Implementation of Nutrition Education to Knowledge, Behaviour, and Performance of Junior High School Children.

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ABSTRACT

The prevalence of obesity increases from year to year. One of the factors that causes obesity was food habits. Precautions need to be taken to undergo this phenomenons. One effort that can be done was to provide nutrition education to children. This research studied the role of nutrition education given to school age children (8th grade junior high school) toward knowledge, behaviour, and overall performance. The study was conducted by giving pre-test and post-test to students who were divided into 2 groups. The first group treated with nutrition education, while the second group did not. Each group consisted of 37 students. The result showed that nutrition education have a strong influence in to knowledge, behaviour, and also the performance of the students. Students who are involved in research are included in the middle to lower class of economics so there are not many opportunities to choose food. Research needs to be done in other locations with middle to upper economic levels.

Keyword: nutrition education, school-age-children, knowledge, healthy food.

Introduction

There are 3 health problems in all coutries, namely: malnutrition, obesity and chronic diseases. These problems arise mainly because of the lack of public knowledge about food habits. Today's lifestyle is instantaneous, encouraging people to consume food without regard to nutritional adequacy. Some studies said there is an increase in the prevalence of obesity in school-age children. The value was twice greater than the previous one. Obesity is a condition where body fat stored in adipose tissue is excessive.

Yaqin dan Nurhayati said that 75% of elementary school children belong to normal weight, 8% are obese, and 2% suffer from obesity. Obesity is now categorized as a disease, no longer a symptom of disease (WHO). Meanwhile, the prevalence of obesity will increase in junior high school children reaching 5% and high school children reaching

6%. The main factor that causes obesity is a poor diet. The prevalence of obesity in elementary school children is more influenced by the social status of parents, parental feeding that exceeds the AKG, offspring (genetic), and lack of Physical activity.

One factor that causes obesity is consumption of "fast food". Food categories that are not provided adequately to meet consumer nutritional needs or better known as junk food. "junk food" and instant food are part of today's human lifestyle. This food has low nutrients compounds, high calories, unbalanced nutrition, has the potential to increase high blood pressure (due to high levels of sodium), and high cholesterol. This consumption habits will increase the risk of obesity and the diabetes epidemic. Some types of packaging are specifically designed to attract the interest of young children. These foods usually delicious, contain high sugar and fat, and low nutritional value.

Such research has been carried out in some countries. One of the result showed that nutrition education in elementary school children has been shown to be effective in reducing consumption of "junk food" and that education carried out for girls is more effective than boy. This kind of study has never benn conducted in Indonesia. Education is not only about the dangers of practice, characteristics that influence the attitudes of nurses in service are age, education, functional positions, and length of work, while the doctors are age, education, and length of work. In this study, groups have similarities to the dominance of subject characteristics, namely age, education and years of service.

As the results of the study that a person's beliefs are needed to involve themselves effectively in service. Sometimes, new graduate midwives often lack confidence in doing services, and this can interfere with safe and effective health services. Therefore, an intervention is needed that can provide support to develop the knowledge and experience of new graduate regarding the services of pregnant women. This is very important to increase the confidence of new graduate nurses.

A. Knowledge: After the Wilcoxon Rank test, the results of the study in table 2 show the value (=0.001), which mean the value (p<0.05) with the mean difference of 2.151. this means that there is a change in the knowledge of midwives in the health services of pregnant women before and after the implementation of the ammuntili bija tenang na beja-beja model. Ammuntili bija tenang na beja-beja is the language of the Makassar, it is hoped that the use of this term will further facilitate local implementation. This is appropriate, that resolving helath problems by taking into account the local context will be more effective than medical actions. It does not only

contain home visits of a health worker to the home of pregnant women and/or mothers who have babies, but it also contains respect for health workers to them. With home visits, it means that they are picked up and it is hoped that they can make use of health services at the Puskesmas.

Knowledge is a continuous formation by someone who is experiencing reorganization at any time because of new understanding. Knowledge in a constructivist view is not a fact from a fact being studied, but as a person's construction of objects, cognitive experiences, and environtments. A person's behaviour tends to be good if his knowledge is also high. Efforts to improve material health services can be done in various ways. One of the strategies is training activities. In some training and development of health services, it has not been fully implemented.

Although it is known that there is an influence of education (counseling) on knowledge and attitudes. Knowledge, skills, and motivation correlate with the performance of midwives. Meanwhile, work time does not have a correlation with the performance of midwives. Health education is an effort to increase one's knowledge and abilities, by encouraging self-direction and being active in providing new information or ideas.

B. Motivation: After the Wilcoxon Rank test, the result of the study in the table 2 show the value (= 0.001), which mean the value (p<0.05) with the mean difference of 5.812. this means that there is a change in the motivation of midewives in the health services of pregnant women before and after the implementation og the ammuntuli bija

teanang beja-beja model. na Motivation is someone's special readiness to carry out a series of activities aimed at achieving a number of targets. Work motivation something that originates from individual's internal (desire, hopes, needs, and preferences) which cause encouragement or enthusiasm to work hard.

The motivation of village midwives is a condition in the village midwives who can give strenght, enthusiasm, the courage to be honest and enjoy what they do in order to achieve high performance. One of the factors to improve performance is motivation because the presence of motivation encourage work will morale. inspiration from work activities of employes to work better in order to achieve organizational Motivational factors are factors that are related to what they do, namely the content of the work on the task that encourages achievement. Motivational factors are intrinsic originating in the individual or also called the content factor of work content.

C. Attitude: after the Wilcoxon Rank test, the result of the study in the table 2 show the value (=0.001), which mean the value (p<0.05) with the mean difference of 5.515 means that there is a change in the attitude of midwives in the health services of pregnant women before and afer the implementation of the ammunition bija teanang na beja-beja model. The attitude is an evaluateive response. The response arise if the individual is faced with a stimulant that requires an individual reaction. Evaluative response means the evaluation process an individual who gives a conclusion to a stimulus. In the form of good-bad, positive-negative, pleasant, unpleasant, which then crystallizes as a potential reaction to the object's attitude.

The higher the attitude of supporting health workers, the higher the behavior of antenatal care visits. The lower the attitude of health workers who do not support the lower the behavior of antenatal care visits. This is in accordance with Lawrence Green's theory that the attitude of health workers who are reinforcing factors can influence behavior change.

research still has various limitations, namely the small number of samples that have not been able to see the overall aspects related to health care for pregnant women. Activities in daily health services at auxiliary helath centers and village health post provide limited intervention communitaion time when conducting research. This study only looks at how the influence of the ammuntuli bija teanang na bija-bija model on the knowledge, motivation and cycles of maternal health services does not see the overall aspects that affect the health services of pregnant women such environmental. social. economic and family support factors.

Conclusions and Recommendations

This study concluded that there was an influence of the midwifery knowledge, on the motivation, and attitudes of in the health services of pregnant women in jeneponto Regency. The study suggests that the implementation of the ammuntuli bija teanang na bejabeja model is very useful to be a reference for midwives in improving health services for program women in Jeneponto Regency and can

repicated in other areas according to local conditions.

Significant Statement: this research is expected to be a recommendation for the regional government (health office) to make regulations by implementing and developing models of immuntuli bija teanang na bija-bija, which are able to improve knowledge, motivation and attitudes of midwives in implementing health services and becoming a momentum in improving effective maternal health services so that the handling of maternal mortality can take place comprehensively and sustainably.

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REFERENCES

- MOH Indonesia Health Profile in 2016 Jakarta: Ministry of Health; 2017.
- Provincial Health Office of South Sulawesi. Health Profile of South Sulawesi Province. Makassar:

- Provincial Health Office of South Sulawesi; 2015.
- District Health Office of Jeneponto. Health profile of Jeneponto District. Jeneponto: District Health Office of Jeneponto; 2017.
- 4. Amiruddin R, Palutturi S, Rahman SA. Increasing Midwifery Skill for Pregnancy Health Care with Ammuntuli Bija Tianang Na Beja-Beja Model. *Indian Journal of Public Health Research & Development*. 2018;9(9).
- Kosgeroglu N, Acat MB, Ayranci U, Ozabaci N, Erkal S. An investigation on nursing, midwifery and health care students' learning motivation in Turkey. *Nurse education in practice*. 2009;9(5):331-339.
- 6. Jackson R, Tesfay FH, Godefay H, Gebrehiwot TG. Health extension workers' and mothers' attitudes to maternal health service utilization and acceptance in Adwa Woreda, Tigray Region, Ethiopia. *PloS One*. 2016;11(3):e0150747.
- 7. Green BN, Johnson CD. Interprofessional collaboration in research, education, and clinical practice: working together for a better future. *Journal of Chiropractic Education*, 2015;29(1):1-10.
- 8. Lowe M, Chen D-R, Huang S-L. Social and cultural factors affecting maternal health in rural Gambia: an exploratory qualitative study. *PloS one*. 2016; 11(9):e0163653.
- Ayiasi RM, Kolsteren P, Batwala V, Criel B, Orach CG. Effect of village health team home visits and mobile phone consultations on maternal and newborn care practices in Maindi and

- Kiryandongo, Uganda: a community intervention trial. *PloS one*. 2016;11(4):e0153051.
- 10. Medyati Amiruddin N. R, SA. Russeng S, Rahman Hypertension in chefs: Prevalence relathionship with characteristics of people. **EXECUTIVE EDITOR** 2018;9(11):522.
- 11. Nievar MA, Van Egeren LA, Pollard S. A meta-analysis of home visiting programs: Moderators of improvements in maternal behavior. *Infant mental health Journal*. 2010;31(5):499-520.
- 12. Amiruddin R, Palutturi S, Rahman SA. Training effect to knowledge and skills of midwives in maternity health services at primary health care. *Interational Journal Of Community Medicine And Public Health*. 2018;5(11):4651-4655.
- 13. Baggs JG, Schmitt MH,. Collaboration between nurses and physicians, *Journal of Nursing Scholarship*. 1988;20(3):145-149.
- 14. Pfaff KA, Baxter PE, Jack SM, Ploeg j. Exploring new graduate nurse confidence in interprofessional collaboration: A mixed methods study. *International journal of nursing studies*. 2014;51(8):1142-1152.
- 15. Asrina A, Palutturi S, Andayanie E. Culture and helath behavior of butin society of Baubau City, Southeast Sulawesi. *Indian Journal of Public Health Research & Development*. 2018;9(9):315-318.
- 16. Arina A, Palutturi S, Tenri A. Dole-Dole Tradition in Health Seeking Behavior of Buton Society, Southeast Sulawesi, Indian Journal of Public Health

- *Research* & *Development.* 2018:9(7):270-274.
- 17. Palutturi S. Determinan Kinerja Bidan di Puskesmas Tahun 2006. Journal Manajemen Pelayanan kesehatan. 2007;10(04).
- 18. Chen G-D, Huang C-N, Yang Y-S, Lew-TING C-Y. Patient perception of understanding health education and instructions has moderating effect on glycemic control. *BMC public health*. 2014;14(1):683.
- 19. Rostiati E. Evaluasi Kinerja Bidan Puskesmas Dalam Pelayanan ANTENATAL CARE (ANC) di kecamatan Banjarsari kota Surakarta, Universitas Sebelas Maret: 2011.
- 20. Erlina R, Larasati T, Kurniawan B. Faktor-faktor yang mempengaruhi ibu hamil terhadap kunjungan pemeriksaan kehamilan di Puskesmas rawat inap Panjang Bandar Lampung, *Jurnal Majority*. 2013;2(4).