

THE INFLUENCE OF NUTRITION ON INFANT AND YOUNG CHILD FEEDING (IYCF) ON THE KNOWLEDGE OF HEALTH WORKERS AT COMMUNITY HEALTH CENTER IN MAROS DISTRICT

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Abstract

Background ; The Indonesian government is currently implementing various things in improving nutrition problems, especially at 1000 HPK, including infant and young child feeding strategies, among others, Strengthening Health Workers in IYCF practices. **Objectives**; This study aims to analyse the effect of nutrition training on infant and young child feeding (IYCF) on the knowledge of health workers at Puskesmas in Maros District. **Method**; This study used an experimental research design with one group pre-post test. The subjects in this study were 27 health workers who participated in training. The research was conducted in August 2023 in Maros District. **Result**; The results showed that the average score of health workers knowledge showed an increase after the training. The results of the Paired Sample T-test showed that training had a significant effect of <0.001 (p value <0.05) on changes in knowledge of health workers at Puskesmas in Maros District. **Conclusion**; There was a significant effect on health workers knowledge through nutrition training on infant and young child feeding (IYCF).

Keywords: Health Workers, Knowledge, Training, Infant and Young Child Feeding

BACKGROUND

As Indonesia faces increasing challenges in combating nutrition, the need for competent health workers in primary care, especially in Community Health Centres (Puskesmas), is increasing. Puskesmas is a public health institution that relies heavily on the performance of health workers (Wulandari and Fajrah, 2021). Nutrition knowledge is one of the things that indirectly.

The problem of malnutrition in Indonesia is still quite high. The interaction between inadequate feeding practices and water, low intake of macro- and micronutrients (Sari et al., 2023), sanitation and hygiene (WASH) is the cause of nutrition problems (Syahrudin, Irmawati and Sari, 2023). Adequate nutrition during infancy and early childhood is essential to ensure children's maximum growth, health and development.

Complementary feeding, defined as the process of providing additional food in addition to milk when breast milk or formula alone is no longer sufficient to meet nutritional needs, generally begins at 6 months of age and continues until 23 months of age, although breastfeeding may be continued beyond this period (Lutter, Grummer-Strawn and Rogers, 2021). Early childhood feeding practices are critical to a child's healthy growth, development and potential. Infancy is also the perfect time to establish lifelong dietary patterns (Cristiana and Piotr, 2023), to learn to accept healthy foods and beverages and establish long-term, health-promoting dietary patterns for humans (Birch and Doub, 2014). This also coincides with the peak period of risk for growth retardation and malnutrition. Inappropriate complementary feeding can result in overweight, type 2 diabetes and disability in adulthood (WHO, 2016).

Feeding problems in children, more commonly recognised in recent years, can stem from poor parent-child interactions in terms of responsive feeding. Community nutrition improvement programmes have been running for decades, but nutrition problems are still quite complex and occur in every life cycle, from the womb (fetus) to old age (Tri Lestari et al., 2023). Education, health services, quality nutrition and nutrition research programmes that are integrated into multi-sectoral programmes and started at an early age can have important implications for long-term health.

The Indonesian government is currently implementing various things in improving nutrition problems, especially at 1000 HPK (Abdillah Fajar et al., 2022) including infant and young child feeding strategies, including strengthening health service facilities and empowering mothers, families and communities in IYCF practices. The implementation of infant and young child feeding strategies aims to improve nutritional and health status, growth and development, and child survival (KEMENKES RI, 2020). Through specific nutrition interventions carried out by nutrition officers at health centres, activities that directly address the occurrence of nutritional problems.

Inappropriate feeding practices are the main cause of early nutritional problems in infants and toddlers (KEMENKES RI, 2020). Until now, nutritional problems have not been resolved, especially in terms of nutritional intake in the food consumed daily. This can be seen from the high prevalence of undernutrition in Maros district at 23.7% (Ministry of Health of the Republic of Indonesia, 2021). Therefore, education on infant and young child feeding needs to be provided as an effort to prevent nutritional problems that will have a permanent impact on children's development in the future.

Based on the above background, it is necessary for health workers to have knowledge to achieve successful health development, including overcoming nutritional problems in children, so the researcher took into consideration conducting a study entitled the effect of nutrition training related to infant and young child feeding (IYCF) on the knowledge of health workers at puskesmas in Maros District.

METHODS

Study Design

This research is a quantitative study that uses a pre experimental design with a one group pre-test post-test design. Pre experimental research design is a type of research that analyses the effect of independent variables on the dependent variable in the absence of control variables, and samples are not taken randomly. Meanwhile, one group pre-test and post-test design is a type of research that provides treatment or intervention, and measures variables before treatment or pre-test and after treatment or post-test.

Sample

The population in this study was all health workers who went to the posyandu and to the community at Puskesmas in Maros District. The sample of this study was 28 nutrition officers in all health centres in Maros Regency. The sampling technique was purposive sampling. Samples were taken from all nutrition workers who worked at Puskesmas and were willing to participate in the study. The inclusion criteria of this study were, (1) nutrition workers at Puskesmas, (2) filling in the subject characteristics on the questionnaire completely, (3) answering questions related to knowledge on the questionnaire completely, (4) willing to take part in training from beginning to end.

Instrument

The data in this study were primary data. Primary data included subject characteristics and health worker knowledge related to infant and young child feeding (IYCF). Primary data was collected through self-reported questionnaires by health workers. Knowledge was measured using a questionnaire instrument consisting of 16 questions. Correct answers were given a score of 1 and incorrect answers were given a score of 0. The total score was then multiplied by 4 to get a score on a scale of 100. The subject's nutritional knowledge category was grouped based on the criteria of Khomsan et al 2009), namely poor knowledge (< 60), moderate (60 -79), and good (\geq 80).

Intervention

The intervention was about the First 1000 Days of Life (HPK), especially in infant and young child feeding (IYCF) and proper service at the posyandu in accordance with Ministry of Health regulations. Knowledge assessment was carried out using a questionnaire measured before or pre-test with the aim of obtaining initial information about the knowledge and abilities of participants related to the material and after or post-test to measure the knowledge of participants after receiving material during nutrition training. The training process was carried out for one day from morning to evening with several sessions, namely opening, material, questions and answers, demonstration and closing. Some information media such as books, information stickers and leaflets were also distributed during the training.

Data collection process

The data collection process was carried out using a nutrition knowledge questionnaire filled out by respondents. Data collection was conducted in August 2023 at the Maros District Health Office. Before the training, respondents were given a pretest and after the treatment, respondents were given a post-test. The treatment provided was in the form of nutrition training. The training materials presented were 1000 HPK, infant and child feeding materials, weighing and measuring toddlers. The delivery of the material was carried out using the lecture method with the help of presentation slides and several videos (specifically weighing and measuring toddlers) which were then followed by a question and answer session. Furthermore, a demonstration practice of food portioning according to the standards for children under five was carried out. This training involved the South Sulawesi Provincial Health Office. The training was conducted only once and the post-test measurement was also conducted only once, which was immediately after the training was completed. The training was conducted for 7 hours, starting

at 09.00 to 16.00 WITA.

Analysis

Data analysis included univariate and bivariate analyses. The univariate analysis was a descriptive test to describe the distribution of the characteristics of the nutrition staff. Descriptive tests were conducted to determine frequency distribution, mean, standard deviation, and percentage. The next analysis conducted was bivariate analysis. The bivariate analysis conducted was the Paired Sample T Test. The paired sample t test was used to test the difference between before and after the training. There is an effect if the p value <0.05.

Research Ethics

This study received approval from the Maros Regency Health Office by paying attention to research ethics such as Beneficence, namely increasing respondents' knowledge through health education, respect for humanity, namely treating respondents fairly without discriminating against ethnicity, religion, economic status and others, justice, namely maximising benefits for respondents. Respect the confidentiality of respondent data through informed consent approval.

RESULTS AND DISCUSSION

Univariate Analysis

Characteristics of Respondents

The characteristics of the respondents in this study are described in table 1 below.
 Table 1. Characteristics of Respondents (n= 27)

| Bidang | n | % |
|---|----|-------|
| Midwife Coordinator | 13 | 48.1 |
| Nutrition Implementation Programme (TPG)) | 12 | 44.4 |
| District TP-PKK | 2 | 7.4 |
| Total | 27 | 100.0 |

Table 1 shows that the majority of respondents were coordinator midwives, namely 13 people (48.1%).

Respondents' Knowledge Before and After Nutrition Training

The frequency distribution of knowledge level among health workers on 1000 HPK nutrition, IYCF and posyandu services before training is described in Table 2.

Table 2. Mean scores before and after IYCF training intervention among health workers at Puskesmas in Maros District.

| Treatment | Mean skor ± SD | Min - Max | P Value |
|-----------|----------------|------------|---------|
| Before | 2.96 ± 1.43 | 0.0 – 6.0 | <0.001* |
| After | 7.78 ± 1.62 | 5.0 – 10.0 | |

*Paired T-Test

Table 2 shows that the mean score before the intervention was 2.96 ± 1.43, but after the intervention there was an increase in the score of 7.78 ± 1.62. paired t-test results showed that there was an effect of IYCF intervention on the mean score of knowledge of health workers (p value <0.05).

Training is an effort to develop human resources, especially to develop intellectual abilities and personality. Training has long-term benefits that help health workers have greater responsibilities in the future. Health workers must be trained and developed in their respective fields to reduce and learn new skills to improve their performance (Wulandari and Fajrah, 2021). There are two factors that influence a person's knowledge, including external and internal factors. Education, occupation, and age are internal factors that affect a person's knowledge, while environment and culture are external factors that affect a person's knowledge (Ariani, 2017). Age has an influence on a person's thinking ability, creativity and level of understanding. It is also proven that nutrition workers who are more than 60 years old cannot continue their work or retire (Tri Lestari et al., 2023).

A person's level of education also greatly affects their knowledge. Someone who has a high level of education tends to be easier to accept and apply nutrition information in daily life compared to someone who has a lower education. Having good nutritional knowledge will influence action and behaviour in a better direction (Utami et al., 2022).

Effect of Nutrition Training on Knowledge of Health Workers at Puskesmas in Maros Regency

The results of this study showed that the value (p value <0.05) and there was an increase in knowledge seen from the average before and after nutrition training. Therefore, it can be concluded that nutrition training on IYCF has a significant effect on health workers at health centres in Maros District.

As Indonesian society faces increasing challenges in combating nutrition for all age groups, the need for competent health workers in primary care, especially in Community Health Centres (Puskesmas) is increasing. Puskesmas is a public health institution that relies heavily on the performance of health workers (Wulandari and Fajrah, 2021). Knowledge about nutrition is one of the things that indirectly affects nutritional status and is the basis for a person in determining food consumption (Khomsan, 2000). The existence of nutritional knowledge about IYCF possessed by health workers is one of the factors that can help the community in choosing daily food consumption that can maintain and improve the nutritional status of children.

This is in line with research conducted by Laraeni and Wiratni (2014) which showed an influence on knowledge before and after health worker training. The results of this study are also in line with Adistie et al. (2018) which showed a significant increase in the knowledge of health workers after training in stimulating growth and development in children and services at Posyandu. In addition, Salamah and Sulistyani (2018) stated that the training of health workers Posyandu cadres in the Nologaten and Seturan areas of Yogyakarta showed a significant increase in knowledge between before and after training.

CONCLUSION

In this study it can be concluded that there is a significant effect on the provision of nutrition training on infant and young child feeding (IYCF) on the knowledge of health workers at the health centre with a p value <0.05 . Training is needed to support the performance of health workers at the health centre. With the nutritional knowledge about IYCF possessed by health workers, it is one of the factors that can help the community in choosing daily food consumption that can maintain and improve the nutritional status of children.

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