



## THE CORRELATION OF THE ROLE OF SOCIETY ON NUTRITION CARE PATTERN BY POSITIVE DEVIANCE MOTHER

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ABSTRACT	Keywords
<p>Society had an important role to help the poor mother who has under-five child to give proper diet. The purpose of the research was to know the correlation of society's role on nutrition care pattern by positive deviance mother from poor families in Mojokerto Regency East Java. This research design was using case-control with case population that were poor mothers with healthy children and control population were poor mothers with nutritious problem under-five child. The number of case group samples were 78 people and control group were 41 people. Sampling technique used multistage sampling. Data collection used questionnaires that had been tested the validity and reliability to 30 people. Data analysis used chi-square statistic test. The research result showed that the role of society in positive deviance mothers was sufficient as much as 37 people (46.84%). In non-positive deviance, the role of society was deficient as many as 35 people (85.37%). = 0.000 and value <math>\alpha = 0,05</math>, meant there was a relation of society's role with the pattern of nutrition care of positive deviance mother. The role of society made the mothers motivated to provide good nutrition in their under-five children.</p>	<p><i>under-five children, care pattern, positive deviance, nutrition.</i></p>

## PREFACE

Society was group of people that interacts according to certain system of custom which was continuous and bounded by a sense of the same identity. In a regional development, society was divided into two parts, namely traditional society and developed society. The traditional one was a group of people with a simple mindset and can only distinguish between men and women, while the developed society had vision for life that would be achieved in the future with the people around it even though not in the same group. Society was basically formed from a group of people. For example, a family was led by the head of the family and then gradually from the family form neighbourhood and hamlet until finally forming a village. Then hamlet developed into several sub-districts and became the Regency, Province until form a State. Society members in an area would give advantages if they could contribute to other society members. Participation of the society was done by the all members in order to solve the problems. Public participation in the field of health means the participation of all members of society in solving every problem. In this case, the people themselves were actively thinking, planning, implementing, and evaluating the health programs. Institutions in society could only motivate them, support and guid them. (Notoatmodjo, 2007). Health contribution by society members such as participation in solving problems of nutrition care pattern of under-five by mothers from poor families. The poor families who had a healthy under-five child was called positive deviance, because of their ability to provide nutritional care in under-fives, so they had good nutritional status and could grow and develop optimally.(D.E &Nanang, 2010)

Positive deviance was positive deviation condition related to the health, growth and

development of other children within the society which determine the factors that affected the growth and nutritional status of children living in poor families and dirty environment where most other children suffered from growth and developmental disorders with less nutrition. (core, 2003). Solution was already provided to overcome nutritional problems. It was already exist in society but only needed to be observed to be able to know the existing positive deviation from the behaviour of that society. (Marsh, Schroeder, Dearden, Sternin, & Sternin, 2004). Efforts could be made by utilizing local wisdom based on the belief that each had certain habits and behaviours that enabled them to find better ways to prevent malnutrition than their neighbours who had the same economic conditions but did not have behaviours that included positive deviations. Special concern was made to the pattern of nutrition care by mother to the under-five children. Nutrition care pattern was the intake of food to support the physical and biological growth of under-five children in a precise and balanced condition.(Bandura albert, 1999). Patterns of parenting in the form of attitudes of the mother or other caregivers regarding proximity to children, feeding, taking care, cleanliness, giving love and so forth. All of them were related to the mother's condition, especially in health, nutrition status, general education, knowledge and skills about good parenting, role in the family or community, the habit of daily work, family customs, society and so on from mother or caregiver.(Soekirman, 2000).

The condition of nutritional status in Mojokerto regency in 2011 children under five who had less nutrition as many as 7,750, malnutrition were 1,388. In 2012, under-fives who had less nutrition were 1049 children under five, malnutrition as many as 149. In the year 2013 under-fives who had

less nutrition were 1040 and malnutrition were 139. In 2014 under-fives who suffered from less nutrition were 1.036 and malnutrition were 106. In the year 2015 under five years experienced Under the Red Line as many as 558 (0.8%), and malnutrition as many as 243 (Health Profile Mojokerto, 2015). The first data collection was conducted by researchers with cadres and head of Hamlet on October 9<sup>th</sup>-11<sup>th</sup> 2016. The result showed that feeding habits on families with children who had less nutrition were often to give them snack, so they did not like to eat and mother did not provide food, and also food was not provided specially for under-fives, the mothers fed their children 2 or 3 times in a day, gave breast feeding for 2 years old, weaning food at age 2 months. Feeding habits in families with healthy or good nutritional status under-fives included frequent snacks but still given regular meals, feeding was provided specially for under-fives, three times daily diet, breastfeeding for 2 years, and weaning food was given when children reached four months old.

Each parent was obliged to provide safe and comfortable care and protection for the child. The first five years was a period that would determine the formation of physical, psychological, and intelligence of the brain so that this child's age had to get intensive care and protection (Eveline & Nanang D, 2010). Parenting patterns in the form of mother's behaviour or other caregivers regarding proximity to children, feeding, caring, cleaning, giving love and so on. All of these were related to the condition of the mother especially in health, nutritional status, general education, knowledge and skills about good parenting, roles in the family or society, the habit of daily work, family customs, community and so on from mother or nanny (Soekirman 2000). Feeding was a form of educating eating skills,

fostering eating habits, fostering appetite for food types, fostering the ability to choose healthy food and fostering good eating behaviour according to their respective culture. Disadvantages in less feeding would result in lack of appetite which in turn would have a negative impact on health and grew late (Gibney, 2008).

The purpose of this research was to know the correlation of the role of society with the pattern of nutrition care by positive deviance mothers of poor families in the region of Mojokerto regency of East Java. By knowing the society's role (neighbours) in the positive deviance mothers, the researchers would know the real mechanisms that occurred in the family, so it could be a model by other poor families who were not as lucky as the positive deviance mothers.

## METHODS

This study was a quantitative study, used case-control design because the researchers would compare the cases (subjects with particular characteristics) with subjects who did not experience those characteristics that became the control group.(Notoatmodjo, 2010). The case population in this study were all positive deviance mothers of poor families with healthy children of under five years old (BW/Age) in Mojokerto regency of East Java. The control population in this study were all mothers from poor families who had children under five with nutritional problems (BW/Age) in the Mojokerto regency of East Java. The number of case group samples were 79 people and control group were 41 people. Inclusion criteria from the respondents in the case group were positive deviance mother from poor family who had health under-five child with good nutritional status (Body Weight/Age) in the area of Mojokerto regency of East Java, while for the control group was non-positive deviance mother from poor family who had

healthy under-five child with less nutritional status (BW/Age). Exclusion criteria in this research were healthy under-five children who had good and less good nutritional status, but children with age more than five years old and their mother were not willing to do the test and not being cooperative. Sampling was done by multistage random sampling method with multilevel sampling where the researcher sampled the sample through the stratified process. The first stage to collect data was to establish the location/village that had under-five children with bad nutrition from poor families, then the second stage was identifying the population (both the number of malnourished and healthy under-fives from poor families), the third, asked permission to respondents in informed consent form, the fourth, determined the respondents based on the sample formula and inclusion and exclusion criteria, the fifth, grouped the respondents, the sixth, grouped the poor mothers with malnourished and healthy under-fives, seventh, conducted survey on mother characteristics, the data collection was done by doing an interview to the respondents using questionnaire which was validity and reliability tested to 30 mothers who had the same characteristic with respondents, eighth, interpreting and analyzing data. Screening all collected data, re-examining to minimize errors, input data, i.e. data that had been through the screening stage into the computer with the appropriate program, the presentation of data, i.e. research results of the data were presented in tables, graphs, and narration that were followed by discussion. Analysis of data used chi-square analysis with the help of SPSS 22.0.0.0 for windows.

## RESULT

### 1. The characteristic of positive deviance mother

Table 1. The Frequency Distribution based on the mother's characteristic in The Area of Clinic Health Center of Mojokerto Regency

No	Characteristic	Respondents Group			
		PD	%	Non PD	%
1	Age				
	The age of 26-30 years old	37	46,8	19	46,3
	The age of 31-40 years old	42	53,2	22	53,7
	Total	79	100,0	41	100,0
2	Education				
	High school	4	5,1	0	0,0
	Junior high school	45	57,0	19	46,3
	Elementary school	29	36,7	22	53,7
	Not completing elementary school	1	1,3	0	0,0
	Total	79	100,0	41	100,0
3	Job				
	Private	0	0,0	2	4,9
	Farm workers	22	27,8	12	29,3
	Housewife	57	72,2	27	65,9
	Total	79	100,0	41	100,0
4	Income				
	> Rp 600.000 until Rp 1.000.000	77	97,5	41	100
	>Rp 300.000 until Rp 600.000	2	2,5	0	0,0
	Total	79	100,0	41	100,0
5	Parity				
	Number of children 1-2	73	92,4	38	92,7
	Number of children >2	6	7,6	3	7,3
	Total	79	100,0	41	100,0

Annotation: PD = *Positive deviance*,

Non PD = *Non Positive deviance*

Table 1 showed that the age of positive deviance and non-positive deviance mothers in this study was mostly between the age of 31-40 years. There were no age difference between the group of positive deviance mother and the group of non-positive deviance mother with the p value 0,959. The education of positive deviance mother was mostly until junior high school while the non-positive deviance mother's education

were until elementary school. There were no education difference between the group of positive deviance mother with the group of non-positive deviance mother with the p value 0,173. The job of the respondents was mostly as housewife. There were no job difference between the group of positive deviance mother with the group of non-positive deviance mother with the p value 0,134. The income of the respondents was mostly at the range of > Rp 600.000,00 until Rp 1.000.000,00. There were no difference in income between the group of positive deviance mother with the group of non-positive deviance mother with the p value 0,546. Total children of the respondents were mostly as many as 1-2 children. There were no difference in total children between the group of positive deviance mother with the group of non-positive deviance mother with the p value 1,000.

## 2. The correlation of society role on nutrition care pattern by positive deviance mother

- a. The society's role in nutrition care pattern of positive deviance mother in the area of Clinic Health Center of Mojokerto Regency on May 2017

Table 2. Frequency distribution based on the role of society in the area of Clinic Health Center of Mojokerto regency on May 2017

No	The involve ment of the role of society	Respondent group				Total
		P D	%	No n PD	%	
1	Good	33	41.77	1	2.44	34
2	Sufficient	37	46.84	5	12.20	42
3	Deficient	9	11.39	35	85.37	44
	Total	80	100	40	100	120

Annotation: PD= *Positive deviance*, Non PD = *Non Positive deviance*

Table 2 showed that the role of the society in positive deviance mothers was good as many as 33 people (41.77%), whereas the involvement of other family members was sufficient as many as 37 people (46.84%), while for the deficient community role was nine people (11.39%), in the non-positive deviance mother, the majority of the community roles were deficient as many as 35 people (85.37%), the sufficient society role was as many as five people (12.20%), the good society role was one person (2.44%).

- b. The role of other family member on giving nutrition care pattern of mothers in the area of Clinic Health Center in Mojokerto Regency On May 2017

Tabel 3 Frequency Distribution based on the other family member's involvement of mother in the area of Clinic Health Center in Mojokerto Regency On May 2017

No	The involvement of other family member	The group of respondents				Total
		P D	%	No n PD	%	
1	Good	35	44,0	2	4,88	37
2	Sufficient	27	34,18	8	19,51	35
3	Deficient	17	21,52	31	75,61	48
Total		79	100,00	41	100,00	120

Table 3 showed that the involvement of other family member was mostly good to positive deviance mother while in the non-positive deviance mother was deficient.

c. Nutrition care pattern of the mother in the area of Clinic Health Center of Mojokerto regency on May 2017

Table 4 Frequency distribution based on mother's nutrition care pattern in the area of Clinic Health Center of Mojokerto regency on May 2017

No	Nutrition care pattern	Respondent group				Total
		P D	%	No n PD	%	
1	Good	64	81,01	22	53,66	86,00
2	Sufficient	14	17,50	8	19,51	22,00
3	Deficient	1	1,25	11	26,83	12,00
Total		80	100	40	100	120

Annotation: PD= *Positive deviance*

Table 4 showed that the pattern of nutrition care by positive deviance mothers was mostly good as much as 64 people (81.01%), while the sufficient nutrition care pattern

was as much as 14 people (17.50%), and deficient care pattern was as much as one person (1.25%). In non-positive mother deviance, the most nutrition care pattern was good which is 22 people (53.66%), deficient care pattern was 11 people (26.83%), sufficient care was eight people (19.51%).

d. The correlation of society role on nutrition care pattern by positive deviance mother

Table 5 The correlation of society's role on nutrition care pattern by positive deviance mother

No	The society role	Nutrition care pattern						Total	
		G ood	%	Suff icie nt	%	Def icie nt	%		
1	Good	21	63,6	12	36,4	0	0	33	100
2	Sufficient	21	48,8	22	51,2	0	0	43	100
3	Deficient	8	18,2	14	31,8	22	50,0	44	100
Total		50	100	48	100	22	100	120	100

P value = 0.000

Table 5 showed that good role of society and have good nutrition care pattern were 21 people (63.6%), good society with sufficient nutrition care pattern of children were 12 people (36.4%), sufficient role of society and good nutrition care pattern were 21 people (48.8%), the sufficient role of society with sufficient nutrition care pattern were 22 people (51.2%), the deficient role of society with good nutrition care pattern was eight people (18.2%), the deficient role of society with sufficient nutrition care pattern was 14 people (31.8%), the deficient role of society with the deficient nutrition care pattern was 22 people (50.0%).



- e. The correlation between the role of other family member on the nutrition care pattern of mother

Table 6 The correlation between the role of other family member on nutrition care pattern of mother.

N o	The role of othe r fam ily me mbe r	Nutrition care pattern				Total			
		G oo d	%	Suff icie nt	%	Def icie nt	%		%
1	Goo d	26	70.3	11	29.7	0	0	3	7.7
2	Suff icie nt	17	47.2	19	52.8	0	0	3	6.0
3	Defi cien t	7	14.9	18	38.3	22	46.8	4	7.0
	Tot al	50	100	48	96	22	44	1	2.0

P value = 0.000

Table 6 showed that the role of other family member was good which was getting along with good nutrition care pattern as many as 26 people (70.3%), good role of other family member with sufficient nutrition care pattern was 11 people (29.7%), sufficient role of other family member with good nutrition care pattern was 17 people (47.2%), sufficient role of other family member with sufficient nutrition care pattern was 19 people (52.8%), deficient role of other family member with good nutrition care pattern was 7 people (14.9%), deficient role of other family member with sufficient nutrition care pattern was 18 people (38.3%), deficient role of other family member with deficient nutrition care pattern

was 22 people (46.8%). The result test of *chi-square* showed that  $p=0,000$  which meant that there was significant correlation between the role of other family member with nutrition care pattern.

## DISCUSSION

Based on the result of cross-tabulation between community involvement and the nutrition care pattern, the good society involvement mostly had good nutrition care pattern as much as 61,8% whereas sufficient society involvement mostly had good and sufficient nutrition care pattern 50,0%. Mothers whose community involvement was deficient with an also deficient nutrition care pattern as much as 50.0%. The sufficient society involvement of positive deviance mothers as much as 38 people (47.50%) and for non-positive deviance, was deficient as many as 35 people (87.50%). Reciprocity determination model of social cognitive theory Bandura (1999) explained that behaviour could also affect the environment and humans as well. (Bandura albert, 1999). The environment of the community around the mother would affect the attitude and behaviour of the mother in the nutrition care pattern of children. Sternin (2007) stated that positive deviance was a community-based development approach, based on the fact that the problem solving faced by society was within the society itself. Communities such as neighbours often gave advice on giving nutrition to under-fives so that they grew up healthy like their peers. A community-based participatory approach was used to reveal the contribution of immigrant families from African Americans and Latin Americans living in poverty. Research by Zlotnick et.a., 1 (2010), the family in the community developed the aspirations to achieve successful parenting through four aspects, namely the importance of caring for communication between parents, children,

family members and the community. The positive and negative influenced of family and friends support the success of parenting. This study illustrated that successful parenting was from a community point of view. Local knowledge was built on a community that was the practice of local wisdom in childcare (Pascale, Sternin, & Sternin, 2010). The parenting pattern was influenced by the culture that exists in the environment whether in the form of things or people and also the rules and customs. It was very influential and determining the pattern of child development and parent education. (DEP Gizi, FKM UI, 2011). The good involvement of other family member would result good sharpening pattern and vice versa. The result test of *chi square* on the involvement of other family member to nutrition care pattern was 0,000, it showed that there was a correlation between the involvement of other family member with nutrition care pattern. There were many ways to make children had appetite to eat, it was like positive deviance mother had done, paid attention to the proper portion for the child. The mother's role to fulfill nutrition intake to children needed the role of husband and other family member too such as grandmother. Nutritional status of under-five children was very influenced by the nearest social environment (Elizabeth Hurlock, 1997). The lack of support from family affected less precisely the pattern of child nutrition. The consumption of food intake for children was also determined by feeding habit that was consumed by the family. Healthy feeding habit was very important to prevent late growth and nutrition problem to children (Fikawati, 2015). Family member who had knowledge about health, sign, symptoms of family member's growth would do immediate action to minimize the adverse impact on the condition of their family members. (Rahmat Hidayat dede, 2009).

## CONCLUSION

The role of the community in this study is neighbours adjacent to the mother house of the positive deviance family. Neighbours provide support in the form of knowledge about nutrition parenting in under-fives including how to choose food, cook, serve and give food to under-fives. Support is done directly and continuously to positive deviance mother until mother understands and can do it independently. The suggestion for Clinic Health Center is that the positive deviance model in the effort to overcome the nutritional problems in the society can be applied by the health officer of clinic health center in the implementation of society nutrition service and health promotion program. Clinic Health Center in collaboration with cadres can implement positive deviance approach and nutrition post to people from poor families in a community. For Health Officers can increase mother's knowledge about the importance of nutrition in under-fives by providing periodical counselling in collaboration with health teams from clinic health centres and cadres. Creating small groups of mothers with under-fives and arrange schedules to provide knowledge on how to choose food, cook to serve under-fives and the importance of the relationship between mother and child, father and child, and other family members with under-fives. Continuing all activities until the problem of all under-fives from poor mothers is solved, and inviting other mothers to join in groups that have been formed to share experiences and motivate to prevent and cope with the occurrence of nutritional problems in the area. For the next researcher, further research can be done to clarify and measure the consistency of other variables that have not been found in this model, by applying to the people in poor families that involve Clinic Health Services. So it is possible to



know a new model which is the development of positive deviance model.

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