to be well documented in the scientific literature. Significant nutritional, anti-allergenic, immunological and psychological benefits of breast milk have been identified. Many studies have described the unique advantages of human milk.^{1,2,3,4} Nutrients percentage contained in breast milk are exactly suits the needs of the infant to grow and develop⁴. Moreover, over six months following birth, breast milk transformed from colostrums into mature milk, which protects the infant from gastrointestinal tract and respiratory organs infections, as well as providing protection during the development of the immune system while the immune system⁴. Clinical experiments have established the value of breastfeeding in preventing otitis media, gastroenteritis, asthma, shigella infection, and a variety of other diseases. For the mother, lactation facilitates a faster return to a pre-pregnant weight while suppressing ovulation for many. The economic advantage and the enhancement of the mother-infant bond have also been discussed as important benefits to breastfeeding^{2,3}. Furthermore, demonstration the mother's love to the infant during the breastfeeding process contributes to the development of a healthy personality in an infant¹.

The infant feeding decision is complex and involves the influence of psychological, social, and economic factors, and health care system. Several authors have identified education and social support as the key factors in the promotion of breastfeeding. Due to lack of knowledge, sociocultural, economic, and personal reasons, women may choose to bottle-feed completely. Those who do intend to breastfeed may supplement too early with formula, thus undermining the establishment of lactation, or have potentially remediable problems that lead to premature discontinuation of breastfeeding⁵. Added to the problem is the fact that in some hospital practices, attitudes of health care personnel and aggressive marketing of commercial formula encourage the choice of formula feeding.

It is recommended by the WHO/UNICEF to have the infant exclusively breastfed for approximately the first 6 month postpartum (after birth) before gradually be introduced to complementary food while the breastfeeding is continued until 2 years or more⁶. Albeit many researches around the factors affecting breastfeeding duration has been done in the past decade, including maternal demographics, attitudes and beliefs, and hospital practices⁷, most countries failed to meet the WHO recommendation for exclusive breastfeeding⁸.

Maintained that non-modifiable demographic variables such as maternal age, marital status, educational level, and socioeconomic status contributed to premature breastfeeding discontinuations⁷. Therefore, in order to effectively improve low breastfeeding duration rates, reliably assessing high-risk women

and identifying predisposing factors are amenable to intervention⁹.

An empowerment program might increase a mother's perceived control over her environment by encouraging active participation based on her requests regarding the content and the program implementation, by designing a mother-oriented program, and by helping them to determine the suitable solution¹⁰. Consequently, improvement of the rate of breastfeeding will be produced by an empowerment program which (1) based on the requests of mothers who are willingly conduct breastfeeding, (2) helps to host mothers to share their problems regarding to breastfeeding, and (3) provide mothers with practical knowledge and skills related to breastfeeding.

Methodology

This was a correlational study examining a hypothesized model of relationship between social support, knowledge, attitude, self-efficacy in influencing breastfeeding practice. All of these variables were measured using questionnaires. All of the scales were translated into Indonesian language and the internal consistency reliability scores (Cronbach's alpha) were found to be above 0.7 for all scales. A total of 178 mothers with babies between 0-6 months who joined the MSG program participated in this study.

Result and discussion

In order to test the hypothesized model of relationship between social support, knowledge, attitude, self-efficacy, and breastfeeding practice, structural equation modeling (SEM) was used.

SEM takes a confirmatory approach to the analysis of a structural theory on some phenomenon. This theory represents "causal" processes that generate observations on multiple variables¹¹.

According to Byrne (2001), the term structural equation modeling conveys two important aspects of the procedure: (1) that the causal processes under study are represented by a series of equations, and (2) that these structural relations can be modeled pictorially to enable a clearer conceptualization of the theory under the study¹².

The hypothesized model can be tested statistically in a simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data. If the goodness of fit is adequate, the model argues the plausibility of postulated relations among variables; if it is inadequate, the tenability of such relations is rejected. SEM provides widely and easily applied methods for modeling multivariate relations, or for estimating point and/ or interval indirect effects¹².

The researcher found that the hypothesized model (Figure 1) is an unfit model (Chi square= 1.557, df= 1, p= 0.212, RMSEA= 0.057, GFI= .996, and AGFI= .946). Since there are several paths which are insignificant (the influence of social support on knowledge; the influence of social support on breastfeeding; the influence of self efficacy on breastfeeding; and the influence of attitude on breastfeeding) ($p > 0.05$); those are indicated causing the model is unfit.

Figure 1 The first (unfit) model of relationship between social support, knowledge, attitude, and self-efficacy in influencing breastfeeding practice among nonworking mothers

Adjustment was made to the hypothesized model to include only the paths that were found significant ($p < 0.05$). After omitting all the insignificant relationships in the first model, the data was run again using Amos version 16.0 software. Result of the analysis is shown in Figure.2. The new model has been proved to be a fit model for nonworking mothers. Goodness of

fit statistics revealed a good fit to the model (Chi square= 2.6, df= 5, p= 0.763, RMSEA= 0.000, GFI= .994, and AGFI= .982). There is only one variable directly influencing breastfeeding practice: knowledge (beta= .21). Social support influences attitude (beta= .28) and self-efficacy (beta= .37) but not breastfeeding practice. Furthermore, knowledge influences self-efficacy (beta= .28), and self-efficacy influences attitude (beta= .41). On the other hand, self-efficacy as well as attitude was not found to be statistically significant in influencing breastfeeding, and social support did not significantly influence knowledge.

Figure 2 The model of relationship between social support, knowledge, attitude, and self-efficacy in influencing breastfeeding practice among nonworking mothers

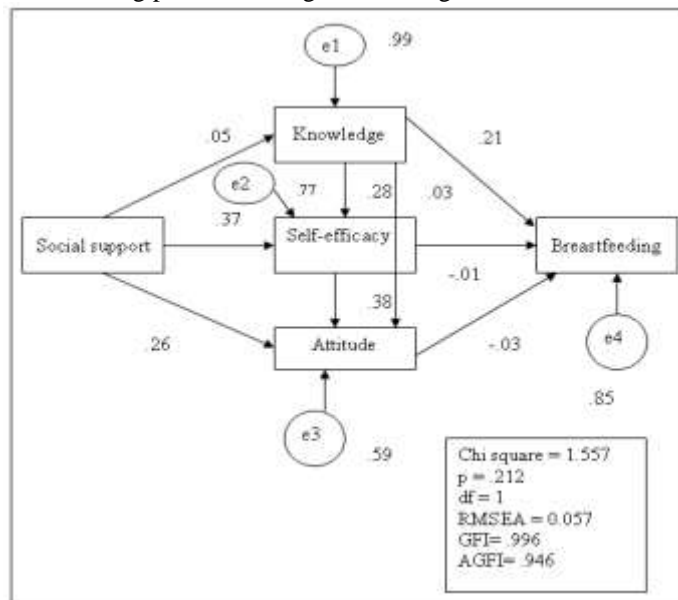


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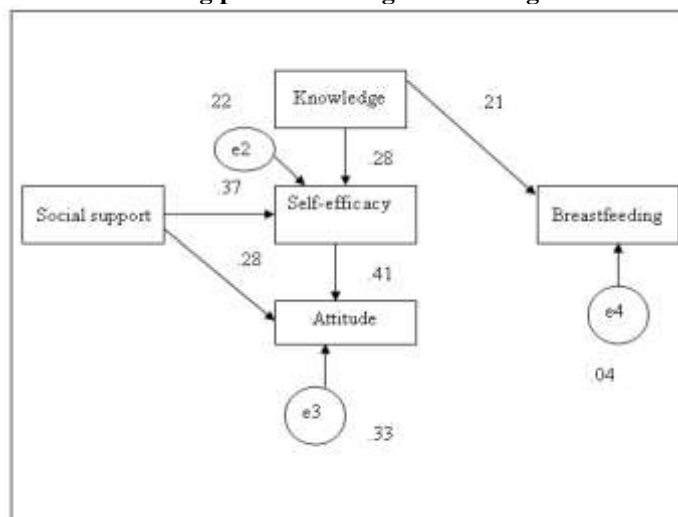


Figure 2 The model of relationship between social support, knowledge, attitude, and self-efficacy in influencing breastfeeding practice among nonworking mothers

The fit model was in line with the integrated behavior model (IBM)¹³. According to the IBM, a particular behavior tends to occur if a person possess the knowledge, and there is no serious environmental constraint preventing the performance. The mothers possess the knowledge about breastfeeding, and there is no serious environmental constraint preventing breastfeeding practice, than the mothers practicing breastfeeding successfully. For nonworking mothers, usually there are fewer

obstacles and barriers to breastfeed their babies than working mothers. They stay at home all the day with their babies, so they can breastfeed on demand. There are no limitation related to time and distance between mother and her baby.

Conclusions and implications

For nonworking mothers who joined MSG program, there was only knowledge that has significant influence on breastfeeding practice. MSG may be a suitable method to promote breastfeeding among Indonesian mothers. Even when the current research has managed to shed some light in terms of the contributions of the focused variables on breastfeeding practice, there is still a lot that can still be researched on in promoting breastfeeding practice.

This research has examined contributions of social support, knowledge, attitude, and self-efficacy on breastfeeding practice among Indonesian MSG mothers. Research in this field is fundamental as it can be a vehicle that brings forward MSG program and the benefits that can be gained by the mothers. However, there are other factors involved and may contribute to the model of factors influencing breastfeeding practice. As the respondents may only represent the mothers who are involved in MSG program, other studies involving non-MSG mothers can be carried out. This allows interesting data comparison.

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