

# Evaluation of Health Related Fitness of Physical Therapists

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## ABSTRACT

**Objective:** To analyze the health related fitness of physical therapists.

**Study Design:** Cross sectional study.

**Place & Duration:** Isra Institute of Rehabilitation Sciences, Isra University, Karachi Campus, from Jan 2013 to June 2013.

**Material and Methods:** The data was collected from 100 physical therapists working in different clinics and physical therapy departments of hospitals located in Karachi city. Convenience non probability sampling technique was used to select the participants for this study. A questionnaire was used in this study to explore the health related fitness of physical therapists. The questionnaires along with introductory letter were sent out to the participants. Questionnaires used in this study contained closed ended questions & analyzed by quantitative methods. After analysis data were presented in the form of tables and charts/figures.

**Results:** Study results revealed that findings related to health related fitness were found to be non significant. Less number of respondents maintain their health related fitness often but not always. They participate in aerobic activities, strength training and flexibility exercises very often and also maintain their recommended body weight. **Conclusions:** This study identified that physical therapists maintain their health related fitness often but not always. Physical therapists exhibit both positive and negative health behaviors which differ in domains at different points of their life.

**Key words:** Health Related Fitness, Fitness, Physical Therapist.

## INTRODUCTION:

A healthy lifestyle is the way of living that enables any individual to reach the highest levels of wellbeing, while achieving the highest levels of fitness and wellness too. People having a lifestyle in which they come up to the mark in all the components of fitness and wellness, it is a must that they have a healthy lifestyle<sup>1,2</sup>. In short we can say that a healthy lifestyle is the outcome of being fit and well. One who will follow the

daily exercises and adequate sleep, and balancing the demands of work will help to offer a healthy lifestyle.

The essential components found in a healthy life style are mostly related with:

- Family customs
- Health edification
- Likeable profession
- Safe surroundings/atmosphere
- Plenty of nutrition
- Activities of fitness
- Avoidance of bad behaviour
- Personal hygiene
- Kindheartedness and love
- Positive social communication<sup>5-7</sup>.

The basic needs of a healthy lifestyle or some of the tips that will guide any individual towards a healthy lifestyle are:

- Consumption of good and nutritious food
- Beneficial exercising
- Adequate rest
- Handling of stress
- Self-supportive attitudes

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- Positive image of own selves
- Love and compassion<sup>8-9</sup>

There are many other ways and tips that will lead an individual towards a healthy lifestyle. But the core is fitness and wellness's are of major concern in order to pertain out a healthy lifestyle<sup>10</sup>.

Physical therapist himself is a human; therefore all the conditions and principles are also applicable on him. He needs to be fit, well and healthy in order to improve positioning and maintain balance in dealing with patients<sup>11</sup>. Physical therapist use to do is in spite of taking care of himself, he took many of the home visits and clinical practices as well. During the home visits it is natural that the physical therapist will not be facilitated with the required equipments. What he uses to do is to manage in the conditions without taking care of him. The working conditions are very uncomfortable for him but still he use to give service there. This actually benefits somehow the patient but have adverse effect upon the health of the therapist<sup>12</sup>.

Similarly in the OPD's it has been a common observation that there is bulk of patients lined up. The physical therapist has the ability to treat some percent of it in a while but what he uses to do is that again he does not care for himself, and serve the patients. Their diet is disturbed due to this hectic schedule. Also in the treatment in unfavorable or uncomfortable conditions there body is also badly affected. That is the reason why risk factors are commonly seen in the physical therapists. In many cases it is also observed that the physical therapists of our society have joined the academic grounds and clinical grounds together. What there schedule is they use to teach in the morning while they continue their home visits and clinical practices in the evening and night. Because of this they don't have even a single minute to think about themselves<sup>13</sup>.

Mostly these types of practices are found in those physical therapists who don't have the awareness that there health also count. Their job is to facilitate the patient but they have to care for themselves as well so that the outcome on the patient and the outcome of their life will also be good<sup>11,12,14,15</sup>.

To summarize the lifestyle of most of the physical therapist it has been as observed that:

- No time for them selves
- Inadequate sleep and rest
- Adaptation of wrong working conditions and posture
- Carelessness of their health
- Low fitness and wellness levels
- Spoil themselves in serving others

In short the lifestyle of our therapist is not up to the mark and it has to be corrected. But the question is how come they will correct their lifestyle, so that they would not only benefit their patients but be a source of benefit for themselves as well<sup>12,16,17</sup>.

It is obvious that to maintain a good lifestyle or to get a lifestyle corrected one must have to implement some positive behaviors' towards his way of living. They must follow and implement all the components of wellness and fitness in their lives, so that their lifestyle becomes positive and they can easily guide themselves towards a positive lifestyle<sup>8</sup>.

Now the question arise that how? What should be the measures to correct a lifestyle or what should our physical therapist do in order to have a healthy lifestyle? For a better lifestyle they have to do efforts to perceive highest levels of wellbeing<sup>19</sup>. A short summarized plan can be given here, that how could they turn their lifestyle in to a healthy one:

- Care for themselves
- Care for their health, wellness and fitness
- Take time out for personal works
- Have rest and adequate sleep
- Must have an exercise plan for themselves<sup>13-15</sup>.

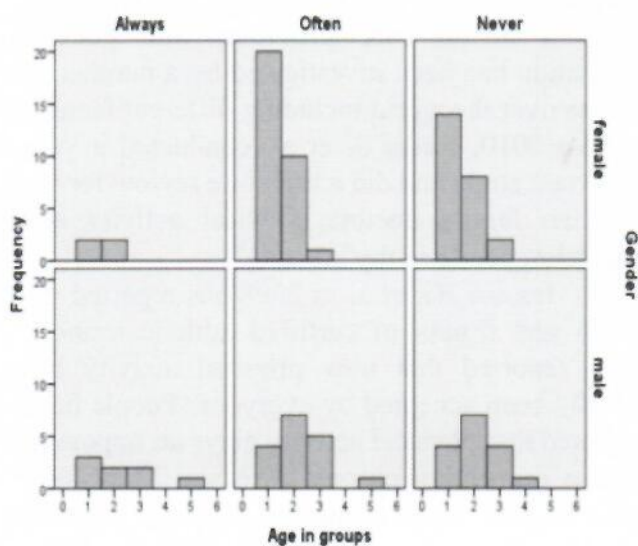
#### **MATERIAL AND METHODS:**

100 physical therapists working in different clinics and physical therapy departments of hospitals located in Karachi city were selected for this study. The participants for this study were selected randomly through the Pakistan Physical Therapy Association database by the convenient non probability sampling technique. The duration of the study was six months from Jan 2013 to June 2013.

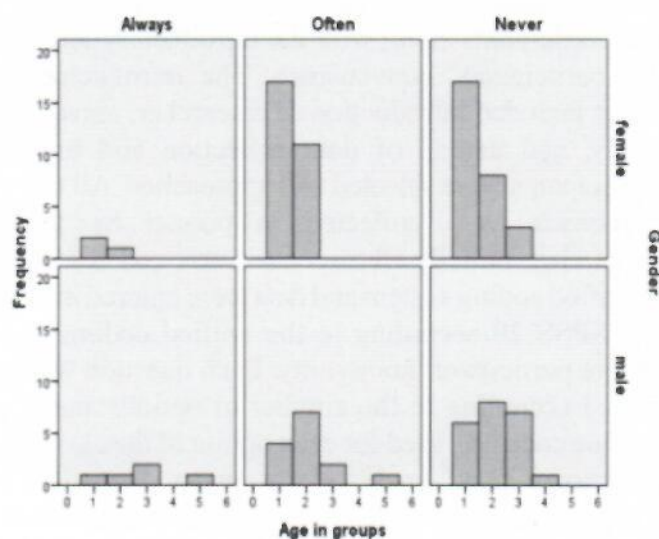
Participants were asked to complete a

**Table -1.** Health Related Fitness

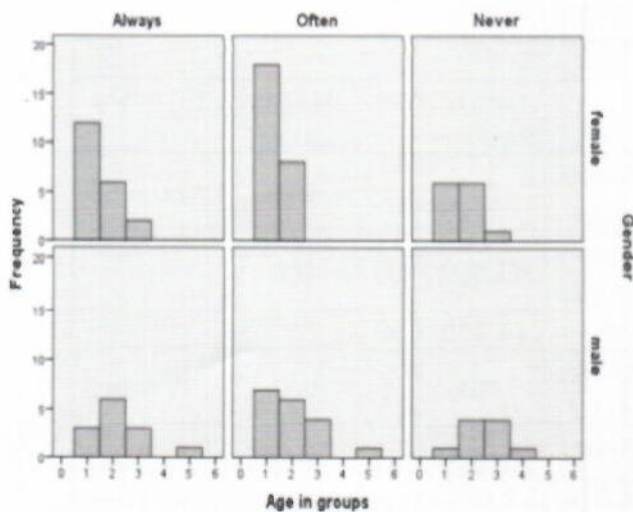
ANOVA						
Activity		Sum of Squares	df	Mean Square	F	Sig.
I participate in vigorous aerobic activity for 20 minutes on three or more days per week and I accumulate at least 30 minutes of moderate activity	Between Groups	.501	1	.501	1.124	.292
	Within Groups	43.659	98	.446		
	Total	44.160	99			
I participate in strength training exercises, using a minimum of eight different exercises, two or more days per week.	Between Groups	.002	1	.002	.005	.945
	Within Groups	40.358	98	.412		
	Total	40.360	99			
I perform flexibility exercises a minimum of three days per week.	Between Groups	.000	1	.000	.000	.998
	Within Groups	45.790	98	.467		
	Total	45.790	99			
I maintain recommended body weight (Includes avoidance of excessive body fat excessive thinness or frequent fluctuations in body weight).	Between Groups	.050	1	.050	.089	.766
	Within Groups	54.950	98	.561		
	Total	55.000	99			



**Figure -1.** Participate in vigorous aerobic activity for 20 minutes on three or more days per week and I accumulate at least 30 minutes of moderate activity



**Figure -2.** Participate in strength training exercises, using a minimum of eight different exercises, two or more days per week.



**Figure -3.** Maintain recommended body weight (Includes avoidance of excessive body fat excessive thinness or frequent fluctuations in body weight).

questionnaire and returned after one week of time. The targeted population of this study was both gender have age ranged upto 55 years and working in different clinics or physical therapy departments of hospitals. Physical therapy students, physical therapists working in academics and who are not currently practicing were excluded from the study. All the questionnaires were delivered in person to the participants along with the introductory letter for participants' convenience. The introductory letter included introduction of researcher, aims of study, and details of data collection and how participants were selected and approached. All the responses were collected in person by the researcher. Initially all responses were coded with a unified coding system and data were entered in to the SPSS 20 according to the unified coding to assure participants anonymity. Each question was coded according to the number of options and a unique code was used for each option of the closed questions. Data analyzed by using Statistical Packages for Social Sciences (SPSS) version 20. One-way ANOVA followed by Post-Hoc Tuckey multiple range tests and Duncan mean test were used for comparison. Statistical significance will be taken at  $p < 0.05$ . Data was summarized and reported in the aggregate.

## RESULTS:

100 questionnaires were sent out and 100 physical therapists gave their responses to this questionnaire survey. There were 59 female and 41 male. Majority of the participants belonged to age within 25 years. The results of the study revealed that with respect to health related fitness, there was no significant difference ( $P = 0.292$ ) observed for those individuals who participated in vigorous aerobic and moderate activities on three or more days per week, as compare to those individuals who participated in strength training exercises, using a minimum of eight different exercises, two or more days per week, the p value is 0.945 so it is non significant. Those individuals who perform flexibility exercises a minimum of three days per week the P value was found to be non significant (0.998). Those participants who maintain their recommended body weight (Includes avoidance of excessive body fat excessive thinness or frequent fluctuations in body weight) the p value was non significant (0.766).

## DISCUSSION:

This study provides us very important information about the lifestyle habits of the physical therapists of Karachi city. The fitness of different health care providers and general population has been investigated by a number of studies over the world including different factors. In year 2010, Kadri S, et al, conducted a very important study and did a literature review for the Estonian family doctors physical activity and counseling for a healthy lifestyle<sup>20</sup>.

Jessica JG, et al in 2008 has reported the health and fitness of certified athletic trainers. They reported that now physical activity has broadly been accepted by everyone. People have accepted that physical activity plays an important role in preventing chronic diseases. They have reported that when moderate intensity physical activity test were performed the athletic trainers were found more physically active than general population<sup>13</sup>.

Similarly our study indicates that few of physical therapists tend to do less physical activity

regularly but majority don't do it at all or if some does it they do it often but not on regular bases, and those who do physical activity they mostly do strength training or flexibility exercises.

Magdalena DG, et al, 2012, indicated in their research that students of physical therapist had the highest level of physical activity. Amongst them 54% showed high level of physical activity and remaining 46% showed moderate level physical activity. It is surprising to know that none of them demonstrated low level of physical activity. Though, other students of medicine science have low level of physical activity. It was concluded that the students of medicine, even though having knowledge about physical activity and its benefits, did not performed physical activity and/ or if they did than they did not met the recommended level of physical activity. Whereas, physical therapist students having knowledge about physical activity and also well trained and qualified met the recommended amount of physical activity, and then recommend and encourage individual to do it. They also in this way make others aware about physical activity and its benefits<sup>21</sup>.

It is undeniable that these days' people are aware about the benefits of physical activity but they don't make use of it. In this research as well, almost 50% of the PT of Karachi do the same. They have the knowledge about the physical activity and its benefits but still many of them do it often or do not do it at all. Only 10%-15% of the PT does vigorous aerobic activity or flexibility exercise or strength training exercise. 34%-45% never does it and remaining do it often. It is for these PT that after having knowledge about physical activity they don't do it and if they do it than not up to the level or requirement needed for them. It is due to them; the patients don't get inspired and don't tend to do physical activity. The overall outcome is that they don't create good impression on their patients and cannot set an example or aware their patients for physical activity.

## CONCLUSION

The current study provides us comprehensive suggestions to improve the health

related fitness by modifying and improving their lifestyle and dietary habits of physical therapists. It has been observed that very less number of respondents maintain their health related fitness often but not always. They participate in aerobic activities, strength training and flexibility exercises very often and also maintain their recommended body weight. It is the primary responsibility of physical therapists to promote healthy living and behavior in their patients. As they are the role models, so, it is of immense important that they themselves should exhibit positive health behavior and healthy lifestyle.

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