# Level of education and types of mother work hard the relationship with preaching provisions of food associators complementary feeding

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#### **ABSTRAK**

**Background:** Complementary Feeding is an additional food or drink containing nutrients, given to infants or children aged 6-24 months to meet nutritional needs other than breast milk. Provision of Complementary Feeding was given from age 6 to 24 months as the age increase, and children then need more nutrients grow.

**Objectives:** To know the relationship between education level and mother's type of work with the practice of giving of baby milk at 6-24 months in Sedayu Bantul, Yogyakarta.

**Methods:** This was an observational research using analytical survey method with cross-sectional approach. Research subjects were mothers who have babies aged 6-24 months. Sampling technique using stratified random sampling with a number of respondents 287 under 2 years children in Sedayu I and II Bantul Yogyakarta. Data collection was using questionnaires and checklist sheets.

**Results:** The result of statistical test using Chi-Square showed that there was a correlation between maternal education level and the practice of giving was breast milk in Sedayu I and II Bantul Health Center, with result p = 0,000 < 0,05. There was a relationship between the type of mother's work with the practice of giving the Complementary Feeding at Sedayu I and II Bantul Health Center, with result p = 0,003 < 0,05. The closeness of the relationship between the level of education and the type of work of the mother with the practice of giving the Complementary Feeding is categorized as low with the value of 0.282 and 0.199.

**Conclusions:** There was a correlation between the level of education and the type of work of the mother with the practice of giving Complementary Feeding in Sedayu I and II Bantul Yogyakarta.

**KEYWORDS**: education level, job type, practice of complementary feeding

#### INTRODUCTION

Nutritious food plays an important role in the human life cycle. Malnutrition in the mother can cause low birth weight babies (LBW). Malnutrition in infants and children can cause growth and developmental disorders (1). The role of nutrition is very important for children and infants, early nutritional disorders can affect the quality of life. Under-two years with less nutrition can have an impact on the physical and mental growth, the child will look short and thinner than his peers (2).

Age 0-24 months is a period of growth and rapid development so termed as the golden period. The golden period can be realized if the baby and the child get the appropriate intake. Conversely,

if infants and children at this time do not get the food as needed then the golden period will turn into a critical period that can disrupt the growth and development of children. To achieve optimal growth, (UNICEF / WHO) The Global Strategy For Infant and Young Child Feeding The World Health Organization recommends four important things to be done: to breastfeed immediately to the baby after birth, breastfeed only or breast milk exclusive for 6 months, providing complementary feeding (AI) foods from infants aged 6-24 months, and continuing breastfeeding until the age of 24 months (1).

According to the World Health Organization (WHO) in 2015 reported the nutritional status of children in the world. Prevalence of lean children

about 13.9% or as many as 93.4 million children (3); while in Indonesia the prevalence of less weight in 2013 was 19.6%, comprising 5.7%, malnutrition and 13.9% less nutrition, very short 0.8%, short 1.2%, lean 0.6 %, and 21% grease. When compared with the national prevalence rate in 2010 (17,9%) seen an increase. Changes are primarily on the prevalence of malnutrition ie, 4.9% in 2010 and 5.7% in 2013 (4). While in the Special Region of Yogyakarta prevalence of malnutrition in 2015 that is 8,04% and increase from the year 2014 equal to 7,91% (5).

Complementary feeding is an additional food or drink containing nutrients, given to infants or children aged 6-24 months to meet nutritional needs other than breast milk (1). Provision of complementary feeding in infants is done gradually. At the age of 6 months, complementary feeding in the form of soft foods such as filtered porridge, milk porridge, or fruit puree. Ages 7-9 months are given soft foods and are slightly textured. Ages 9-12 months are given semi-solid textured foods such as team porridge or chopped food. Ages 12-24 months continued with semi-solid feedings, such as team rice and other minced meals but added portions (6).

Parents education is one of the important factors in the growth and development of children because, with a good education, the parents will more easily receive all the information from outside such as how to care for a good child, how to maintain the health of her child and so forth. In addition, the level of formal education of the mother forms the values for a person especially in accepting new things. The level of formal education is a factor that helps determine whether or not the mother receives information about complementary feeding and child nutrition, so if the mother is easy to absorb the information it will affect the practice of giving the complementary feeding properly and correctly (7).

Work is the daily livelihood of a person to earn money in the daily needs of the work, the role of a person in giving the complementary feeding. Mothers who work too busy tend to have less time to get information about the right breastfeeding that affects the non-fulfillment of appropriate breastfeeding in infants (8).

The number of under-two years children in Sedayu sub-district is 1021 babies aged 6-24 months, wherein Sedayu 1 community health center there are 467 under-two years children and in Sedayu 2 public health center there are 554 undertwo years children, with 68 Posyandu (Integrated Service Post) in the working area of Sedayu Puskesmas Bantul. One of the efforts to decrease the prevalence of malnutrition rate in Puskesmas is by giving complementary feeding to under-two years children children and poor family which is one of minimum service standard (SPM) nutrition program with 100% target. The phenomenon that occurs in the community where there are still many mothers who have not been right in giving the complementary feeding either in the form of type, time, and frequency.

This study aims to determine the relationship between the level of education and the type of work of the mother with the practice of giving the baby complementary feeding 6-24 months in Sedayu District Bantul Yogyakarta.

#### **MATERIALS AND METHODS**

This research was analytical survey research, using cross-sectional approach. The technique used in this study was stratified random sampling (9,10). This research was conducted in January 2018 conducted at Puskesmas Sedayu I and II Bantul Yogyakarta. The sample of this research was a mother who has baby age 6-24 month with a number of respondent 287 respondent, with criterion mother willing to research respondent, a mother who has a child age 6-24 month, and mother who live at home with their child.

Data analysis was done by Chi-Square test. The research instrument used a questionnaire sheet to obtain data on maternal education and type of work and a checklist for the practice of breastfeeding.

#### **RESULTS AND DISCUSSIONS**

#### Results

#### Respondents characteristic

Based on the results of the research, the characteristics of the sample consist of age, sex, history of childhood disease, and mother's characteristics, maternal age, marital status, number of children, mother's education level, mother's work and the practice of giving breastfeeding.

Table 1. Characteristics of children 6-24 months at Sedayu I and II Bantul Yogyakarta in 2018

<u> </u>		
Characteristic	f	%
Age (month)		
6-9	63	22
9-12	56	19,5
12-24	168	58,5
Total	287	100%
Sex		
Female	150	52,3
Male	137	47,4
Total	287	100%
History of LBW (Low Birth Weight) and Premature		
Yes	7	2,7
No	280	97,6
Total	287	100%

Source: Primary Data, 2018

Based on **Table 1** on characteristics based on 6-24 months of age, majority children at 12-24 months old with 168 children (58.5%), with female gender with 150 children (52.3%) and history child illnesses where there are 7 children (2.4%) with a history of LBW and premature.

Based on the result of **Table 2** on maternal characteristics based on age, it is the most at 21-30 years old with the number of 179 people (62,4%) with marriage status of 1 widow (3%), the highest education of SMA / equal to 139 (48.4%) and the highest number of jobs were housewives (IRT) of 185 (64.5%).

Based on **Table.3**, the distribution of complementary feeding in infants aged 6-24 months in Sedayu I and II Bantul Yogyakarta Health Center

Table 2. Characteristics of mother at puskesmas sedayu I and II Bantul Yogyakarta 2018

Characteristic	f	%
Age (years)		
<21	6	2,1
21-30	179	62,4
31-40	94	32,8
> 40	8	2,8
Total	287	100
Education	F	%
Not Study/primary school/Equal	57	19,9
Junior High School/Equal	55	19,2
Senior High School/Equal	139	48,4
College	36	12,5
Total	287	100
Occupation	F	%
Housewife	185	64,5
Farmer/Labor/Breeders /Enterpreneur	59	20,6
Private Employee/ Government Employee	43	15,0
Total	287	100

Source: Primary Data, 2018

Table 3. The practice of complementary feeding provision of Sedayu I and II Health Centers in Bantul Yogyakarta 2018

The Practice of Giving Complementary Feeding	Total	%
Corresponding	138	48,1
Not Corresponding	149	51,9
Total	287	100

Source: Primary Data, 2018

was found to be inappropriate data on the provision of inappropriate complementary feeding as many as 149 people (51.9%).

Based on **Table 4** it can be seen that the result of cross tabulation between education level and the practice of giving of complementary feeding was obtained by the respondent whose level of education with the practice of giving the complementary feeding Not School / Elementary / equivalent as many as 11 people (3.8%) accordingly and not according as much 46 persons (16.0%), junior and senior high school education is not suitable as many as 23 people (8.0%) and corresponding 32 respondents (11.1%) and education level of SMA / equivalent as many as 73 people (25.4%) and not fit as many as 66 people (23.0%), colleges as

Table 4. Education level and type of employment mother with the practice of provision of complementary feeding of Sedayu I and II Bantul Yogyakarta in 2018

Education	The Practice of Giving complementary feeding					otal	Significancy	р
	Not corre	esponding	Corresp	onding				
	N	%	N	%	N	%		
Not Study/Primary School/Equal	46	16,0	11	3,8	57	19,9	,282	0,000
Junior High School/Equal	23	8,0	32	11,1	55	19,2		
Senior High School/Equal	66	23,0	73	25,4	139	48,3		
College	14	4,9	22	7,7	36	36,0		
Total	149	51,9	138	48,1	287	100		

Occupation	The Practice of Giving complementary feeding				Total		Significancy	р
	Not corre	esponding	Corresp	onding				
	N	%	N	%	N	%		
Not working	110	38,3	75	26,1	185	64,5	,199	0,003
Farmer/Labor/Breeders/Enterpreneur	23	8,0	36	12,5	59	20,5		
Private Employee/Government Employee	16	5,6	72	9,4	49	15,0		
Total	149	51,9	138	48,1	287	100		

Source: Primary Data, 2018

many as 22 people (7.7%) and not as many as 14 people (4.9%).

Based on **Table 4** it can be seen that cross tabulation result between mother work type and practice of giving of breastfeeding obtained by respondent that type of work mother with practice of giving of Worker / IRT not as much as 75 person (26,1%) appropriate and not appropriate as much 110 people (38.3%); of respondents with employment of Farmers / Laborers / Entrepreneurs / Self-employed according to as many as 36 persons (12.5%) and inappropriate to 23 persons (8.0%) respondents and Private Employment / Civil Service employment where 72 persons (9, 4%) and not fit 16 people (5.6%).

#### **DISCUSSION**

#### **Characteristics of Respondents**

Based on the results of the research in **Table** 1. it was found that most children aged 12-24 months with the most gender were female, and there were 7 children under five with a history of LBW and Premature. Premature and LBW infants need nutrients to meet their nutritional needs and also to meet their developmental and growth needs.

According to previous studies, LBW children are accompanied by inadequate food consumption, as well as complex health services and frequent infections during growth so that children will experience greater problems (11).

In this study, most mothers aged 21-30 years. Age is a period of new life patterns and new expectations. The more a person's age the more knowledge he possesses according to the previous research where the mother who has good knowledge about complementary feeding with age 21-35 years (12).

#### **Education Level Mother**

Based on the results of the research Most of the provision of complementary feeding is not appropriate is the mother who has a high school education/equivalent amounting to 66 people (23.0%).

Education is a tool to be able to change the value and normal in the family. With the value of education owned by someone can receive more information and expand the horizon of ways of thinking so easily develop themselves to take decisions and act. The more information obtained the more open the awareness of utilizing health

facilities. Highly educated mothers are more likely to be knowledgeable and better aware of their child's needs according to the child's development (13).

Previous research has suggested that the wrong provision of complementary feeding is mostly done by poorly educated mothers compared to well-educated mothers where the level of education affects maternal awareness in the health of their children or in the care of their children and families. Low-educated mothers have less access to limited information and skills to use the information that affects the mother's ability to care for her child and protect her child from health problems (13).

#### Type of Work

Based on the results of research Most of the maternal types that are not suitable for the provision of complementary feeding is not Working / IRT as much as 110 (38.3%).

Work is the daily livelihood of a person to earn money in meeting daily needs. The work plays a major role in a person performing the supplementary feeding action of complementary feeding. Mothers who only work at home and have a lot of time at home do not always give the complementary feeding properly. Many mothers work at home and outdoors that combine breastmilk and other supplementary foods such as instant food even though the baby is not yet eligible for additional food (14).

#### The Practice of Giving complementary feeding

Based on the results of the provision of complementary feeding in Sedayu I and II Bantul Yogyakarta, most of the respondents are categorized as inappropriate, that is 149 respondents (51.9%), and 138 (48.1%).

The first age and type of complementary feeding gave is the most significant factor related to the development and weight of children aged 6-24 months. The resulting consequences of inappropriate complementary feeding include both short and long-term. Short-term can be a gastrointestinal infection and malnutrition, as well as the long-term that arises is obesity due to excessive energy intake. The frequency and amount of MP-breast feeding may be affected by the amount of

food or drink that enters and exits on a child's body and the activity of the child on the frequency and amount of Complementary Feeding associated with the child's metabolism (15).

## Level of Education With Giving Practice complementary feeding

Based on statistical test result using Chi-Square test showed that there was a correlation between maternal education level and the practice of giving breast milk to infants aged 6-24 months with value (p = 0,000 <0,05). According to previous research the higher level of knowledge, education, and parenting skills there is the possibility of better levels of family food security in the provision of complementary feeding; on the contrary if knowledge and education less likely parents can not afford to provide good food in the form of complementary feeding for their children (16).

Based on the results of the research, respondents whose level of education with the practice of giving complementary feeding the most unsuitable is the education of Senior Higt School/ equal to 66. A high education does not always give the complementary feeding correctly where the respondents still have errors in the giving of complementary feeding because of the absence of the counseling conducted at Posyandu. Mothers with low education are found with good knowledge about feeding for their children because respondents are always looking for information about giving the correct food for their children either from health workers or other media.

This research is in line with previous research where there is a correlation between maternal education level and the practice of giving breastfeeding with p = 0,007, mostly high school / vocational high school where many mothers are highly educated, but not yet know and understand about giving of complementary feeding. There is also a highly educated mother and good knowledge of breastfeeding but does not apply appropriate complementary feeding (17).

## Type of work with giving practice complementary feeding

Based on statistical test results using SPSS Chi-Square test showed a relationship between the

type of mother's work with the practice of giving of breast milk with value (p = 0.003 < 0.05).

Work is not an obstacle for the mother to breastfeed or not to give her breast milk, there are various ways that a mother can keep breastfeeding just like milking and then put on the fridge and support the work environment so that a working person can still breastfeeding only to infants without any additional food (17).

Based on the result of the research, the mother's type with the practice of giving complementary feeding, where the most mother in giving of complementary feeding is not appropriate was housewife with the number of 185 people (64,5%), mother only at home or as housewives will often not get information about giving food to their children or are not present in the counseling provided by health workers because they spend too much time at home, and also provide food with an inappropriate portion to their children.

The results of this study are also in line with previous research where there is a relationship between the work with the provision of complementary feeding with the value of p-value 0.083 (18).

### **CONCLUSSIONS AND RECOMMENDATION CONCLUSSIONS**

Most of the majority mothers aged 21-30 years with married marriage status and most have 2 children. Most children aged 12-24 months with female sex, and most have no history of LBW and premature. Much of the education level of mothers was Senior High School. Most types of mother jobs are as housewives. The practice of complementary feeding in infants aged 6-24 months in Sedayu I and II Bantul Yogyakarta Public Health Center, mostly included in the category is not appropriate. There is a correlation between Education Level and the type of mother's work with the practice of giving complementary feeding at Sedayu I and II Bantul Yogyakarta Health Center.

#### RECOMMENDATION

1. For health promotion officers Sedayu Puskesmas 1 and 2 to more often provide health education

- counseling to the community, especially mothers who have children aged 6-24 about the practice of giving breast milk according to an age of a child.
- 2. For mothers who have children aged 6-24 months to exclusively breastfeed until the age of 6 months, try to provide additional food and provide a breastfeeding appropriate to the needs of their children, and more often listen or seek information about the provision of complementary feeding through health workers or other information media.
- 3. For further researchers, it is advisable to develop variables, take more samples, and use different sampling techniques.

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