



## Gender based Differences in Attitude and Practice of Sporting Activity among Medical Students. A Study in North-East India

Authors

**Dr Sharat Agarwal<sup>1</sup>, Dr K K Pandita<sup>2</sup>, Dr Manika Agarwal<sup>3</sup>**

<sup>1</sup>Associate Professor (Orthopaedics & Trauma), North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong (India)-793018

Email: [drsharat88@yahoo.com](mailto:drsharat88@yahoo.com), Phone- +91-9436336213

<sup>2</sup>Assistant professor (Hospital Administration), North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong (India)-793018

Email: [panditakawal@gmail.com](mailto:panditakawal@gmail.com), Phone- +91-9419781592

<sup>3</sup>Associate Professor (Obstetrics & Gynaecology), North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong (India)-793018

Corresponding Author

**Dr Manika Agarwal**

Associate Professor (Obstetrics & Gynaecology), North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong (India)-793018

Email: [drmanika89@yahoo.com](mailto:drmanika89@yahoo.com), Phone- +91-9862123245

### Abstract

**Objective:** A study was carried out to determine the level of physical activity in the form of sports in the medical students before and after joining the medical curriculum in a medical college in North-East India.

**Design:** 92 medical students were voluntarily asked to fill a predesigned questionnaire. The data was then analyzed and expressed in percentages and proportions.

**Results:** 92 medical students (MBBS) enrolled in the study were from 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> semester. 46 were boys and 46 were girls. Among the boys 89.13% used to play before joining the medical course and 16.8% didn't play before and after the course. Only 60.8% girls used to play before joining the medical course, but 39.1% girls did not play before and after the course.

**Conclusion:** In our study, we found gender based difference in the sporting activities undertaken by boys and girls. This indicates environmental and cultural factors may be responsible for inability of the girls to indulge in sports. This probably may be the reason that 69.5% boys wanted sports to be compulsory as compared to girls, where 89.13% wanted it to be made compulsory.

### Introduction

Sports among the youth is undertaken for recreation, physical and mental rejuvenation. Worldwide in 2010, the WHO reported that 23% of adults aged 18 years old and above and 81% of

adolescents 1-17 years were insufficiently physically active <sup>[1]</sup>. Physical activity plays a major role in the prevention of non-communicable diseases. It has also been found that physicians who are physically fit are more likely to advice

their patients regarding exercise and fitness, thus leading to healthy life style. So, this study was undertaken to determine the level of sporting activity among male and female undergraduate medical students.

### Material and Method

92 medical students in MBBS 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> semesters studying in our medical college were included in the study. The study was conducted from August'2017 to October'2017 (3 months). They were voluntarily asked to fill a pre structured questionnaire and results were then analyzed and expressed in terms of percentages and proportions after the survey.

### Results

92 medical students participated in this study. 46 were boys and 46 were girls. Mean age of the students enrolled in the study was 21.6 years. Among the boys, 41 out of 46 (89.13%) used to play games before joining the medical course and 10.8% did not play any games. Among the girls

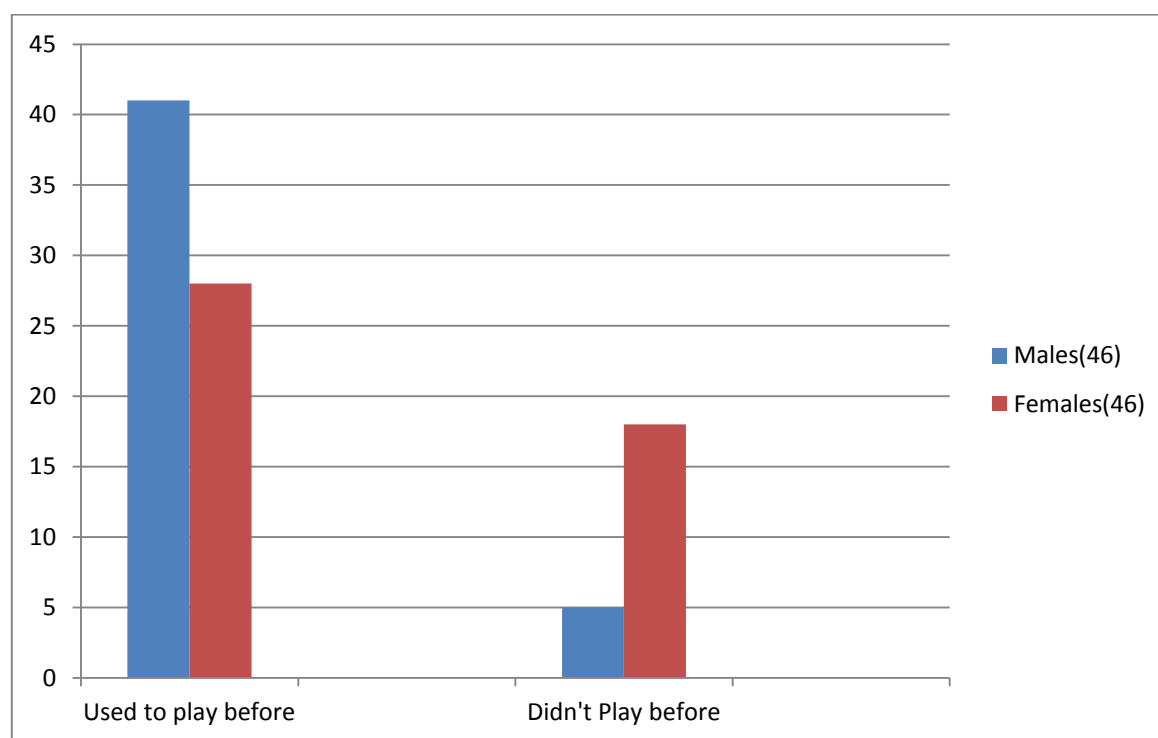
28 out of 46 (60.8%) girls used to play before joining the course and 39.1% girls did not play any game before and after joining the course (Fig.1).

29 out of 41 boys (70.7%) boys continued to play even after joining the course, but 72.4% played infrequently and only 27.5% played 2-3 times a week. Not a single student played every day.

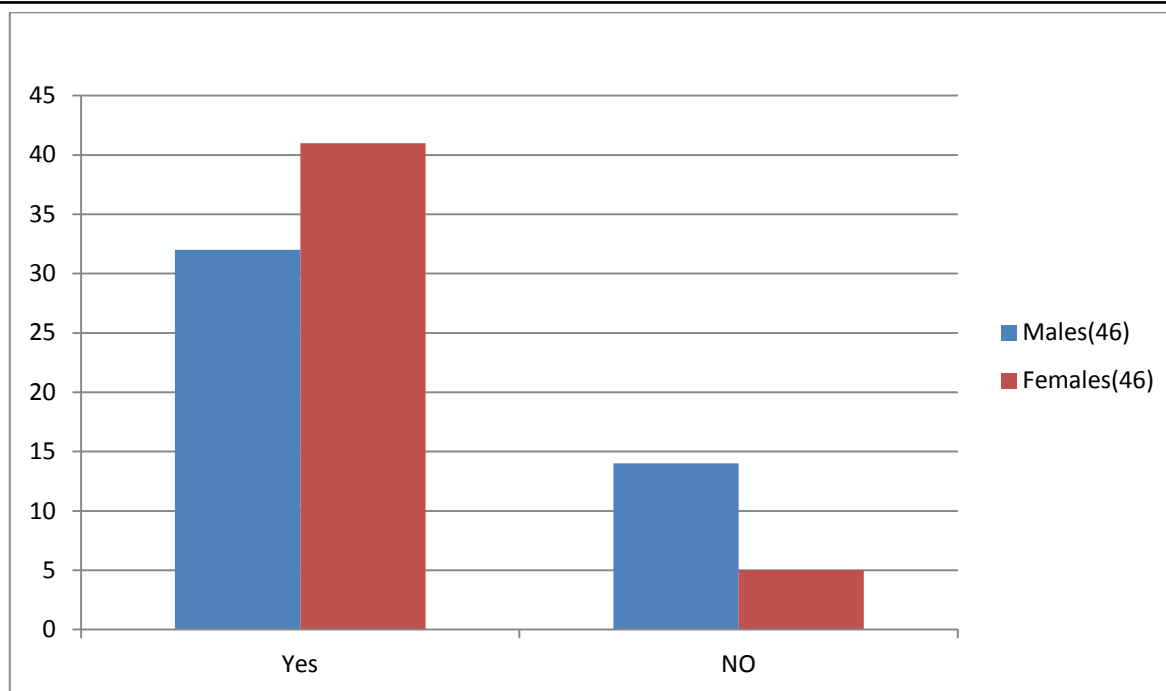
Only 19 out of 28 girls (67.8%) played even after joining the course and all of them (100%) infrequently.

32.1% girls stopped playing after joining the medical course, citing lack of time or recourse to other recreational activity as use of social media as a cause for stop playing sports.

31.7% of boys also stopped playing after joining the medical college, due to lack of time, interest or due to recourse to social media as recreational activity. On being asked, if games should be made compulsory in the medical colleges, 89.13% of the female students wanted to be made compulsory as compared to 69.5% boys who wanted it to be made compulsory (Fig.2).



**Fig.1-Distribution based on gender (Used to play before/didn't play before)**



**Fig.2** -Distribution based on gender for Playing to Be Made Compulsory

## Discussion

Physical fitness of youth is of paramount importance for health and prosperity of a nation. Physical fitness of future doctors is even more important as it can help them in counselling about health life style and undertake sports, walking etc for maintaining fitness. In a study by Stanford FC et al<sup>[2]</sup>, they found that physician and medical students engage in more physical activity, may be less likely to encourage patients to engage in physical activity.

As in our study, we found that more male students used to play games than females i.e 89.13% versus 60.18%. similarly, a study undertaken by Chythra R Rao et al<sup>[3]</sup>. on practice of physical activity among future doctors showed that, physical activity was more among boys as compared to girls i.e 62% versus 38%.

In a study by Apichai Wattanapisit et al<sup>[4]</sup>, also it was found that preclinical students and male sex were the factors associated with more physical activity. Their study also points to the fact taht being a medical student was a risk of physical inactivity.

In a study by Lobelo F, Duperly J and Frank E et al<sup>[5]</sup>. On physical activity habits of doctors and medical students influences their counselling

practices, they found that rates of exercise counselling by doctors remain low; only 34% of United Staes adult report exercise counselling at their last medical visit. This highlights the fact that doctors who play or indulge in physical activity are more likely to motivate the patients to do the same.

In a study done by AS Wash et al<sup>[6]</sup>. On sports practice among private secondary school students in Dubai in 2004, also reported that good level of sport was higher among males (26.0%) than females (14.7%) and that there was significant association between overweight and obesity as well as tobacco, smoking and low level of sports activity.

El Galany et al<sup>[7]</sup>. Carried out analyses on physical inactivity among Egyptians and Saudi medical students have found out that 70% students perceived that physical activity promotes health and maintains health and most frequent barriers to physical activity are time limitation due to busy schedule and lack of assessable and suitable sporting places.

Lack of time (60.5%), laziness (61.8%) and exhaustion from academic activities (42%) were identified as important hindering factors among medical students who did not exercise.

In our study, we found lack of time, lack of interest and recourse to other recreational activity especially indulging in social media as causes for stop playing sports in students who used to play before joining the medical college.

### Conclusion

As in other studies, one of the most important finding in our study is that the boys indulge in playing games more than girls i.e 89.13% versus 60.8%. But what was surprising revelation is more girls wanted sports to become compulsory as compared to the boys i.e 89.13% versus 69.5%. This reflects ethnic or cultural factors may prevent girls from undertaking sporting activities and making it compulsory at school and college level may be the only way to enable and encourage girls to indulge in physical activities in the form of sports.

### Public Health Significance

This article reflects that girls need to be promoted to undertake sports activities for which they need to be encouraged may be at the school and college level. Besides, as the non-communicable diseases are on the rise all around the world, such an encouragement with regard to sports activities amongst the budding doctors by making it as a compulsory part of undergraduate curriculum will go a long way in bringing out the attitudinal transformation in the society and scaling down the disease load with regard to non-communicable diseases, where a healthy life style with incorporation of sports activities through the patients visiting such doctors in future.

### Conflict of Interest- None

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