

Original Research Article

Evaluation of a community based yoga training programme in Ernakulam

Aparna Vasudev, Paul T. Francis*

Department of Community Medicine and Public Health, Amrita Institute of Medical Sciences, Ponekkara, Kochi, Kerala, India

Received: 13 February 2019

Revised: 05 March 2019

Accepted: 07 March 2019

***Correspondence:**

Dr. Paul T. Francis,

E-mail: paultfrancis@gmail.com

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ABSTRACT

Background: Mental health concern is escalating globally and current therapeutic approach is insufficient to bring people towards the state of mental well-being. There is a compelling need for effective population mental health promotion approaches. Yoga is a universally acclaimed method for promoting mental and physical well-being, but very much underutilised. The objective of the present study is to evaluate a community-based yoga training program which was conducted in the field practice area of a medical college in Ernakulam.

Methods: A sequential mixed method-quantitative and qualitative-study was done among the participants who attended the yoga training. The perceived benefits of yoga and adherence to yoga were assessed using an investigator administered semi-structured questionnaire. Subsequently a focus group discussion was conducted among the study participants.

Results: 20 subjects who attended the training participated in the study. Mean age was 48 years ($SD \pm 14.663$) and 85% were females. Mean duration of yoga practice was 6 months. Among the participants, 95% continued yoga practice at home after the training. The main benefits reported were: a feeling of increased energy (75%), relaxed/happy feeling (55%), relief from body pain (40%) and stress reduction (35%). The subjects reported that the increased energy they felt from yoga increased their work productivity and eased tiredness and stress.

Conclusions: The study shows that yoga offers considerable benefits on mental health, with a large proportion of participants feeling energised and happier. Community based yoga training is a low cost and feasible approach for better mental health.

Keywords: Yoga, Perceived benefits, Adherence, Barriers

INTRODUCTION

Yoga is a group of physical, mental and spiritual practices or disciplines which originated in India during the ancient times. The word yoga arises from the Sanskrit word 'Yuj' which means to unite or to combine (with the divine). In Indian traditions, yoga however is more than a physical exercise, it has a meditative and spiritual core. As per Patanjali yoga sutra, yoga is defined as "Yogah

Chitta Vritti Nirodhanam" i.e., yoga is the one which controls the activities of the mind. It is an art and science of healthy living leading to a perfect harmony between the mind and body. Physical and mental exercises such as the postures, breathing exercises, and meditation are combined in yoga to help achieve this goal by acting holistically on various dimensions of health.

Yoga can also provide the same benefits as any well-designed exercise program, increasing general health and

stamina, reducing stress, and improving those conditions brought about by sedentary lifestyles.¹ Its practice prevents psychosomatic disorders and improves the resistance and ability of an individual to endure stressful situations. It is well established that yoga has a preventive and curative role on high blood pressure and heart diseases, but the degree to which yoga may decrease blood pressure and its mechanism of action is yet to be established.² Improving insulin sensitivity, glucose tolerance and lipid profiles, preventing obesity are the other tangible benefits of yoga.³ The scientists around the world accepted that it also leads to a reduction in oxidative damage (delays ageing), improves pulmonary function and coagulation profiles and decreases sympathetic activation in patients with DM related chronic disorders.^{4,5}

Yoga has gained much popularity since the inception of International yoga day in 2015 and it is widely practiced across the globe nowadays. In today's frenetic world, yoga has much importance as it has been shown to slow down/relax the rushing pace of life and increase awareness, by focusing on the present. Regular practice of yoga improves flexibility, strength, endurance, self-control while promoting a sense of mental well-being. Sustained practice tends to improve sense of energy in day-to-day life. Yoga is recognised as a form of mind-body medicine that helps in integrating individual's physical, mental and spiritual components to improve all aspects of health especially stress-related illness.

Yoga is a universally acclaimed method for promoting mental and physical well-being, but very much underutilised. Our institution conducted two yoga training programs at the peripheral centres with an objective to increase utilisation and awareness about yoga. The aim of the study was to evaluate the community-based yoga training program which was conducted in the field practice area of AIMS, Ernakulam.

METHODS

Study design

Cross sectional mixed method—quantitative and qualitative.

Study setting

Urban and rural field practice area of Amrita Institute of Medical Sciences, Ernakulam.

Study population

Residents who attended yoga training at the centres.

Study period

December 2017 to January 2018.

Sample size

Universal sample—all participants who attended yoga training at the centres were included in the study.

Study description

The details of all participants who attended two yoga training batches of January 2017 and September 2017 were obtained and then contacted over phone. Among 28 contacts, 20 responded. The participants were then interviewed based on a semi structured questionnaire to assess the benefits of yoga programme. The questionnaire consisted of 21 questions which assessed variables such as age, sex, educational status, occupation, pre-existing medical conditions, health benefits of yoga and factors affecting adherence. It also had open ended questions which asked them to reflect on their perceived benefits of yoga and the barriers experienced for adherence to yoga practise at home.

The qualitative part consisted of key informant interviews and focus group discussions with the participants. The focus group discussions were mainly based on the evaluation of the perceived benefits and the factors contributing to adherence to yoga. The findings from the FGD were in line with the results obtained from the personal interviews. The data was entered into Microsoft excel version 2016 and analysed using SPSS version 20. The qualitative data collected was transcribed verbatim, translated and the particular comments that supported or contradicted the main themes were noted.

RESULTS

The sociodemographic variables are presented in Table 1. The mean age of the respondents was 48±14.663 years (Table 1).

Table 1: Sociodemographic variables (n=20).

Variables	Mean (or) Number (%)
Mean age (in years)	48±14.663
Gender	
Male	3 (15)
Female	17 (85)
Education	
Graduates	12 (60)
High school	6 (30)
Higher secondary	2 (10)
Occupation	
Skilled	5 (25)
Unskilled	4 (20)
Unemployed	11(55)

All participants perceived more than one benefit from practising yoga, the results of which are presented in Table 2. The most common perceived benefit was a

refreshed or energised feeling. A majority of them also perceived a feeling of happiness. There were many barriers for practising yoga at home regularly and the most common reason was lack of time (Table 2).

Table 2: Adherence to yoga, perceived benefits and barriers (n=20).

Variables	Number (%)
Adherence to yoga	
Adherence to yoga	7 (35)
Non-adherence to yoga	13 (65)
Perceived benefits	
Refreshed/energised	15 (75)
Relaxed/ happy	11 (55)
Relief from body pain	8 (40)
Relief from mental stress	7 (35)
Improved concentration	5 (25)
Prevents weight gain	5 (25)
Better sleep	4 (20)
Reduced anger	4 (20)
Barriers	
Lack of time	12 (60)
Lack of space	4 (20)
Physical difficulty	4 (20)

Qualitative data findings

With respect to perceived benefits of yoga, the observations were mainly under two domains—physical and mental benefits.

The main physical benefit mentioned by most of the participants was a feeling of increased energy to carry out work. One of the respondents quoted *“When I do yoga in the morning, I feel energised for the whole day to do my works”*.

Many participants also had other benefits and one of them was relief from musculoskeletal pain enabling an ease of movement. One participant said *“because of body pain, I had difficulty in climbing steps but after doing yoga I could climb steps without pain”*.

The mental benefits reported by participants mainly included an energised or refreshed feeling and relief from stress as quoted: *“Yoga helped me boost my confidence levels”*

“It helps in reducing stress and I do it when I go through stressful periods”.

Regarding barriers to continue with practising yoga, most of them found lack of time as a major constraint. Many of the respondents felt that doing yoga practice in a group would lead to better adherence. Yoga practice as a group also resulted in a sense of togetherness and adds to its benefits as a social gathering as well, which a participant

quoted as saying in the FGD that *“There is a happiness in doing it (yoga) together and this happiness is the reason why we wish to do it again. When we all get together and do yoga, it’s a happiness and it helps us in forgetting the tensions at home”*.

DISCUSSION

In our study we found that 35% of the participants had adhered to regular yoga practice. In a study done at Goa by Chatterjee et al, the adherence rate was found to be 50% whereas a study done in older women with osteoarthritis in Minnesota reported a high adherence rate of 75%.^{6,7} Another study done in Bangalore by Dayananda et al had an adherence rate of 86%.⁸

The main perceived benefit in our study was an energised or refreshed feeling. A systematic review done by Woodyard et al reported similar findings with the basis that yoga shifts the balance from the sympathetic nervous system and the stress response to the parasympathetic system and the relaxation response.⁹ Arora et al describes in their study that the practise of yoga results in generation of balanced energy, which is also essential to the immune system.¹⁰ Zavala et al also reported a subjective sense of energy that was positively correlated with yoga.¹¹ An RCT done by Shanthakumari et al in Trivandrum has revealed that yoga resulted in a significant reduction in lipid profile of diabetic patients.¹² Our study has shown that many of the participants felt a relief from body pain through yoga. A study done on older adults by Tew et al showed that yoga improved all aspects of physical function and flexibility.¹³ Woodyard et al states improved flexibility as one of the first and most obvious benefits of yoga and says that the gradual loosening of muscles that comes with practice is thought to be one reason that yoga is associated with reduced aches and pains.⁹ Rao et al reports in their study that yoga caused a significant improvement in quality of life of breast cancer patients.¹⁴ It was found from our study that 75% of the respondents preferred doing yoga as a group. The interview responses indicated that the opportunity for social interaction and the feeling of togetherness promoted their mental well-being. A study done by Tew et al also reported that the same reasons promoted attendance in the yoga classes.¹³

The most common barrier to yoga practice at home was lack of time. This was similar to another study by Dayananda et al which reported irregularity in lifestyle, family commitments, and occupational commitments as significant strong barriers and a study by MT et al which reported busy schedule as the most common reason for discontinuing practice.^{8,15}

ACKNOWLEDGEMENTS

The authors thank the staff of urban and rural health centres who helped in the conduct of the study.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Vasudev A, Francis PT. Evaluation of a community based yoga training programme in Ernakulam. *Int J Community Med Public Health* 2019;6:1457-60.