EFFECTIVENESS OF AEROBIC EXERCISE ON DYSMENORRHEA AMONG ADOLESCENT GIRLS (12-16 YEARS) IN SELECTED SCHOOL AT VISNAGAR.”


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INTRODUCTION: Adolescence is a transitional stage of physical and psychological human development generally occurring between puberty and adulthood. The period of adolescence is more closely associated with the teenage years, although its physical, psychological and cultural expressions can begin earlier and end later. After menarche many adolescent girls face problems of irregulars menstruation, excessive bleeding and dysmenorrhea. dysmenorrhea is the one of the common problem experienced by most of the adolescent girls.

DESIGN: A evaluatory research approach using quasi experimental research design pre-test post-test design in experimental and control group.

PARTICIPANTS: 60 adolescent girls were selected using purposive sampling technique in adarshvidhyalyaschool,Visnagar.

INTERVENTIONS: Aerobic exercises were taught and supervised by the investigator only to the adolescent girls in the experimental group.

TOOL: Standardized numerical pain rating scale was used to assess the effectiveness of aerobic exercise on dysmenorrhea.

RESULTS: The total 60 sample under the study 30 were in experimental group and 30 were in control group That data obtained were analyzed and interpreted to using descriptive and inferential statistical in terms of mean, standard deviation, “t” test and chi square test value. that there is statistically significant difference found in level of dysmenorrhea’s score after administration aerobics exercise that mean difference of experimental group is 5.8 and standard deviation 1.4793 and for control group mean difference is 1.26 and standard deviation 1.6273. The calculated ‘t’ value is 11.36 which is greater than t table value (table value = 2.00) at 0.0001 level of significance.

CONCLUSION: Hence there is effectiveness of aerobic exercise among adolescent girls on dysmenorrhea. Thus finding indicates that the aerobic exercise was a effective demonstration for reducing pain in dysmenorrhea among adolescent girls.

KEY WORD: Effectiveness, aerobic exercise, dysmenorrhea, adolescent girls.
**INTRODUCTION:-**

Adolescence is a transitional stage of physical and psychological human development generally occurring between puberty and adulthood. The period of adolescence is more closely associated with the teenage years, although its physical, psychological and cultural expressions can begin earlier and end later. After menarche many adolescent girls face problems of irregular menstruation, excessive bleeding, and dysmenorrhea, dysmenorrhea is one of the common problems experienced by most of the adolescent girls.

**NEED OF THE STUDY:-**

The prevalence of dysmenorrhea worldwide is similar to that in the United States, reported prevalence have ranged from 15.8% to 89.5% with higher rates reported in adolescent populations. It is estimated that between 50 and 70 percent of women endure some degree of period pain and cramping. Of those, approximately 10 percent experience contractions so extreme that they are one and a half times more powerful than labor pains. Every month many women suffer from pain around the time of their periods.

**OBJECTIVE**

1. To assess the level of dysmenorrhea among adolescent girls of experimental and control group.
2. To evaluate the effectiveness of aerobic exercise on dysmenorrhea among adolescent girls.
3. To determine the association between pre-interventional level of dysmenorrhea among adolescent girls of experimental and control group with selected demographic variables.

**HYPOTHESIS**

**HI:**- There is a significant reduction in post-test mean pain perception score of dysmenorrhea among experimental group.

**HII:**- There is a significant association between the severity of dysmenorrhea with selected demographic variables.

**MATERIAL AND METHODS:-**

An evaluatory research approach with Quasi experimental (non-equivalent control group) design was used for the study. The sample consisted of 60 adolescent girls (30+30) selected by
purposive sampling technique. Data were collected using standardized numerical pain rating scale, prepared by the investigator. Data were analyzed using descriptive and inferential statistics.

RESULTS AND CONCLUSION:

Demographic data was analyzed using frequency and percentage. mean, mean percentage and standard deviation was used to determine level of dysmenorrhea. The ‘t’ value was computed to show the effectiveness of aerobic exercise and chi-square test was done to determine the association between the pre-interventional dysmenorrhea of adolescent girls both experimental and control group with selected demographic variables.

Findings related to effectiveness of aerobic exercise on dysmenorrhea among adolescent girls in experimental and control group.

Level of dysmenorrhoea before and after intervention between experimental and control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>experimental group</th>
<th>control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean standard deviation</td>
<td>Mean standard deviation</td>
</tr>
<tr>
<td>pre-intervention</td>
<td>7.4 0.8944</td>
<td>6.46 1.5477</td>
</tr>
<tr>
<td>post-intervention</td>
<td>1.6 1.1016</td>
<td>5.2 1.3490</td>
</tr>
</tbody>
</table>

The data presented in indicates that mean value of pre-intervention in experimental and control group is 7.4 and 6.46. Mean value of post intervention in experimental and control group is 1.6 and 5.2

Comparison of Level of dysmenorrhoea between experimental and control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>NUMERICAL PAIN RATING SCALE</th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean difference</td>
<td>stander deviation</td>
<td>‘ t’ Value</td>
<td>Df</td>
<td>p value</td>
</tr>
<tr>
<td>experimental group</td>
<td>5.8</td>
<td>1.4793</td>
<td>11.36</td>
<td>58</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>control group</td>
<td>1.26</td>
<td>1.6273</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The data presented in table indicates that there is statistically significant difference found in level of dysmenorrhoea’s score after administration aerobics exercise. The above table shows that mean difference of experimental group is 5.8 and standard deviation 1.4793 and for control group mean difference is 1.26 and standard deviation 1.6273. The calculated ‘t’ value is 11.36 which is greater than t table value (table value = 2.00) at 0.0001 level of significance. Hence, research hypothesis are accepted.

Findings related to the association between pre-interventional dysmenorrhoea of adolescent girls of both experimental and control group with selected demographic variables.

Finding of the chi-square value are showing the association between duration of menstrual bleeding, and do you have previous sources of information on aerobics. Whereas there was no association between age, age at menarche, and religion. In control group it show that there was association between age at menarche, religion and do you have previous sources of information on aerobics. Whereas there was no association between age, age at menarche, and duration of menstrual bleeding.

RECOMMENDATION:

i. The study may be replicated with randomization in selection of a large sample.
ii. Nurse researcher can do studies related other type of alternative therapies on reducing dysmenorrheal among adolescent girls
iii. The study can be conducted by including more number of variables and at different geographic locations
iv. The study can be conducted to compare the level of dysmenorrhea among adolescent girls living in urban and rural areas.

CONCLUSION:-

Thus finding indicates that the aerobic exercise was a effective demonstration for reducing pain in dysmenorrhea among adolescent girls 12-16 years.
REFERENCES