The effect of relaxation gymnastics education on the anxiety of pregnant women in the new normal era

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ABSTRACT

Background: Currently the government is implementing a new normal policy regarding the Covid-19 pandemic. Pregnancy in the new normal era still causes anxiety among pregnant women because the Covid-19 pandemic as a whole has not yet ended due to information regarding the condition of pregnant women who are very likely to still be infected with the Covid-19 virus. Remembering that you have to be in the hospital and have direct contact with medical staff.

Objectives: The research aims to determine the effect of relaxation exercise education using video and leaflet media on the anxiety of pregnant women in the new normal era.

Methods: This research is an experiment with a pre-test-post-test control group design. There were 62 pregnant women respondents who were selected using simple random sampling technique. The instrument uses the Google-shaped Coronavirus Anxiety Scale (CAS) questionnaire. The analysis used the Independent T-test to determine differences in anxiety between treatment groups with video media and leaflet media.

Results: The results of the study showed that there was an insignificant difference in reducing anxiety for pregnant women with relaxation training education using video media and leaflets. There was no significant difference in pre-posttest1, pre-posttest2 and pre-posttest3 anxiety scores (p>0.05). There is an influence of relaxation sports education using video media and leaflets on reducing the anxiety of pregnant women in the new normal era.

Conclusions: Pregnancy exercise education using video media and leaflets can reduce the anxiety of pregnant women, so it is hoped that pregnant women will know and understand how important it is to deal with anxiety during pregnancy. The more often a mother does pregnancy exercises, the more calm she will be during pregnancy.

KEYWORD: relaxation exercises; anxiety for pregnant women; video media and leaflets

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INTRODUCTION

In Indonesia, in 2020 globally, mental health disorders that often occur are depression and anxiety with a prevalence of 15% to 65% (1). While anxiety in pregnant women related to Covid-19 also tends to be high, such as in the Madura region, which shows that 31.4% experience severe anxiety and 12.9% experience severe anxiety (2). Previous research in Malang showed that most pregnant women were found to experience mild anxiety (51%), followed by pregnant women who did not experience anxiety (21%). In comparison, severe anxiety was experienced by a small percentage of pregnant women (11%) (3). While research in North Sumatra was based on maternal anxiety levels, the majority of severe anxiety levels were 17 people (56.7%), and a minority of moderate anxiety levels were 13 people (43.3%) (4).

Anxiety during pregnancy is associated with adverse outcomes for both mother and baby. Although Anxiety during pregnancy is normal, Anxiety can be a problem and harmful behaviour, potentially endangering the mother and the development of the fetus or child at home. Clinical diagnosis of Anxiety and anxiety-related conditions often requires a period that cannot be applied to pregnant patients, leading to diagnoses and terms such as pregnancy-related Anxiety. The important thing that needs to be done is increasing awareness about the increased potential risk to mothers who may be affected by Anxiety during pregnancy or the postpartum period, which has the potential to increase maternal mental health screening and access to services (5).

Anxiety can be influenced by several common factors, including age, social support, and gender of a person (6). More specifically, anxiety can be influenced by knowledge, psychological and family support (7). Another study showed a significant relationship between knowledge and the age of pregnant women with the anxiety of pregnant women. Pregnant women who experience high anxiety have poor knowledge (8)—an urgent need to provide psychosocial support to the expectant mother during the crisis. Otherwise, anxiety side effects in pregnant women may occur during pregnancy (9).

Pregnant women must get the correct information about Covid-19 (10). The decrease in anxiety in pregnant women can be realized by nursing interventions in the form of providing health information as part of health promotion, according to the World Health Organization (WHO). Health promotion includes forming healthy individuals, creating a healthy living environment, and building and strengthening community.
actions to promote health promotion and prevent diseases and health problems (11).

Many efforts can be made to reduce pregnant women's anxiety by providing information through print media such as leaflets, booklets, and non-print media using video (12). Information media such as demonstrations and lectures can also provide health education. In health education giving, the most effective method is demonstration because we can remember 90% of what we say and do. Advantages of demonstration techniques: increased concentration / maximum, minimal errors compared to lectures or reading, and is a method to hone psychomotor skills/ skills (13). Counseling is needed to reduce anxiety by doing gymnastics for pregnant women at home (2). Using a demonstration method in pregnancy exercise can improve the skills of pregnancy exercise effectively because all the skills after the implementation of pregnancy exercise training increase (14).

In Ashari's 2019 research, yoga exercise intervention using video media carried out on pregnant women in the prenatal stage could have an effect on reducing the level of anxiety in pregnant women entering the third trimester phase at the Pattingalloang Community Health Center and Tamalate Community Health Center, Makassar City with a significance value of 0.000 (p<0.05) (20).

Efforts are made to deal with patient anxiety and educational assistance is needed to provide encouragement, understanding, and information that can help eliminate anxiety or worry (15). Health workers are obliged to provide nursing services and health information needed by patients as educators and motivators, both through offline and online media, so that they can reduce the level of anxiety of pregnant women and improve maternal and Child Health. Pregnant women can do relaxation exercises with the assistance of health workers to reduce anxiety amid the Covid-19 pandemic. Maternal and fetal health counseling and relaxation exercises can be done using video media and leaflets. Anxiety and anxiety during pregnancy can cause a racing heart, chaotic thoughts, difficulty concentrating, restlessness, worry, and feelings of discomfort (16).

Based on a preliminary study conducted on December 29, 2020, data on visits by pregnant women for the last six months, from June – November 2020, recorded in Sariharjo Village, Ngaglik, taken from Ngaglik II Health Center data, there were 159 pregnant women of the three questions given by researchers related to anxiety during this pandemic, which were given to 10 pregnant women
when they came to check their pregnancy. The question is made in the form of a questionnaire; the results are that 63% of pregnant women feel anxious, and 27% do not feel anxious, so most pregnant women feel anxious about their pregnancy during this pandemic.

The problem that occurs above is that many pregnant women still experience anxiety due to the lack of information about pregnancy during the COVID-19 period, so education is needed to reduce the anxiety of pregnant women. This research aims to determine the effect of relaxation exercise education using video and leaflet media on differences in reducing anxiety in pregnant women during the era new normal.

MATERIALS AND METHODS

This research is quasi-experiment design with a control group pre-test-post-test design. The population in this study were all pregnant women in the Sariharjo village, Ngaglik District, Sleman Regency, Special Region of Yogyakarta. The sample was pregnant women in Sariharjo village, Ngaglik District, Sleman Regency, Special Region of Yogyakarta, by the inclusion criteria that have been determined. Preliminary study data on the number of pregnant women in Sariharjo village was as many as 159 pregnant women. This study obtained a sample of 62 people based on the Slovin formula (17).

The independent variable in this study is relaxation Gymnastics education with video and leaflet media. We educate pregnant women through relaxation exercises through videos and leaflets, which were given three times within four weeks with an intervention interval of 7 days. In comparison, the effect of relaxation gymnastics education on anxiety of pregnant women in the new normal era. Instrument using the Coronavirus Anxiety Scale (CAS) questionnaire in the form of Google form. Analysis of research data used the Mann-Whitney test to identify differences in anxiety between the treatment group with video media and the treatment group with leaflet media. A research ethics review has been carried out at the Yogyakarta Ministry of Health Health Polytechnic with number e-KEPK/POLKESYO/0162/II/2021.

RESULTS AND DISCUSSION

RESULTS

Characteristics of Respondents

The frequency distribution of respondent characteristics can be seen in the table below:
Based on the Table 1 above shows that the majority of respondents in the video and leaflet group were 20-35 years old. With the education of the video and leaflet group, the majority were Bachelor's degree. Most of the respondents in the video Group and leaflet group were private employees with a gestational age of >26 weeks. The results of the homogeneity test analysis of respondents in both groups were given video media and leaflets with significant values ranging from 0.193 to 0.928 (p>5%). This means that respondents in both groups were given video media and homogeneous brochures.

Data normality test

Normality test using kolmogorov smirnov was used to determine whether the data is usually distributed, including data on anxiety scores of pregnant women during the era new normal the first pre-test and post-test, second post-test, and third post-test. Normality test results obtained as follows:

Table 2. Normality test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogorov smirnov z</th>
<th>Sig</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>1.393</td>
<td>0.041</td>
<td>Abnormal</td>
</tr>
<tr>
<td>Post test 1</td>
<td>2.238</td>
<td>0.000</td>
<td>Abnormal</td>
</tr>
<tr>
<td>Delta1(Pretes Postes1)</td>
<td>1.834</td>
<td>0.002</td>
<td>Abnormal</td>
</tr>
</tbody>
</table>
Table 2 normality test results known significant value (p<0.05) that the data is declared abnormal distribution. At the same time, Delta2 (Pretest-Posttest2) shows normal distribution data (p>5%) so that the difference in the effectiveness of videos and leaflets against the anxiety of pregnant women using Mann Withney analysis test both pre-test and post-test 1 to 3.

Table 3. decrease in anxiety of pregnant women after being given education with video and leaflet media

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Pre test (mean±SD)</th>
<th>Post test 1 (mean±SD)</th>
<th>Post test 2 (mean±SD)</th>
<th>Post test 3 (mean±SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video</td>
<td>7.8387±3.12086</td>
<td>7.000±2.64575</td>
<td>2.3548±1.49551</td>
<td>0.7097±0.58842</td>
</tr>
<tr>
<td>Leaflet</td>
<td>8.4839±2.75525</td>
<td>7.1613±2.55730</td>
<td>3.4839±1.17958</td>
<td>0.9032±0.59749</td>
</tr>
</tbody>
</table>

there is a decrease in anxiety after being given education using video media. The anxiety of pregnant women before being given education amounted to 7.83+3.12, and after being given education in the treatment group with video media, posttest1 amounted to 7.00+2.64, posttest2 amounted to 2.35+1.49 posttest3 amounted to 0.709+0.58.

The anxiety of pregnant women after being given education with Leaflet media can be seen in Table 2.3 shows that based on the average value results, there is a decrease in anxiety after being given education using leaflet media. The anxiety of pregnant women before given education amounted to 8.48+2.7, and after given education in the treatment group with media leaflet, posttest1 amounted to 7.16+2.55, posttest2 amounted to 3.48+1.17 posttest3 amounted to 0.903+0.59.

Decreased anxiety of pregnant women after being given education with video media and leaflets

The frequency distribution of anxiety in pregnant women before and after being given education with video media and leaflets can be seen in the Table 3. Table 3 shows the anxiety of pregnant women after being given education with video media; with video media; value results

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Effect of relaxation Gymnastics education with Video and Leaflet media on reducing anxiety in pregnant women

The effect of education can be seen based on the difference in the decrease in the anxiety of pregnant women with relaxation. Gymnastics education using video media and leaflets can be seen in the table below: Table 4 Anxiety of pregnant women pre-postest1 mean rank in the video group of 32.89 leaflet group of 30.11 significance value of 0.532 (p>0.05) stated that there was no significant difference between prepostest1 video and leaflet groups. Anxiety measurement results in a pre-postest2 mean rank value in the video group of 29.90 and leaflet group of 33.10 significance value of 0.483 (p>0.05);

Table 4. Differences in anxiety reduction in pregnant women with relaxation gymnastics education using video and leaflet media

<table>
<thead>
<tr>
<th>Pre-Postest1</th>
<th>Pre-Postest2</th>
<th>Pre-Postest3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Rank</td>
<td>P value</td>
<td>Mean Rank</td>
</tr>
<tr>
<td>32.89</td>
<td>0.532</td>
<td>29.90</td>
</tr>
<tr>
<td>30.11</td>
<td></td>
<td>33.10</td>
</tr>
</tbody>
</table>

there is no significant difference between pre-postest2 anxiety of pregnant women in the video and leaflet groups. Anxiety measurement results of pre-postest3 mean rank value in the video group of 32.18 leaflet group of 30.82 significance value of 0.765 (p>0.05), there is no significant difference and pre-postest3 anxiety of pregnant women in the video and leaflet groups. The findings of anxiety of pregnant women in the video media Group and leaflets pre-postest1, pre-postest2, and pre-postest3 showed no significant differences. This means that video media and leaflets can be used as an alternative options to reduce anxiety because both can reduce anxiety.

DISCUSSION

Anxiety of pregnant women before and after given education in the treatment group with video media.

The anxiety of pregnant women before and after being given education with video media, based on the average value results, shows a difference in decline known based on the Wilcoxon Test (p<5%). This means that there is a significant reduction in anxiety before and after being given education with video media. Video Media has several advantages: the message conveyed is more attractive, visual images can report messages quickly, visual presentation of statements can encourage children to
concentrate, help develop abstract imagination, and generate motivation (18). Based on research results, after being given education using video media, anxiety decreased because pregnant women found it easier to practice exercise by imitating the movements in the videos they watched. Apart from that, the benefits of exercise that have been explained include improving blood circulation, increasing appetite, better digestion and better sleep, so it can trigger mothers' interest in regularly doing pregnancy exercise (19).

The information factor using media also influences the anxiety of pregnant women, but mothers whose pregnancy conditions are not normal are not recommended to do exercise, because it can endanger their pregnancy.

Anxiety of pregnant women before and after given education in the treatment group with leaflet media.

The anxiety of pregnant women before and after being given education with leaflet media based on the average value results shows a difference in known decline based on the Wilcoxon Test (p<5%). This means that there is a significant reduction in anxiety before and after being given education with leaflet media (8).

Based on the research results, after being given education using leaflets, anxiety was reduced because from the contents of the leaflets provided, pregnant women were able to find out the benefits of pregnancy exercise so that they could generate interest in doing pregnancy exercises by practicing the exercise movements outlined in the leaflet. Regular pregnancy exercise can reduce the mother's discomfort and complaints in dealing with pregnancy, such as; back pain, nausea, limb spasms, constipation, shortness of breath, and other anxieties (9).

Differences in anxiety reduction in pregnant women with relaxation Gymnastics education using video and leaflet media

The results showed no difference in pregnancy exercise education using video and leaflet media. However, it showed a decrease in anxiety in pregnant women. This means that both video media and leaflets can reduce pregnant women's anxiety. Education is provided through online media, namely WhatsApp, which can make it easier for pregnant women to get information comfortably without meeting face-to-face with a midwife during the Covid-19 pandemic. Interventions delivered remotely are highly recommended to improve access to treatment and support and provide cost-effective, flexible, and timely solutions (19). Vigod and Dennis discuss

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that internet-delivered interventions may provide a solution to overcome barriers to access to treatment for perinatal mental health disorders, such as lack of specialist psychological and psychiatric support, cost of services and transportation, and child care requirements. Interventions may be provided as targeted resources to support or replace patient-provider interactions or as guided interventions, including live interactions via telephone or video or contact with a therapist using digital messaging. Web-based therapist-assisted interventions may offer women flexibility and convenience and be more efficient (12).

Pregnancy exercises are effective in providing relaxation that can stabilize anxiety and reduce fear through physical and mental relaxation, as well as obtain information that prepares them to experience what will happen during labor and birth (13). Gymnastics given researchers belong to the category of relaxation Gymnastics, where relaxation is a nonpharmacological technique in behavioral therapy to calm one's mind and physically to avoid mental, physical, or emotional stress being experienced by someone (14) This is in line with the results of Ashari's 2019 research showing a significant relationship between prenatal yoga exercise intervention in reducing the incidence of anxiety in third trimester pregnant women at the Pattingalloang Health Center and Tamalate Health Center, Makassar City with a value of p=0.000. This research shows that yoga exercise in the prenatal stage has an influence on reducing the incidence of anxiety in pregnant women (20).

The effect of relaxation Gymnastics education with video and leaflet media on reducing anxiety in pregnant women during the Covid-19 pandemic.

Relaxation Gymnastics education with video and leaflet media is useful for reducing anxiety in pregnant women during the new normal. Education that can be given is related to pregnancy exercise material. When pregnant women get the knowledge and experience of pregnancy exercise, Dian practices the pregnancy exercise can reduce anxiety. Previous research revealed that pregnancy exercise effectively reduces anxiety primigravida pregnant women (15).

Health education is a dynamic process of behavior change. It is not just a process of transferring matter from one individual to another; it is not a set of procedures or results to be achieved. In this study, education is provided through videos, and leaflets are expected to represent the delivery of information about pregnancy exercises. Video is preferred as an educational medium for
pregnant women because compared to other educational media, such as posters, the information in videos and leaflets can be more extensive and detailed. The results of this study showed that in the information provided through the video and leaflets, there is a difference seen from the results of anxiety reduction scores in the video and leaflet groups, and it was shown to reduce anxiety in pregnant women.

The provision of videos and leaflets for pregnant women can help other health workers related to providing information about pregnancy exercises to pregnant women so that they can relax the condition of the mother's body and mind of pregnant women. This study has provided education related to pregnancy exercise to reduce anxiety in pregnant women. However, in this study, researchers were unable to control mothers in doing pregnancy exercises in a timely manner according to the agreed schedule. They could not confirm whether pregnant women do pregnancy exercises correctly or not because of the limitations of the study, which was only monitored via WhatsApp. However, doing pregnancy exercises will provide many benefits in helping smooth the labor process, which can train breathing and relaxation, strengthen the pelvic and abdominal muscles, and train how to strain properly. This preparation is essential for prospective mothers during childbirth. (16)

CONCLUSION AND RECOMMENDATION

Based on the results of research and discussion, the following conclusions can be drawn there was a decrease in anxiety among pregnant women after being given education in the treatment group with video media and leaflets. The highest decrease in anxiety scores was after being educated on pregnant women's final post-test. This is in line with Wibowo & Lestari, 2021 who said the movement of home pregnancy exercise effectively provides relaxation that can stabilize anxiety and reduce fear through physical and mental relaxation. There are differences in reducing anxiety in pregnant women with relaxation Gymnastics education using video media and leaflets. The video media Emergency reduction score was more significant than the leaflet media Emergency reduction score. This is in line with Daryanto, 2018 who said that the advantages of video media are that the message conveyed is more attention-grabbing, visual images can convey messages quickly and generate motivation. In this study, researchers have provided education related to pregnancy exercise to reduce anxiety in pregnant women. However, researchers could not provide exercise...
assistance simultaneously to pregnant women because the timing of the exercise was different. Some respondents received online assistance because they were still afraid of contracting Covid-19. It is not yet certain whether pregnant women who are assisted via online assistance can carry out pregnancy exercises correctly or not due to the limitations of research which only monitors them via WhatsApp video calls. Therefore, to prevent anxiety during pregnancy, pregnant women are advised to do pregnancy exercises more often at home, either by imitating them on video or following the movements in the leaflet.

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