ORIGINAL ARTICLE

Attitude Towards Physical Activity: A Comparative Study among Doctors and Physical Therapists

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ABSTRACT

Objective: To assess and compare the attitude towards physical activity (PA) in midcareer doctors and midcareer physical therapists (age 24-35 years old) and to assess their common barriers found against physical activity (PA).
Methods: A cross sectional survey of 376 midcareer doctors and midcareer physical therapists at different tertiary care hospitals was conducted. The participants were surveyed regarding their physical activity (PA) habits and barrier to physical activity (PA) through self-administered questionnaire. Fisher's exact test was used to find the association between doctors and physical therapist and their attitude towards physical activity and barriers.
Results: Walking was found to be most sought after physical activity among both doctors and physical therapists Among barriers of lack of time and company was found to be most common barrier against planned structured physical activity (exercise).
Conclusion: The results of the study concluded that midcareer doctors and physical therapist are not performing planned structured physical activity because of barriers like lack of time and lack of company yet they prefer walking as a form of leisure activity in comparison of other activities like gardening and swimming etc.

How to cite this article: Khan DA, Zaidi R, Danish SH, Ahmad F, Sarfraz M. Attitude towards physical activity: a comparative study among doctors and physical therapists.. J Dow Uni Health Sci 2013; 7(2): 68-72.

INTRODUCTION

Various studies have observed that healthcare professionals who have healthy lifestyles and look after their own personal wellness are more expected to give recommendation, advice and suggestion to their patients on lifestyle modifications.[1] As they are considered an important part to encourage people to become active[2] and they are the forerunners for recommending physical activity (PA) and exercise to their patients/ clients it should be ascertained how much they practice what they preach.

Personal health habits, activities regarding medical care, physical activity (PA) and lifestyle behavior of healthcare professional's correlate with their attitudes towards protective, precautionary and preventive care.[1] Doctors and physical therapists who are physically active themselves are three times more likely to regularly encourage physical activity in their patients when they demonstrate their own personal health habits, patients find them to be more realistic and better able to bring changes in their physical activity levels.[3]

Common declaration is that occupational physical activity has decreased in recent decades.[4] If the doctors and physical therapists do not have sufficient time for leisure physical activity they can incorporate physical activity in their daily occupational routine for example by using stairs instead of elevators, they will have the same influence for counseling the patients as those that perform physical activity during leisure time.[1,4]

According to WHO Global recommendation on Physical Activity (PA) "Adults aged 18-64 years should perform at least 150 minutes of moderate-intensity aerobic physical activity throughout the week".[5]

In a study conducted in Finland by Seiluri T et al., 30 minutes of moderate-intensity leisure-time physical activity for at least five times a week was suggested.[6,7] In another study by Anand T et al., similar advice was delivered by Center for Disease Control (CDC).[8]

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In spite of the well-known benefits of regular physical activity, it is estimated that over 60% of world's population is not physically active enough to gain health benefits.[8,9] By understanding the barriers reported by midcareer doctors and physical therapists an effective program to meet the WHO recommendation for physical activity can be developed.

It is acknowledged that performing physical exercise can have significant benefits in terms of preventive and therapeutic effects on health. Several studies conducted to evaluate physical activity have discovered that the physical condition of medical professionals is more related with their own attitudes toward health promotion and illness prevention.[10]

This study aims to assess and compare the attitude toward physical activity in midcareer doctors and midcareer physical therapists and to assess the common barriers found against physical activity.

METHODS AND MATERIAL

A cross sectional study with a comparison group was conducted among the midcareer doctors and midcareer physical therapists (24-35 years old) at three Tertiary care hospitals of Karachi. Institutional ethical committee clearance was obtained prior to the initiation of the study. A written consent was taken from authorities of tertiary care hospitals where the survey was conducted and Informed consent was taken from study participants before collecting the data.

The study sample included 376 midcareer doctors and midcareer physical therapists (n=188 midcareer doctors and n=188 midcareer physical therapists). The sampling technique was non probability convenience sampling technique and tool used for data collection was self administered Questionnaire; the questionnaire was developed following reviews of the literature and the questions were mostly close ended.

In addition to demographic details, height and weight were also included in the questionnaire. Body Mass Index (BMI) was calculated using the formula weight in kilograms/height in square meters. The participants were also asked about their leisure time physical activity, physical activity transportation for work place, participation in sports, performance of exercises, hours spent at computer desk, attendance at health and fitness gyms to perform exercise perform household chores.

Statistical Package for Social Sciences (SPSS) version 17 was used for data entry and analysis. Chi-square test was used to find the association between doctors and physical therapist and their attitude towards physical activity and barriers. P value of less than 0.05 was taken as significant.

RESULTS

A total of 376 participants filled the questionnaire that assessed the attitude of doctors and physical therapist regarding physical activity, 50% of them were physical therapist and remaining half were doctors (n=188). Male female ratio was 1:2. When BMI was compared, it was found that out of the total obese, n= 32(73%) were doctors and only n=12 (27%) were physical therapists. In underweight category, majority n=37 (60%) were physical therapists and n=25 (40%) were doctors. (Fig 1)

The participants were assessed equally on different physical activities they performed. Regarding leisure time activities walking was the most preferred mode of exercise as no significant difference was found between doctors and physical therapists where 160 doctors (85%) preferred leisure time walking compared to 162 (86%) physical therapists.

When inquired about the preferred mode of transport walking was the favored one as majority doctors n=177(94%) and physical therapists n=175(93%) preferred walking over cycling as a means of physical exercise for transportation purpose.

Significant difference was observed when utilization of stairs at the work place was preferred more by physical therapists n=173(92%) compared to doctors n=150(80%) (p=0.001). Again significant difference was observed when inquired about household work as a mode of physical activity. One hundred and twenty six (67%) physical therapists and 105(56%) doctors preferred to do household work as a mean of physical exercise (p=0.026).

Participation in sports was not much common as less than 50% displayed interest in both groups (n=80 doctors and n=84 Physical therapists). When asked if they perform exercise 2-3 times a week it was seen that only 26 (14%) doctors and 42 (22%) Physical therapists indulged in this activity (p=0.032).

After seeing their attitudes towards physical activity, barriers were discussed. It was observed that lacking sufficient time for physical activity was more common in doctors compared to physical therapists where 132(70%) doctors and 115(61%) physical therapists did not indulge in physical activity owing to lack of time (p=0.065). When interest deficit was taken into concern almost similar results were seen in both the groups. Forty eight (25%) doctors and 55(29%) physical therapists showed lack of interest in physical activity.

Table 1: Barriers against Physical Activity

Barriers for Physical Activity					
	Doctor		Physical Therapist		P-value
	n	%	n	%	
Not Enough Time	132	53	115	47	0.041
Lack of Interest	48	47	55	53	0.244
Too Exhausting	75	64	42	36	0.0001
Find Physically Fit	26	46	31	54	0.283
Financial Reason	5	26	14	74	0.029
Do not Exercise For Health Reason	17	59	12	41	0.22
Lack of Company	101	61	65	39	0.0001
Lack of Resource	72	55	60	46	0.117
Lack of Will Power	86	62	52	38	0.0001

Figure 1: Comparison of Nutritional Status of Doctors and Physical therapists

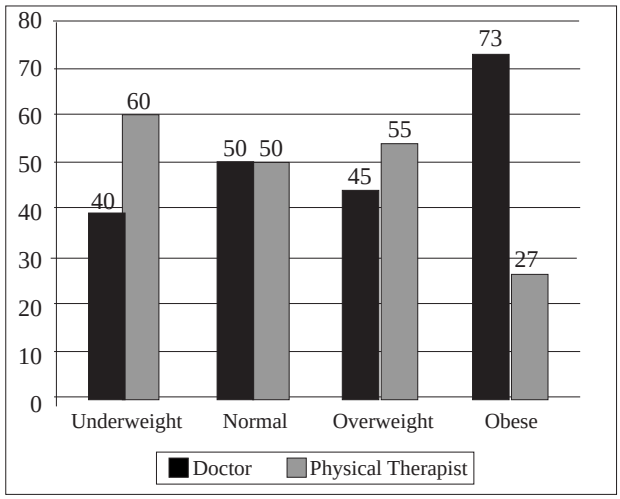
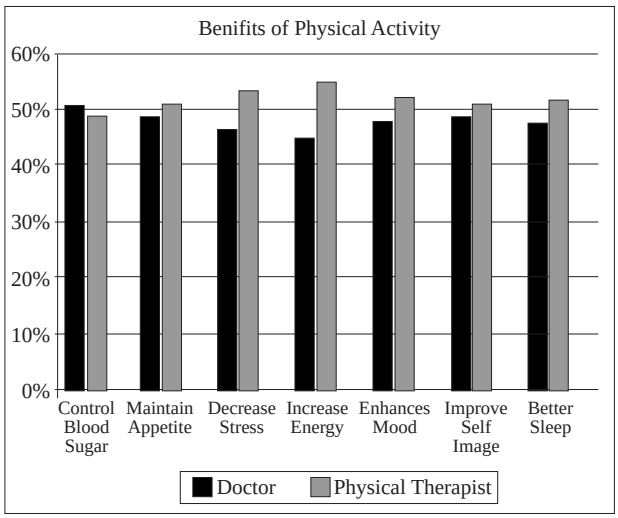


Figure 2: Benefits of Physical Activity as perceived by both doctors and Physical therapists



When asked if they felt physical activity was too exhausting 75(40%) doctors concurred with this notion as compared to only 42(22%) physical therapist who deem physical activity as exhausting (p value 0.00). Interestingly only 26(14%) doctors and 31(17%) physical therapists considered themselves healthy enough so that they did not require further physical activity to keep themselves fit.

When inquired as to how many people from both groups do not exercise as their health is compromised for health reasons it was observed that 17(9%) doctors and 12(7%) physical therapists agreed to this as the reason for not doing exercise. When lack of company was seen as a barrier to physical activity it was observed that more doctors n=101(54%) compared to physical therapist n=65(35%) were seen as lacking company and thus not performing physical activity (p value 0.00).

Lack of will power was considered a strong barrier in non performance of exercise among both doctors and physical therapists. Doctors were seen as lacking will power more with 86(46%) of them seen with this characteristic as compared to 52(28%) physical therapists ($p < 0.00$).

Both doctors and physical therapists had similar opinions regarding the benefits reaped from performing physical activity.

DISCUSSION

A number of recent studies have shown that regular physical activity is beneficial for patients with different health problems, e.g. cardiovascular, musculoskeletal, obesity, and emotional disorders and regular physical activity can lead to reductions in risk factors for chronic disease and disability.[11,12] Physical activity counseling administered through healthcare providers have shown

to be feasible and cost-effective for promoting physical activity. Routine physical activity is also associated with improved psychological well-being.[12]

Our study was carried out to assess the practices of midcareer doctors and physical therapists regarding physical activity. In recent years it has been recommended that doctors and physical therapists should counsel their patients for physical activity[5] because health professionals have been recognized as potentially important sources of influence for individuals who do not meet minimum physical activity guidelines.[13]

Medical professionals are valued as prominent sources of guidance as they get in touch with a large percentage of the population.[13] Rogers et al reported that the physician's personal practice of their own physical activity also improved counselling for physical activity. Doctors who exercised continually and regularly were also more effective in helping patients to carry out regular physical exercise. As compared to our study findings where physical therapists were slightly more agile than doctors, most studies have shown that physicians are physically more active compared to the general population.[14] Physician's behavior is influenced by their general attitude to the importance of preventive care, and those who view exercise as a extremely essential health contributing factor are more likely to recommend, counsel and advise for exercise[14] it is therefore necessary for doctors and physical therapist to be physically active themselves so as be a mentor for their patients and clients.

A study by Ming Wen et.al, in California states that walking is the first step and an effective way to achieve the benefits of physical activity.[15] Another study published that regular walking can contribute to a variety of physical activity benefits, including appropriate weight management, maintaining normal body mass index (BMI), lower blood pressure and sense of well-being.[16,17] Our study also revealed similar findings with walking as the most preferred mode of physical activity among both groups.

Majority of the midcareer doctors and physical therapist do not attend health and fitness clubs/gyms for exercising similarly a study in Northern Ireland revealed that only 10% of medical professional's declare attending gym as form of leisure-time physical activity.[3]

In our study the most reported barrier among the respondents was shortage of time, lack of company and lack of will power. Likewise a study by Rao CR et.al revealed lack of time and lack of motivation or will as the most significant barrier for practicing regular physical activity by over 50% of the medical professionals.[10] Another study revealed lack of company, time, financial limits and lack of facilities as a barrier to physical activity.[8,18]

Though quiet a lot of them perform their household chores themselves so as to compensate the level of physical activity requirement as fitness benefits can be accomplished through structured or non structured physical activity, assembled all over the day even through short 10-minute bouts on nearly all days of the week and inhabitants must select physical activities that they like better and have a preference to do them on majority days of the week.[16]

The major strength of this research is the type of study design that was cross sectional. At a point in time we were able to assess the practices and attitude towards physical activity. Another strength is equal number of doctors and physical therapists in the sample. Yet the major limitation was that we were not able to observe the counselling of the doctors and the physical therapists regarding exercise and physical activity to their clients and associate them with their own practices.

This study opened a new horizon for research that can be further delved into for finding interventions that can help in reducing the barriers that seem to restrict the physical activities of the healthcare providers.

CONCLUSION

The study results concluded that both midcareer doctors and midcareer physical therapists are physically active and they try to engage in healthy routines like climbing stairs instead of using elevators as the preferred mode of commuting during office hours and preference of walking over other leisure time activities yet are not performing planned physical activity because of barriers like lack of time and lack of company.

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