



Effect of Yoga on Primary Dysmenorrhoea among Adolescent Girls – A Literature Review

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Menstrual pain affects most of today female adolescents and this is a leading cause of school absenteeism/ college absenteeism. The researcher reviewed the various literatures to evaluate the effect of yoga on primary dysmenorrhoea and about prevalence through various sources such as Printed material, conference papers, Books as well as electronic sources which are Pubmed, CINAL, Google Scholar, MEDLINE, Science Direct and etc. Primary dysmenorrhoea is menstruation cramps which is common, recurrent and without any pathological condition. In India 50 to 87.8% adolescents had complaints of primary dysmenorrhoea, while equalling occurrence of primary dysmenorrhea from other countries, Ethiopia reported 70%, Malaysia 6.8% and Jordan reported 55.8%. There are many factors which make pain worse include heavier, irregular or longer, menstrual cycle; lack of exercise; mental or social stress; drinking alcohol; smoking; being overweight and other factors. Most of studies show that yogic practices like different yogasana such as Bhujanagasana, Matsyasana, Vajrasana, Dhanurasana, Apanasana and Shavasana, relaxation techniques, pranayama's and meditation have proven very beneficial in the treatment of primary Dysmenorrhoea. After reviewing literatures its concluded that yoga is effective to decrease menstrual pain and it will also increase productivity in daily living activity by enhance self-confidence level.

Keywords: Effect yoga; primary dysmenorrhoea; adolescent's girls.

1. INTRODUCTION

Primary dysmenorrhoea is common menstruation cramps that are recurrent and are not due to any pathological condition. Affected adolescents experienced sharp spasm in the supra pubic area and may radiate to the back, legs and thigh. [1] Pain can range from mild, moderate to severe, can last for 12 to 72 hours, and can be associated with nausea, vomiting and fatigue. Commonly menstruation cramps and pain usually become less as a woman ages advance and may be chances of cessation entirely if the woman has a baby [2].

Some studies reported that pain during the menstruation affects up to 90% of women of childbearing age at various point of life. 5-20% adolescents reported that dysmenorrhoea or pain make them to not fully participating in their usual activities [1]. Menstrual pain is one of the common problems faced by utmost adolescent.

In today's world the Yoga is regarded as a holistic approach for good health. National Institutes of Health considered yoga as Complementary and Alternative Medicine (CAM). However, practice of yoga is more in india and it is part of main-stream medicine not an alternative healing system. Yoga is a combination of physical exercises, breathing exercise, mental meditation, and a part of specific lifestyle to relieve stress and strengthen the muscles. In addition to all above benefit yogic

practices have proven it is very beneficial also in the treating dysmenorrhoea [3].

Yoga practices help to increase productivity in daily living activity of life and also enhance self-confidence level. Regular yoga practices have benefits like corrects the physiological imbalances in the body and also makes the mental health by its deeper and subtler effects on mind, body and souls [4].

The researcher reviewed the various literatures from sources such as Printed material, conference papers, Books as well as electronic sources which are Pubmed, CINHAL, Google Scholar, MEDLINE. Science Direct and other.

2. MATERIALS AND METHODS / FINDINGS

The studies reviewed related to the effect of yoga on primary dysmenorrhea and its prevalence rate. After reviewing around 35 literatures the researcher classified in three categories as mentioned.

1. Literature related to prevalence of primary dysmenorrhoea
2. Literature related to effect on daily living activity of primary dysmenorrhoea.
3. Literature related to effectiveness of yoga on primary dysmenorrhoea.

Table 1. Some of the significant literature reviews are depicted in the following

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| Author: Ameade EPK, Amalb a A, Mohammed BS Year: 2018 Setting: Northern Ghana | Objective: Study to evaluate Prevalence of dysmenorrhea among students regarding impact and management strategies. | Methodology: A cross-sectional study was conducted to assess dysmenorrhea impact and management strategies, 293 girls are selected randomly as a participant. Data was collected by using a self-administered questionnaire. Analysis was done by SPSS [5]. | Result: the study found that majority of girls suffering from dysmenorrhoea taking medicine as management strategies. Conclusion: the study concludes that majority of girls having dysmenorrhea and using PCM. |
| Author: Alka Ahuja, Manoj Kumar Sharma and Amarjeet Singh. Year: 2016 | Objective: A study was conducted to determine the influence of dysmenorrhea among adolescents life | Methodology: In the present study multistage stratified sampling was used and selected 300 samples by lottery method from 5 villages, 5 slums and 5 sectors. Then 20 respondents were selected from each area. The data was collected by interview and | Result: 61.3% adolescent's girls suffering from dysmenorrhea and 50% girls reported that daily activity is altered due to discomfort. Conclusion: Study was concluded that |

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| Setting: India | quality. | visual analogue scale from the adolescent's girls of age group between 11 to 18 years [6]. | dysmenorrhea affect the quality of life. |
| Author: Shabnam Omidvar, Fatemeh Nasiri and Khyunnisa Besgum Year: 2016 Setting: South India | Objective: To determine the prevalence, impact and management of Dysmenorrhea among girls. | Methodology: A cross-sectional study was conducted on 1000 girls aged 11-28 years. The data was collected by standardized self-reporting questionnaires and used numerical pain scale to assessed pain intensity. The data was analysed by SPSS version 16 [7]. | Result: The study found that majority of girls suffering from dysmenorrhea and complaint pain on 1 st and 2 nd day of menstrual cycle and also found that majority of girls using medication. Conclusion: the study concluded that the girls required health education regarding dysmenorrhea and its management. |
| Author: Tulika Joshi, MoolRaj Kural, Deepa P and it Agrawal et.al Year: 2014 Setting: M.P | Objective: To determine effect of Primary dysmenorrhea on Physical, social health, absenteeism at work and work productivity among girls. | Methodology: A cross sectional study was conducted on 310 young girls who voluntarily agreed to participate in study and data was collected by semi-structured questionnaire related to menarche age, menstrual cycle and quality of life and also collected sociodemographic data [8]. | Result: The Study Significantly found that found that dysmenorrhea decrease attendance, work productivity and poor work satisfaction (P<0.05). Conclusion: The study concluded that menstrual pain leading cause of absenteeism among young and also affecting the quality of life. |
| Author: Veena kirthika, K Padmanabh an, Selvaraj S. and et.al Year: 2018 Setting: Tamil Nadu | Objective: The objective is to compare the efficacy of yoga and gym ball therapy for management of dysmenorrhea. | Methodology: A randomized controlled trial, single blind study conducted on 30 samples selected by simple random sampling and then randomly allocated into two groups. Group A selected for yoga asana for 60s duration for 5 time in a day for 3 time in a week followed for 12 weeks, Group B went for ball exercise for 10s hold for 12 time and for same period as group A. data collected by Questionnaire and pain scale [9]. | Result: Group B showed Significant difference (P<0.05) in pain level when compared to Group A. Conclusion: Study concluded that gym ball exercise is more effective in comparison to yoga asana for alleviating the menstrual pain. |
| Author: Shraddha Prabhu, Sanket Nagrale Ashok Shyam, Parag Sancheti Year: 2019 Setting: Maharashtra | Objective: To underscore the importance of performing yogasanas and to highlight its importance as a non-pharmacological form of treatment. | Methodology: A experimental study conducted on 80 sample of age group between 18 to 22 years and then sample divided equally in control and experimental group. Experiment group perform yogasans while control group perform core exercise for 4 sessions in a week. Data collected by using Moo's MDQ Questionnaires [10]. | Result: There was a significant difference within group (P<0.05). Conclusion: Both core exercise and yogasana help to reduce menstrualal pain but yogasana in more effective and improve the quality of life. |
| Author: Nam-Young Yang and | Objective: To evaluate effect of yoga session | Methodology: A single-blind, randomized control trial study conducted on 40 randomly | Result: Menstrual pain scores decrease significantly in study group |

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| Sang-Dol Kim Year: 2016 | on menstrual distress, cramps among UG students. | selected UG nursing students. 20 student in each group: experimental and control. Study group engage in yoga for 60 minutes once a week for 12 weeks. Data was collected by using questionnaire and pain scale [11]. | after yoga session (p=0.001). Conclusion: The study concluded that yoga is effective to alleviate menstrual pain. |
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3. DISCUSSION

With this review paper we assessed effectiveness of yoga on primary dysmenorrhea. Here we compared various studies related to prevalence, effect on daily living activity and effectiveness of yoga. For review we gone through various study were we found Primary dysmenorrhea have significant effect on daily living activities, hence having harmful effect, leading to increase non-attendance, abridged physical activity, lack of concentration, and poor societal relationship. This noticeably shows that dysmenorrhea is troubling the lifecycle of adolescents when linked with the lives of adolescents without dysmenorrhea. These results are on equivalence with other studies where the researchers have illuminated the effects of primary dysmenorrhea on physical fitness and emotional instabilities.

Shabnam Omidvar, Fatemeh Nasiri and Khyunnisa Besgum and Ameade EPK, Amalba A, Mohammed BS found that majority of adolescents suffering from dysmenorrhoea taking PCM/Meftaspasm as management strategies.

Veena kirthika, concluded that gym ball exercise is more effective in comparison to yoga asana for alleviating the menstrual pain.

K Padmanabhan, Selvaraj S. and et.al, Shraddha Prabhu, Sanket Nagrale Ashok Shyam, Parag Sancheti and Nam-Young Yang and Sang-Dol Kim found Both core exercise and yogasana help to reduce menstrual pain but yogasana in more effective and improve the quality of life.

4. CONCLUSION

Hence after reviewing extensive literature review, the researcher found that various studies done on the present topic but either lack of some aspects and mainly done in setting other than researcher interest. Also review of studies suggest that there in decrease in menstrual pain by practicing yoga like different asana, relaxation techniques, pranayama's and meditation have

proven very beneficial in the treatment of primary dysmenorrhoea and it will increase productivity in daily living activity of life and also enhance self-confidence among adolescent girls. This study determined that yoga is effective to alleviate menstrual pain.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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