ASSOCIATION OF GOVERNMENT POLICY AND MOTHER’S PERCEPTION TO EXCLUSIVE BREASTFEEDING PRACTICE

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ABSTRACT
Background: Although the Indonesian government has campaigned exclusive breastfeeding during the past decade through maternal and child program of Ministry of Health, however, its coverage in Yogyakarta province remains low.
Objective: This study aims to analyze factors related to exclusive breastfeeding program, especially indicators that can explain government’s regulation and mothers’ perception to exclusive breastfeeding practice.
Methods: It was a cross-sectional study involved 185 mothers who have 6-12 months infants with parity 1-3. The correspondents live in Sleman district and had normal delivery in hospital, health center or midwifery private practitioner. The association between the exogenous (government policy and mothers’ perception) and the endogenous variables (mothers’ participation to exclusive breastfeeding practice) was determined using Lisrel version 8.80.
Results: Although the government policy contributed to the success of implementing breastfeeding program (33%), providing breastfeeding rooms (28%), and declaring the related government regulation (17%); however, its contribution was recorded at only 2% to human resources. Knowledge significantly encouraged mothers to breastfeed whilst infrastructure was assessed as a strong determinant of mothers’ willingness to participate in the program at the contribution of 50%.
Conclusion: Although there was only a weak association between government regulation to mothers’ perception and between mothers’ perception towards exclusive breastfeeding practice, the study highlights the importance of providing adequate information to improve mothers’ knowledge on exclusive breastfeeding. By knowledge improvement, mothers will have better perception, which in turn will improve their self-efficacy and practices in exclusive breastfeeding.

Keywords: policy, perception, participation, exclusive breastfeeding
INTRODUCTION

The importance of breastfeeding for both mother and child has been studied widely. Numerous studies have shown that breastfeeding may improve child’s quality of life in a short and long term. Not only reducing the risk of infant mortality, exclusive breastfeeding also lessen the probability of acute respiratory infection and diarrhea.\textsuperscript{1,2} Moreover, breast milk contains of lactose and essential fatty acid that stimulate baby’s brain to grow and develop optimally. In a long term, children and adults who were breastfed are more likely to have higher IQ and develop better immunity against food allergies, asthma, and diabetes.\textsuperscript{3,4}

Although the Indonesian government has campaigned exclusive breastfeeding during the past decade through maternal and child program of Ministry of Health, however, its coverage in Yogyakarta province remains low. Only 66.7 percent of mothers were reported exclusively breastfeed their babies. Yogyakarta regency was noted as the lowest with only 51.6 percent of mothers practiced breastfeeding, followed by Gunung Kidul district, Bantul and Kulon Progo with 56.5, 62, and 70.4 percent, respectively. Sleman district showed the highest achievement by reporting 80.6 percent of mothers have breastfed their babies exclusively in 2014.\textsuperscript{5}

Studies found that mothers’ knowledge, related to the importance of exclusive breastfeeding, was found as a strong inhibitor of breastfeeding practice. When mothers’ participation in breastfeeding support group – as one of the indicators of mothers’ knowledge – was reported low, the likelihood of participation in breastfeeding will be at the lowest. In some cases, breastfeeding practice also related to mothers’ self-confidence. Mothers who believed they may produce sufficient amount of breastmilk are more likely to participate in exclusive breastfeeding.\textsuperscript{6,7}

Beside mother’s internal factors, successful breastfeeding is determined by the involvement of family and community member.\textsuperscript{8} Studies found, mothers who have their family supported and joined a support group for breastfeeding were more likely to practice exclusive breastfeeding compared to their counterparts who were not. Not only support group, community participation may also involve peers and counselors. Mothers who were visited by community-based counselor were more likely to initiate breastfeeding earlier.\textsuperscript{9,10}

Government’s roles of course are undoubtedly important. Series of government policy include providing training for breastfeeding facilitators and counselor, designing peer support groups in community level, Baby Friendly Hospital Initiative (BFHI), The First 1000 Days of Life movement and also issuance of government regulation on exclusive breastfeeding. Although much have been done in order to increase the exclusive breastfeeding coverage in Yogyakarta, the results are still unsatisfying. Since successful breastfeeding is determined by many factors, government’s regulations only do not have enough power to improve breastfeeding practice. Nevertheless, it cannot be denied that government policy helps to regulate the implementation, either in working place or community. This study aims to analyze factors related to exclusive breastfeeding program, especially indicators that can explain government’s regulation and mothers’ perception on exclusive breastfeeding practice.

METHODS

A quantitative study with a cross-sectional approach was employed in this present study. The assessment of independent and dependent variables was
conducteved at the same period, and each sample in the population was observed only one time during the research. The association between the exogenous (government policy and mothers’ perception) and the endogenous variables (mothers’ participation to exclusive breastfeeding practice) was determined using Lisrel analysis version 8.80.

In total, 185 mothers were randomly chosen as subjects proportionally from 87 villages in 17 sub-districts (as cluster), at Sleman district of Daerah Istimewa Yogyakarta province. Respondents in the clusters met these inclusion criteria: mother aged 20 to 35 years with infant aged 6 to 12 months, the baby was born normally or through sectio caesarea, had delivery at health care service (not home birth), having not more than 3 children, complete secondary school, and residing in the cluster site, able for communication and willing to participate. Mothers who had serious disease or delivered babies with disability were excluded from the participation. Sleman district was selected in this study since the highest breastfeeding coverage compared to the other five districts in this province.

The reliability and validity of the instruments in this present study have been tested through statistical analysis and expert review. Reliability coefficient for internal consistency test was set at Cronbach’s alpha > 0.6. Of 135 questions, 61 were found valid and reliable to represent the aims of the study. Moreover, questions have passed reviews by nine experts in two rounds following the contexts without losing the meanings. Design of this research was approved by ethical committee of Universitas Aisyiyah Yogyakarta with reference number 02/Kep-SAY/II/2016.

RESULTS

Government policy to exclusive breastfeeding practices

Government has set four programs in exclusive breastfeeding practice, comprised of: (1) Socialization of Government Regulation No. 33/2012; (2) Implementation of 10 steps to succeed the breastfeeding program; (3) providing breastfeeding rooms; and (4) human resources including counselor and motivator. The role of government policy to exclusive breastfeeding program was presented in the measurement quotation and covariant matrix in Table 1. Value of $R^2$ exhibits the contribution of government policies to those four indicators in exclusive breastfeeding practice.

| Variable | Indicators | Error variance | $R^2$ | Total Variance |
|----------|------------|----------------|-------|----------------|
| Government policy in exclusive breastfeeding practice | Socialization of government regulation No.33/2012 | 5.88 | 0.17 | 7.12 |
| | Implementation of 10 steps to succeed the breastfeeding program | 11.27 | 0.33 | 16.76 |
| | Breastfeeding rooms | 3.39 | 0.28 | 4.70 |
| | Human resources | 1.49 | 0.02 | 1.52 |

Results presented in Table 1 revealed that government policy mostly contributed to the success of implementing breastfeeding program (33%), providing breastfeeding rooms (28%), and declaring the related government regulation (17%); however, the policy contributed only 2% to human resources. From our assessment,
the highest contribution of the breastfeeding program to the milestone of implementation was presented at the error variance of 11.27 and total variance of 16.76. As the lowest contributor to the success of the program, human resources deliver the influences at error variance of 1.49 and total variance of 1.52.

**Mothers’ perception in exclusive breastfeeding program**

Four indicators of mothers’ perception determining the success of exclusive breastfeeding programs were assessed including value, knowledge, support, and hopes to the programs. Mothers’ knowledge to the breastfeeding was underlined as a significant factor to encourage the initiatives of the program, at the contribution of 52%; and this factor was assessed with error variance of 1.32 and total variance at 2.74. Even presented insignificant role, government may place the consideration to mothers’ attention to construct positive perception among the mothers in exclusive breastfeeding program. Mother’s perception to the program contributed 20% to their support at the error variance of 1.04 and total variance at 1.29. Presented in Table 2, mothers’ perception in exclusive breastfeeding program determined as 10% in mothers’ value and hopes to the program, respectively, at error variance of 1.53 and 1.62.

Table 2 Summary of quotation measurement and covariant of mothers’ perception and exclusive breastfeeding program

| Variable                                      | Indicators                      | Error variance | \( R^2 \) | Total Variance |
|-----------------------------------------------|---------------------------------|----------------|----------|---------------|
| Mothers’ perception in exclusive breastfeeding program | Value                           | 1.53           | 0.10     | 1.76          |
|                                                | Knowledge                       | 1.32           | 0.52     | 2.74          |
|                                                | Support                         | 1.04           | 0.20     | 1.29          |
|                                                | Hopes to the program            | 1.62           | 0.10     | 1.81          |

**Mothers’ participation in exclusive breastfeeding program**

Three indicators convincing mothers’ participation in exclusive breastfeeding program comprise of infrastructure, activity, and mothers’ contribution to the programs (e.g., idea, material, and human resources). Table 3 exhibits the contribution of those three indicators to maximize mothers’ participation in the breastfeeding program. Infrastructure was assessed as the most affected factor determining the mothers’ willingness to participate in the program at the contribution of 50% with error variance at 1.22 and total variance at 2.43. Whilst activity and mothers’ contribution determined the participation, respectively, at 45% and 35%. From the result we noted that the three indicators have important roles in constructing recommendation for improving mothers’ participation in exclusive breastfeeding program.

Table 3 Summary of quotation measurement and covariant of mothers’ participation and exclusive breastfeeding program

| Variable                                      | Indicators                      | Error variance | \( R^2 \) | Total Variance |
|-----------------------------------------------|---------------------------------|----------------|----------|---------------|
| Mothers’ participation in exclusive breastfeeding program | Infrastructure                | 1.22           | 0.50     | 2.43          |
|                                                | Activity                       | 4.24           | 0.45     | 7.71          |
|                                                | Contribution (idea, material and human resources) | 2.55           | 0.35     | 3.93          |
Mothers’ perception to government policy and participation in exclusive breastfeeding program

Presented in Table 4, the standard solution between government policy and mothers’ perception was -0.16. The government policy did not affect significantly to improve mothers’ perception in providing exclusive breastfeeding to their infants. In addition, by Lisrel measurement models we found that the standard solution of mothers’ perception to their participation was assessed at -0.17. It shows that the recent mothers’ perception to exclusive breastfeeding practice will not encourage mothers to participate the program.

Table 4 The completely standardized solutions (Lambda-X) in mothers’ perception in exclusive breastfeeding program to government policy and their participation

|                  | Government policy | Participation |
|------------------|-------------------|---------------|
| Perception       | -0.16             | -0.17         |

DISCUSSION

There is no doubt that government plays a great role for successful breastfeeding program. Regional and local regulations help framing the family and community’s participation in supporting mothers to breastfeed exclusively. In this present study, of four indicators, only two significantly succeed in explaining government regulations: (1) monitoring of ten steps for successful breastfeeding; and (2) the provision of breastfeeding room. Socialization and human resources (facilitator and counselor) were not statistically satisfying as indicators to explain government regulations, perhaps, because the numbers of existing human resources were not adequate to present effects to breastfeeding practice. The socialization of government regulation on breastfeeding was also lacking, partly because the community demands on information that was also inadequate. In addition, it was driven by the unattractiveness of media promotion on breastfeeding which was only limited to conventional media such as leaflet, brochure, and advertisement board.

Social Cognitive Theory of Bandura posited that individuals are willing to adopt a new behavior when the internal and social circumstances are supporting. One needs to believe that behavior will bring positive outcomes before engaging and make it sustainable. Self-efficacy contains of skills to perform the new behavior and it influences behavior reciprocally. Skill will increase the likelihood of one to practice the new behavior, and by repeating the new behavior over times, it will increase one’s self efficacy. In exclusive breastfeeding program, mothers will be more likely to breastfeed when they feel confident and believed that breastfeeding will bring a lot of benefit for their babies. Simultaneously, when mothers practice breastfeeding overtimes, it will increase their self-efficacy in performing the feeding.

The study confirmed that mothers’ perception on the importance of exclusive breastfeeding was formed by norms, knowledge, support and expectation. The internal norms comprise of information and intuition that are incorporated into mother’s point of view to breastfeeding. The internal norms are influenced by external drives such as culture, belief and knowledge. Therefore, norms of breastfeeding are strongly correlated to mother’s knowledge which is the result of her interpretation of the culture, belief and
information she has stored. Support in this study refers to family care and social support. Since breastfeeding is a personal experience, a private space is needed for mother to breastfeed comfortably. Beside breastfeeding rooms in workplace, prolonged maternity leaves can be given for mothers as a support to breastfeed exclusively. Family supports, especially husband, also contribute to a successful breastfeeding. Mother’s perception is also determined by her expectation of the cost and benefit towards breastfeeding. When mothers believed that breast milk is beneficial for the children and exclusive breastfeeding will improve the baby’s immune system and growth, mothers’ perception is likely to be positive.

Unexpectedly, knowledge was found as the only indicator that contributed to the forming mothers’ perception whilst the other three indicators namely social norms, support and expectation of mothers were not strong enough in forming the variable. This finding marked a need in improving mothers’ knowledge in order to build mothers’ perception. It does not mean that only improving knowledge will improve perception, but the influence of norms, support and expectation will be stronger when knowledge is improved. Therefore, although norms, support and expectation are found to be insignificant, nevertheless, it cannot be denied that the three factors are important to improve mothers’ perception on breastfeeding.

Although in practical level government supposed to play big role for successful breastfeeding program, the present study found only a weak correlation between government regulation and mothers’ perception. The insignificant findings perhaps were caused by unfamiliarity of mothers towards the government regulations as by nature women are less concerned about regulation but more engaged in practice. Furthermore, the dissemination of information on government regulation No.33/2012 regarding breastfeeding was lacking. Most mothers do not understand that by law, exclusive breastfeeding is every child’s right.\textsuperscript{12}

Not only breastfeeding practice, childcare, when the mothers are working, is also a problem on its own. The unavailability of breastfeeding room in working place may increase the barriers for working mothers to breastfeed their babies. Although it’s protected by the existing law, the implementation in the working place is far from satisfying. Therefore, future regulation should encourage working place to have better support towards exclusive breastfeeding by providing more space and time for breastfeeding mothers to care their child. Simultaneously, program addressing knowledge of regulation can be designed in order to improve mothers’ perception towards breastfeeding.

Future programs also should involve community participation in order to develop more positive perception towards exclusive breastfeeding. Mothers should be promoted to be involved in support groups in order to exchange their experiences in breastfeeding. From the peers, mothers may acquire a better understanding of the importance of breast milk versus formula milk, and also eliminate the negative perception towards breastfeeding such as misconception on colostrum, rooming in, and restriction to breastfeed during illness. As peer and community supports are strong predictors of successful breastfeeding,\textsuperscript{6,7,13} therefore, the need to increase the number of peer counselors becomes more important. The lack of peer counselor who can persuade mothers to breastfeed is a big inhibitor since it may reduce the likelihood of mothers to join support group.
A weak correlation was found in the relationship between mothers’ perception to participation and exclusive breastfeeding; because not all mothers perceived that exclusive breastfeeding is necessary for their babies. Theoretically, the likelihood of behavior to occur is determined by many factors including internal and external drives. This study confirmed that perception as internal factor is strongly correlated to knowledge whilst breastfeeding practice is highly associated to the infrastructure and program activities (external). This means, knowledge can be the bridge to improve perception that will eventually improve practice.

The weak association between perceptions to exclusive breastfeeding practice perhaps was also caused by the nature of adoption of a new behavior which depends on many factors such as intention, attitudes, belief on cost and benefit of the behavior, and motivation to comply.\textsuperscript{14-16} The direction of chosen action of a person will be influenced by the beliefs regarding the action, and not only her perception.\textsuperscript{15} Therefore, even though mothers’ perception was good, the association of others factor might be stronger to affect exclusive breastfeeding practice. Mothers may spend more time to contemplate because perception itself has already involved cognition process where one’s considering the consequences of a new behavior.\textsuperscript{17}

CONCLUSION
This study confirmed that successful breastfeeding is associated to internal (knowledge) and external (the availability of resources and program activities) factors. Although there was only a weak association between government regulation to mothers’ perception and between mothers’ perception towards exclusive breastfeeding practice, the study highlights the importance of providing adequate information to improve mothers’ knowledge on exclusive breastfeeding. By knowledge improvement, mothers will have better perception which in turn will improve their self-efficacy and practices in breastfeeding.

Declaration of Conflicting Interest
There is no conflict of interest to be declared in this study.

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Authorship Contribution
All authors contributed equally in this study.

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