ISSN 2597-6052





Media Publikasi Promosi Kesehatan Indonesia The Indonesian Journal of Health Promotion

Research Articles Open Access

The Effect of Empowering Rhythmic Gymnastics on the Fitness of PKK Women in Karangduren Village, Pakisaji Health Center Working Area, Malang Regency

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ABSTRACT

Introduction: Fitness is the quality of a person to carry out activities according to their work optimally without causing health problems and excessive fatigue. PKK meeting activities in Karangduren Village RT 07 are still considered general, such as social gatherings and cooperative savings and loans & shares from members. So PKK activities in the form of physical activities such as gymnastics are still not implemented in improving the fitness of PKK woman.

Objective: The purpose of this research is to determine The Effect of Empowering Rhythmic Gymnastics on the Fitness of PKK Women in Karangduren Village, Pakisaji Health Center Working Area, Malang Regency.

Method: This type of research is quantitative Pre-Experimental with a One Group Pre Test Post Test design. The research sample used a total sampling of 32 PKK woman.

Result: The research results showed that the average fitness score of PKK woman before empowerment was 72.93 and the fitness of PKK woman after empowerment was 81.04. From the results of the Wilcoxon analysis, it was found that p = 0.001, meaning that the p value $< \alpha$ value (0.05) means that H1 is accepted, meaning that there is an The Effect of Empowering Rhythmic Gymnastics on the Fitness of PKK Women in Karangduren Village, Pakisaji Health Center Working Area, Malang Regency.

Conclusion: It can be concluded that there is an The Effect of Empowering Rhythmic Gymnastics on the Fitness of PKK Women in Karangduren Village, Pakisaji Health Center Working Area, Malang Regency.

Keywords: Empowerment; Rhythmic Gymnastics; Fitness

INTRODUCTION

PKK is a community organization that empowers women to be able to participate in the development sector in Indonesia which has the function of facilitator, planner, implementer, mobilizer and controller for the implementation of the PKK program (1). The implementation of PKK activities is generally only as a gathering place for the woman of sub-district residents, so there are no positive activities that can improve the level of community health (2).

Fitness is a person's quality of life to be able to carry out activities according to their work well and optimally without causing health problems and excessive fatigue. Having a fit body is everyone's desire, but not everyone can do physical activity to improve their fitness (3). Based on (Desviandini & Karyana, 2022) the results of the 2020 population survey, it was stated that in September 2020, Indonesia's population was 270.20 million people. Meanwhile, the distribution of the population according to gender is 136.66 male and 133.54 female (4).

Based on data from the East Java Health Service in the 2022 East Java Province Health Profile, the population of East Java Province in 2022 is 40.348.441 people with details of the male population being 19.912.535 people and the female population being 20.435.906 people (5). Based on the Profile of the Malang Regency Central Statistics Agency in 2023, the population of Malang Regency is 2,663,862 residents, with 1,338,264 male residents and 1,325,598 female residents, while the population in Pakisaji District is 89,731 residents (6).

From the results of the preliminary study, increasing efforts in activities to mobilize and develop the community in the working area of the Pakisaji Community Health Center, one of which is the PKK women's meeting which actively carries out activities every month. One of the PKK that actively carries out meeting activities is PKK RT 7 Karangduren Village which is held in public facilities in RT 07. PKK meeting activities in Karangduren Village RT 07 are still considered general, such as social gatherings and cooperative savings and loans & shares from members. So, PKK activities in the form of physical activities such as gymnastics are still not implemented in improving the fitness of PKK woman. Based on this problem, it is important to carry out empowering gymnastics so that members can know the influence of empowering gymnastics in improving their fitness.

One way to improve the fitness of PKK women is by providing exercise treatment. The types of physical activity that are good and suitable for women to gain physical health and fitness are doing gymnastics exercises. PKK meetings are an effective place to mobilize and motivate women as an effort to increase fitness, for this reason PKK women need to be empowered to improve their health status (7).

Rhythmic gymnastics is an exercise that involves following the rhythm of music or singing which forms a coordinated movement between the movements of the body parts and the rhythm. Rhythmic gymnastics movements must be carried out in harmony with the rhythm that accompanies it so that the movements performed look harmonious so that a movement coordination can be formed between the movements of the body parts and the rhythm. (8). The frequency of exercise training which is useful for maintaining the fitness of PKK woman is carried out at least once a week and a maximum of 3 times a week with a minimum duration of 15 to 30 minutes. Even though rhythmic exercise is very cheap and easy to do, there are still many PKK woman who do rhythmic exercise irregularly and do not follow the proper rules, which can result in unexpected negative effects (9).

Based on this background, the author is interested in conducting research on the Effect of Empowering Rhythmic Gymnastics on the Fitness of PKK Women in Karangduren Village, Pakisaji Community Health Center Working Area, Malang Regency.

METHOD

This research was conducted in Karangduren Village, Pakisaji District, Malang Regency. This research was conducted from April to May 2024. This type of research is quantitative. The research design used by researchers is pre-experimental. The approach chosen by researchers is the One Group Pre-Test and Post Test approach. The population of this research is all PKK members in Karangduren Village RT 07 totaling 32 members. The sample for this research was determined using a total sampling technique of 32 members.

Researchers obtained data by measuring the fitness of PKK women. The data collection technique in this research was the Harvard Step Test measurement sheet for respondents during the pre-test and post-test to determine their fitness level based on heart rate frequency. Before giving the measurement sheet, the researcher explained the flow of the research to the PKK representative or chairman. The homogeneity test in this study used the Wilcoxson Singn Rank Test statistical test with the help of the SPSS computer application which aims to determine the difference in the fitness level of PKK women before and after being given treatment.

RESULTS Characteristics of PKK Women Based on Age and Occupation

Table 1. Characteristics of PKK Women Based on Age and Occupation

| Characteristics | Frequency (n=32) | Percentage (%) | |
|-------------------|------------------|----------------|--|
| Age | | | |
| 21-30 Years | 1 | 3,1 | |
| 31-40 Years | 8 | 25 | |
| 41-50 Years | 13 | 40,6 | |
| 51-60 Years | 10 | 31,2 | |
| Work | | | |
| Not Working/IRT | 14 | 43,7 | |
| Civil Servants | 3 | 9,3 | |
| Private Employees | 4 | 12,5 | |
| Merchant | 10 | 31,2 | |
| Other | 1 | 3,1 | |

Based on table 1. the results show that almost half (40.6%) of PKK women are aged 41-50 years, almost half (31.2%) are aged 51-60 years, a small portion (25%) are aged 31-40 years and a small number (3.1%) aged 21-30 years.

Based on table 1. the results show that almost half (43.7%) of PKK women jobs are not working category, almost half (31.2%) are merchant, a small portion (12.5%) are private employees, a small portion (9.3%) Civil Servants and a small portion (3.1%) in other categories.

PKK Women Fitness Before and After Empowering Rhythmic Gymnastics

Table 2. PKK Women Fitness Before and After Empowering Rhythmic Gymnastics

| PKK Mother's Fitness | Before Score (n=32) | | After Score (n=32) | | P Value |
|----------------------|------------------------|------|-----------------------|------|---------|
| | F | % | F | % | |
| Very good | 0 | 0 | 2 | 6,25 | 0.001 |
| Good | 7 | 21,9 | 25 | 78,1 | |
| Enough | 25 | 78,1 | 5 | 15,6 | |
| Not Enough | 0 | 0 | 0 | 0 | |
| Very Little | 0 | 0 | 0 | 0 | |
| Mean | 7 | 2,93 | 8 | 1,04 | |
| SD | 2 | 2,78 | 3 | ,44 | |

Based on table 2. above, it shows the results of research on the fitness of PKK women before being given empowerment, almost all (78.1%) of PKK women had fitness in the enough category and a small portion (21.9%) in the good category.

Based on table 2. fitness of PKK women after being given rhythmic exercise empowerment using video media, almost all (78.1%) of PKK women have fitness in the good category, a small portion (15.6%) in the enough category and a small portion (6.25%) with the very good category.

DISCUSSION

Fitness of PKK women before empowering rhythmic gymnastics in Karangduren Village, Pakisaji Community Health Center Working Area, Malang Regency

The analysis results in table 2. are small (21.9%) of PKK women before empowering rhythmic gymnastics had fitness in the good category and almost all of them (78.1%) had fitness in the enough category.

According to (Armade & Manurizal, 2019) Fitness is an individual's ability to carry out daily activities without feeling tired. Based on the opinion above, someone with a good and fit body condition can influence the body's endurance in carrying out its activities. So, to achieve a good fitness condition, physical training activities are needed for a person involving fitness rules with good and correct training techniques. There are 2 factors that can influence a person's physical fitness, namely internal and external factors. Internal factors are factors that already exist in a person's body that are permanent, such as age, gender and genetics. Meanwhile, external factors are influenced by the environment, physical activity and lifestyle (3).

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According to (Navera & Mistar, 2021) physical activity is an important factor in maintaining a person's level of physical fitness, especially for PKK women. It can be seen that many PKK women only take care of the household so that their physical activity is not balanced with their body condition, and they often experience excessive fatigue. The activities of PKK women who only do household matters make women lazy to do physical activities. Apart from that, the majority of PKK women think that if they have done housework such as washing dishes, cooking, sweeping the house and so on, it is the same as doing sports activities which can burn calories and produce sweat so that women feel that there is no need to do sports (10).

According to researchers, another factor that influences the fitness of PKK women in the sufficient category is that the majority of PKK women jobs are as housewives. Apart from that, the meeting activities carried out by PKK women have not been utilized optimally in improving the fitness of their members. PKK meeting activities are still relatively general, such as social gatherings and savings and loan cooperatives & shares from members, so there are still no physical activities available to improve the fitness of PKK women. With the hope that meeting activities can be more positive and beneficial for all members.

Fitness of PKK women after empowering rhythmic gymnastics in Karangduren Village, Pakisaji Community Health Center Working Area, Malang Regency

After PKK women received rhythmic exercise treatment 3 times a week using video media, there were differences in the fitness levels of PKK women after empowering rhythmic exercise. Based on table 2. a small percentage (15.6%) of PKK women have a fitness level in the enough category, almost all (78.1%) are good and a small percentage (6.25%) are very good.

According to (Yusuf, 2018) Aerobic activities are one of the sports activities that are beneficial for body health and the stability of the heart's function. One way to find out how stable your physical condition is is by doing the Harvard Step Test. The better a person's fitness, the faster the pulse will return to normal after carrying out the test (11).

According to (Anastasya et al., 2023) Success in achieving physical fitness is determined by the quality of a person's sports training by paying attention to the frequency and time of exercise. In this research, empowering gymnastics was carried out to improve the fitness of PKK women because rhythmic gymnastics is one of the easiest and cheapest sports activities because it is done together with the accompaniment of rhythmic music. By doing exercise 3 times a week for 15-30 minutes, a person's fitness will be maintained so that they can regulate the work of the heart which can train to accelerate the recovery of the pulse back to normal (12).

According to (Supriady & Schiff, 2021) The aim of exercise is to increase the work of the heart and stabilize the resting heart rate. So that a person with a stable pulse can be said to be able to carry out daily physical activities in a healthy and fit condition (13).

According to researchers, the increase in fitness in PKK women can occur due to positive responses from PKK women, such as being active and enthusiastic when participating in rhythmic gymnastics activities. Exercise video media accompanied by music or rhythm is used as media, also supporting the improvement of PKK women fitness because video media is more interesting and easy for PKK women to follow.

Apart from that, the increase in the fitness of PKK women occurred due to the empowerment activities of rhythmic gymnastics which can train the independence of PKK women. In carrying out rhythmic exercise empowerment activities, it is carried out 3 times a week for 15-30 minutes so that PKK women are able to practice accelerating the recovery of their pulse rate back to normal. The empowerment activity of rhythmic gymnastics can also indirectly increase the physical activity of PKK women during PKK meetings.

The Effect of Empowering Rhythmic Gymnastics on the Fitness of PKK Women in Karangduren Village, Pakisaji Health Center Working Area, Malang Regency

Based on the results of the average fitness score for PKK women, there was an increase in fitness for PKK women through empowering rhythmic exercise. The results of the average pretest and posttest scores showed an increase from 72.93% to 81.04%. Positive ranks or differences (positive) indicate that the results between the pretest and posttest were 32, meaning that 32 PKK women experienced an increase in fitness. So there are no negative ranks or (negative) differences and ties in the similarity of pretest and posttest scores. Based on table 4.3, the results of the analysis test using Wilcoxon showed that the asymp sig ρ value was 0.001 or the ρ value <0.05, which means that H1 is accepted, meaning that there is an empowering effect of rhythmic exercise on the fitness of PKK women in Karangduren Village, Pakisaji Community Health Center Working Area, Malang Regency.

The results of this study are in line with (Anastasya et al., 2023) which states that there is a difference in the average fitness score of PKK women before and after exercise training. So it can be concluded that giving rhythmic exercises can have an effect on improving a person's fitness (12). This statement is also supported by research (Kunarti et al., 2015) which states that the benefits of gymnastics activities are improving a person's physical fitness

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with the required intensity in a time span of 15-30 minutes. The benefits of this exercise can improve physical conditions which can affect the quality of physical strength, as well as the skilled movements obtained from each movement (14).

According to research (Purwantini, 2021) one of the factors that can influence a person's physical fitness is age, this is because the human body changes and develops with increasing age. At a young age, the body has more ability to carry out various physical activities easily and quickly. However, with increasing age, a person's physical abilities and health begin to decline, so the need for appropriate sports and physical activity also changes (15).

Apart from age, there are external factors that can influence a person's physical fitness which originate from outside the body in the form of physical activity. To obtain maximum physical fitness, greater muscle movement intensity and activity are required. One type of exercise that has greater muscle movement intensity is aerobic exercise. According to (Dewi & Rifki, 2020) Aerobic exercise is a sport that can improve physical fitness for a person's body by paying attention to the training intensity of 60% - 80% and the time required is around 45-60 minutes (16). According to (Majid, 2020) Doing good physical activity and exercise, regularly and regularly, can have benefits for a person's health and physical fitness for those who do it (17).

Description of 7 steps of empowerment regarding rhythmic exercise for the fitness of PKK women in Karangduren Village, Pakisaji Community Health Center Working Area, Malang Regency

The following are the 7 stages of community empowerment proposed by (Maryani & Nainggolan, 2019) in the community empowerment book as follows (18):

Preparation

At this stage, officer and field preparation activities are carried out. The community empowerment officers in this research were the researchers themselves, undergraduate students in Applied Health Promotion. The next stage is field or site preparation, for the location of this research at PKK RT 07 Karangduren Village, Pakisaji District, Malang Regency.

Assessment

At the assessment stage, researchers identified local health problems currently being experienced in the research area, especially for PKK women in Karangduren Village. Researchers held a discussion session with PKK representatives, namely the PKK chairman. From the results of the discussion, according to the PKK chairman, there were problems, one of which was the lack of physical activity to improve the fitness of PKK women. Because PKK meeting activities are still relatively general, such as social gatherings and cooperative savings and loans & shares from members. The aim of the problem identification activities carried out is to be right on target, meaning that it is in accordance with the needs of the community and the potential that exists in the community in participating in community empowerment activities.

Planning

In this planning stage, researchers and representatives of the head of PKK RT 07 Karangduren Village held discussions on solving the problems faced in Karangduren Village which then resulted in proposals for activities to carry out exercise to improve the fitness of PKK women. Apart from that, researchers also held discussions regarding media that would be suitable for use in future gymnastics activities, which then reached an agreement that several PKK members agreed to use video media as a supporting media for gymnastics activities.

Performance

In this research, researchers have roles as community empowerment officers, organizers and funders. So researchers do not make proposals to carry out activities to funders because they are purely from researchers.

Implementation

For the implementation of the activities in this research, rhythmic gymnastics was carried out in the public facilities of RT 07 Karangduren Village which was attended by the PKK chairman, PKK members and researchers. This activity lasted for 1 week with 4 meetings. At the first meeting, pre-test fitness measurements were carried out on PKK women and exercise activities. Next, at the second meeting, they carried out gymnastics activities. At the third meeting, gymnastics activities were also carried out and continued with post-test fitness measurements to measure the fitness of PKK women after empowering rhythmic gymnastics.

Evaluation

The purpose of this evaluation activity is to find out how much success the program has achieved and can be known in a measurable and clear manner, so that obstacles found in subsequent activities can be anticipated. After discussing it, the researchers asked directly to the PKK chairman of Karangduren Village regarding the obstacles or problems experienced during the empowerment process. The PKK chairman said that there were no obstacles or problems during the research activities.

Termination

In this study, researchers terminated relations with the PKK chairman and PKK members. The aim of this activity is because empowered communities are able to organize themselves to live better lives. In other words, they can guarantee a decent life for themselves and their families. Apart from that, researchers also conducted discussions regarding the media provided so that it could be useful. So it can help the PKK chairman to improve the fitness of PKK members. Efforts that must be made by the PKK chairman to improve the fitness of PKK women are by carrying out regular exercise activities at PKK meetings.

CONCLUSION

This research concluded that the asymp sig ρ value was 0.001 or ρ <0.05, which means that H1 was accepted, meaning that there was an empowering effect of rhythmic exercise on the fitness of PKK women in Karangduren Village, Pakisaji Community Health Center Working Area, Malang Regency.

SUGGESTION

For the PKK chairman, it is hoped that the PKK chairman can follow up on the researchers' limited time regarding the fitness of PKK women who are still in the sufficient category to be able to carry out rhythmic gymnastics' activities periodically in the hope of improving the fitness of PKK women, who were previously in the adequate category to good. Apart from that, PKK members can also use rhythmic gymnastics video media as a reference for the next rhythmic gymnastics meeting. Apart from that, future researchers are expected to be able to develop other media and empowerment methods and to develop targets and other variables for research that are more beneficial to society

REFERENCES

- 1. Hafifah VN, Ummah R, Octaviati RN, Talia RD, Shodiqoh HN. Socialization of Healthy and Livable Houses for PKK Mothers in Pandean Village, Paiton District. Community Dev J J Pengabdi Masy. 2023; 4(6):13168–71.
- 2. Nugraha PD. Socialization of the implementation of yoga gymnastics for the women of Tp. PKK, Randusari Village, Teras District, Boyolali Regency. In 2020.
- 3. Armade M, Manurizal L. The effect of the low impact version of the physical fitness exercise method (SKJ 2012) on physical fitness in students of the sports and health education study program, Pasir Pengaraian University. J Penjaskesrek. 2019; 6(1):140–51.
- 4. Desviandini RA, Karyana Y. Indonesian Population Projections to 2060 with Basic Data of the 2020 Population Census and Assumption of a Population Growth Rate of 1.25%. In 2022. pp. 266–72.
- 5. East Java Health Office. Population Profile in East Java [Internet]. [quoted July 6, 2024]. Available on: https://dinkes.jatimprov.go.id/#
- 6. BPS Malang Regency. Population Profile in Malang Regency [Internet]. [quoted July 6, 2024]. Available on: https://malangkab.bps.go.id/
- 7. Larasati L, Lengkong F, Londa V. Empowerment of PKK Organizations in Tuminting Village, Manado City. J Adm Public. 2021; 7(103).
- 8. Ulfah AA, Dimyati D, Putra AJA. Analysis of the Application of Rhythmic Gymnastics in Improving Early Childhood Gross Motor Ability. J Obsession J Early Childhood Educator. 2021; 5(2):1844–52.
- 9. Permatasari I. The Effect of a Combination of Rhythmic Gymnastics and Stick Gymnastics on the Physical Fitness of Children Aged 10-12 Years During the Covid-19 Pandemic. 2023;
- 10. Navera Pc, Mistar J. The Effect of Aerobic Gymnastics Training on Physical Fitness in a Group of PKK Mothers in Asam Peutik Village, Bukit Tengah Hamlet, Langsa Lama District. J Ocean Recreational Sports. 2021; 4(2):9–16.
- 11. Yusuf H. Physical Fitness Evaluation Through Harvard Step Test on PJKR Students in 2016/2017 IKIP Budi Utomo. Jp Jok J Educator of Sports and Health. 2018; 1(2):1–13.
- 12. Anastasya A, Jalil R, Saman S, Kahar I, Hakim N. Effect of aerobic gymnastics on the physical fitness of PKK mothers. J Porkes. 2023; 6(2):712–23.

- 13. Supriady A, Schiff NT. Socialization of aerobic gymnastics to improve the physical fitness of the people of Pamoyanan. Aksararaga. 2021; 3(1):33–41.
- 14. Kunarti TU, Jubaedi A, Nurseto F. The effect of rhythmic gymnastics training on improving physical fitness. JUPE J Penjaskesrek. 2015; 3(1).
- 15. Purwantini D. Physical Fitness in the Elderly. J Lighthouse Health. 2021; 4(2):19–25.
- 16. Dewi R, Rifki MS. The effect of aerobic gymnastics on the level of physical fitness of students. J Stamina. 2020; 3(6):398–416.
- 17. Majid W. Behavior of sports activities towards the improvement of physical fitness in the community. In 2020.
- 18. Maryani D, Nainggolan RRE. Community empowerment. Deepublish; 2019.