



## RESEARCH ARTICLE

## Health Coaching to Improve Mother's Self Efficacy in the Implementation of Prevention Malnutrition in Children

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### Abstract

**Introduction:** One of the factors causing nutritional problems that can be modified and has an influence on the nutritional status of children under five is the pattern of parenting or child care by the mother, because the mother is a personal preference in fulfilling family nutrition. The family will play an important role in preventing nutritional deficiencies in each member of the family. The purpose of this study was to examine the effect of health coaching on maternal self-efficacy in preventing malnutrition. **Method:** Quasy-experimental design with pre-post control group was used as a method in this study. A total of 30 parents were used as respondents, divided into 15 for the treatment group and 15 for the control group. The sampling method used was purposive sampling based on inclusion criteria. Self-efficacy as the dependent variable and health coaching as the independent variable. The data were collected by means of a questionnaire and analyzed using the Wilcoxon rank sign test and the Mann Whitney U test with a significance level of  $\leq 0.05$ . **Results:** The results showed the wilcoxon results for the treatment group p 0.008, the control group showed a p score of 1,000. Mann Whitney test showed a p score of 0.003. **Conclusion:** Health coaching is effective in increasing maternal self-efficacy in preventing malnutrition. The mechanism of change is by changing the Health inhibiting Thinking (HIT) in the mother to become Health enhancement Thinking (HET). The results of this study can be used as an alternative health promotion method.

**Keyword:** *Health coaching, Malnutrition. Self-efficacy, Parents, Health inhibiting thinking, Health enhancement thinking.*

### Introduction

Malnutrition is still a major health problem in the world, including in Indonesia [1]. According to data from the World Health Organization (WHO) Africa and Southeast Asia, malnutrition affects nearly 20 million children under five. Malnutrition is also a major factor affecting about a third of the nearly 8 million deaths of children under the age of 5 worldwide. The incidence of stunting in the community is often undetected and is seen as a common posture so that short stature is still considered normal, short stature in society is more determined by existing norms than guidelines from health nutrition programs [2].

According to WHO, nutritional problems in a country can be indicated by the large incidence of malnutrition. According to a study conducted by [3], one of the factors

causing nutritional problems that can be modified and has an influence on the nutritional status of children under five is the pattern of mother's child care or care, because the mother is a personal preference in fulfilling family nutrition. The mother is a person who is always responsible for the daily care of her child and has an important role in fulfilling her nutritional needs [4]. The role of nurses in dealing with malnutrition is to foster therapeutic relationships, as family advocates, play a role in health prevention/promotion, as health educators, provide counseling and support, provide nursing care, as coordinators/ collaborators, and as ethical decision makers [5].

At this time parents are quite familiar with the knowledge of malnutrition, but there are still many parents who have not

implemented good nutritional behavior. In the context of the Health Promotion Model, a person's behavior is influenced by several factors. These factors are divided into two major domains. The first domain is the domain of individual character and previous behavior. The second domain includes specific cognitive behaviors and attitudes which consist of several components, namely the benefits of action, barriers to action, self-efficacy, emotional responses, interpersonal influences and situational influences. Based on this theory, Perceived Self-efficacy has a role in shaping commitment in carrying out activities. To increase self-efficacy, several elements are needed, namely training by experiencing it yourself, through models, and verbal persuasion.

The health coaching method was chosen because this method allows the achievement of 3 elements in increasing self-efficacy by integrating these 3 elements. Health coaching has the advantage of not only concerned with the cognitive aspects of the patient but psychomotor and psychological aspects. In patient-centered health coaching and the choice of activity objectives is also determined by the patient so that the patient is more involved in the activity. The aim of this study is to explain the effect of health coaching on increasing maternal self-efficacy in implementing the prevention of malnutrition in the work area of a public health center in Surabaya.

## Method

This study used a quasi experimental study with the approach used was the pre-post test control group design. Health coaching with 7 elements according to [6] as the independent variable and self-efficacy as the dependent variable. 30 Mothers were selected using purposive sampling based on inclusion criteria, namely mothers who have toddlers 1-5 months, are not malnourished and have low self-efficacy. A total of 30 mothers were selected and divided into 2 groups. 15 mothers became the treatment group and 15 mothers became the control group.

In the treatment group, 7 essential elements of Ghorob were carried out, namely providing information, providing specific disease skills, negotiating Health Behavior change, providing problem-solving training, helping clients' emotional aspects, regular control, encouraging to be actively involved in disease management. The intervention was carried out in 4 sessions in 4 weeks; the control group was only given a booklet for the prevention of malnutrition. Self-efficacy was measured using a questionnaire from Affendi Isa [7]. The results were analyzed using the Wilcoxon ranked sign test and the Mann Whitney U test with a significance of  $p < 0.05$ .

## Results

**Tabel 1: Demografi responden**

Age	F (Σ) Treatment group	F (Σ) control group
25-30	5	5
31-35	2	4
36-40	8	6
Education	F (Σ) Treatment group	F (Σ) Control group
SD	1	2
SMP	2	2
SMA	10	8
Perguruan tinggi	2	2
Penghasilan	F (Σ) Treatment group	F (Σ) Control group
<2200000	2	5
2200000- 3000000	10	9
>3000000	3	1
Pekerjaan	F (Σ) Treatment group	F (Σ) Control group
government employees	1	0
Private employes	1	2

trader	2	4
housewife	11	9
<b>Etnis</b>	<b>F (Σ)Treatment group</b>	<b>F (Σ)Control group</b>
Javanese	8	10
Maduranes	7	5
<b>Σ Respondent</b>	15	15

**Tabel 2: Hasil self efficacy responden**

self-efficacy	Before	After	uji wilcoxon P=0.008
low	15	4	
moderate	0	11	
high	0	0	
N	15	15	
Control group			
Self-efficacy	Sebelum	Setelah	uji wilcoxon P=1
Rendah	15	15	
Sedang	0	0	
Tinggi	0	0	
N	15	15	
mann whitney postest perlakuan dan kontrol			
self-efficacy	Perlakuan	Kontrol	mann whitney  P 0,003
Rendah	4	15	
Sedang	11	0	
Tinggi	0	0	
N	15	15	

Table 2 shows the results of the pre-test and post-test of the treatment group. Based on the table, it is found that 11 respondents experienced an increase in the level of self-efficacy. Wilcoxon test results show that  $p = 0.008$  where  $p \text{ value} < 0.005$ . This means that there is a significant effect of health coaching on self-efficacy. Table 2 shows the results of the control group pre-test and post-test. From the table, it is found that all respondents did not experience an increase in self-efficacy. Wilcoxon test results showed  $p = 1,000$  which means there was absolutely no difference between pre and post in the control group. The results of the Mann-Whitney test showed  $p = 0.003$ , which means that there was a significant difference in the group treated with health coaching compared to the control group

### Discussion

Based on the research results, it was found that there were differences in the level of self-efficacy of the treatment groups. This shows a change in self-efficacy to be better than before the intervention. In addition, there are also differences between the treatment group and the control group which means that the provision of health coaching interventions can increase maternal self-efficacy in implementing malnutrition prevention measures.

This relationship shows that the intervention given by the researcher is effective. Of the 15 treatment respondents, 11 of them have increased the predicate to moderate where according to Isa [7] someone whose self-efficacy has reached a moderate point is considered capable of carrying out the task of preventing malnutrition [8].

Based on Pender's theory, there are 2 basic assumptions that underlie health coaching, namely the first is that health workers as part of the environment will affect a person and the second is that each individual will actively regulate his own behavior [9]. The principle of health coaching is to help respondents carry out self-regulation to change their behavior, which according to Pender theory, by changing someone's affect status will increase that person's self-efficacy [10].

Based on data analysis, it is known that the results of self-efficacy have increased. This is in accordance with the opinion of Gale [10] who stated that the goal of health coaching is to increase self-efficacy. According to Ghorob [6] to achieve effective results, health coaching is carried out through 7 essential elements, namely providing information, providing specific disease skills, negotiating

behavior change, providing problem solving training, helping clients' emotional aspects, encouraging active involvement in disease management, regular control. From the results that has been done by following these 7 elements and being able to increase the person's self-efficacy. The mechanism for increasing self-efficacy during health coaching starts with setting goals by someone. According to Da Silva, goals and strategies are more focused on the client's ability to make it more accessible to clients [11].

In this study the dominant goals were to provide nutritious food, feed children on time, and provide breast milk for up to 2 years. For respondents these goals are considered as realistic goals that can be achieved during the research period. In Bandura's view, one of the efforts to increase self-efficacy is an achievement that has been achieved in the past, namely if in the past success in doing something, self-efficacy will increase and success in the past is the most powerful source of self-efficacy.

The selection of goals that have been mentioned is a form of the respondent's thinking about achieving the goals that are most likely to be done by the respondent. In its implementation, most of the respondents focused on providing nutritious food to toddlers as their goal. Researchers argue that respondents understand by giving nutritious foods to toddlers and support their children's growth and development to be optimal.

This may imply that the respondent is aware of and understands how to properly prevent malnutrition. In health coaching, there is the term Health Inhibiting thinking (HIT) which is negative perceptions that inhibit behavior, and health enhancement thinking (HET) which is positive thinking that encourages behavior change [12].

Extracting HIT and HET is a standard in implementing health coaching. According to Bandura, emotional arousal and affective status will affect a person's self-efficacy (Bandura, 2006). In the Pender HPM theory, affective related to activities, both positive and negative, will affect self-efficacy, where if it is negative, it will increase self-efficacy and if it is positive it will increase self-efficacy [13].

HIT and HET are a person's affective response where HIT is a negative affective and HET is a positive affective [12] The more HIT, the lower one's self-efficacy. Changing HIT to HET is theoretically appropriate where a good affective will increase self-efficacy. The increase in self-efficacy is caused by the less HIT and the more HET in a person's cognition process. It is assumed that with fewer HITs and more HETs, a person will easily perceive the obstacles faced in carrying out an activity.

In Pender's theory, it is explained that family is a cognitive process that affects a person [13]. In this study, mothers who have good self-efficacy will influence other family members so that other family members will increase as well. Families who have good self-efficacy as members will be better able to carry out the process of preventing malnutrition. In this study, in the treatment group there were 4 respondents who did not experience a significant increase even though the score had increased but the predicate was still low.

These four have low points on item 10-18 where these items are items related to neighbors. This is most likely a confounding factor, for example the values and norms that apply to the family as well as the communication patterns to build a trusting relationship that is not created between the researcher and the respondent.

Researchers assume that the four respondents do have a closed personality so that it is difficult to accept researchers and their lack of response to their neighbors. In terms of economy and type of work, these 4 respondents have income below the UMR and the UMR, so it is very possible that such economic conditions make respondents prefer activities that are materially beneficial rather than doing activities that are not materially productive.

## Conclusion

Health coaching is effective in increasing self-efficacy in preventing malnutrition with a realistic goal selection mechanism as well as reducing HIT and increasing HET which is a form of affective response that determines a person's level of self-efficacy.

Health workers, in this case nurses, are advised to use health coaching as an alternative method in implementing health promotion programs in the prevention of malnutrition and other cases.

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## Acknowledgments

The author would like to thank Faculty of Nursing, Universitas Airlangga for the internal grants research given to researcher to conduct this research.

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