



# Physical Therapist's Prescription Regarding Benefits of Active Life Style of Patients

## Fizyoterapistlerin Hastalarda Aktif Yaşam Tarzının Yararlarına İlişkin Reçetesi

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### Abstract

**Background:** Physical activity is advantageous for several diseases like heart problem, diabetes & cancer as well. The complete load of diseases depends upon the physical inactivity. The significance of physical life style is to reduce the risk of coronary heart disease, diabetes as well as hypertension.

**Aim:** The aim of the study was to determine the physical therapist's prescription regarding benefits of active life style among patients.

**Methods:** A cross sectional study with 150 male and female physical therapist working at different hospitals located in Karachi. Practicing Physical therapists were included by convenient sampling to fill the consent form. The modified and adopted questionnaire physical activity Promotion in the Physical Therapy Setting was used to collect data to examine the prescription of active life style among patients. Data was analyzed through SPSS 20 version, frequency and percentage was calculated.

**Results:** The result of this study showed that majority physical therapist agreed with the prescription of short time exercises on most of the day is good for patient's health and prescribe the benefits of active life style among patients.

**Conclusion:** This study concluded that majority of physical therapist agreed for the implementation of benefits of active life style among patients. The further result of this study concluded that physical therapist agreed to prescribe the short time exercises on most of the day is better for patient's health. The recommendation of this study is that the governing body of physical therapy should be organized different programs like workshops and seminars regarding fitness training.

**Keywords:** Prescription, active lifestyle, benefits, physical fitness, physical therapist physical activity.

### Öz

**Arkaplan:** Fiziksel aktivite, kalp problemi, diyabet ve kanser gibi çeşitli hastalıklar için de avantajlıdır. Hastalıkların tam yükü fiziksel hareketsizliğe bağlıdır. Fiziksel yaşam tarzının önemi, koroner kalp hastalığı, diyabet ve hipertansiyon riskini azaltmaktadır.

**Amaç:** Çalışmanın amacı fizik tedavi uzmanının hastalar arasında aktif yaşam tarzının yararlarına ilişkin reçetesini belirlemektir.

**Yöntemler:** Karachi'deki farklı hastanelerde çalışan 150 erkek ve kadın fizyoterapist ile kesitsel bir çalışma. Pratik Fizik terapistler, onay formunu doldurmak için uygun örnekleme yoluyla dahil edilmiştir. Değiştirilmiş ve benimsenen anket fiziksel aktivite Fizik Tedavi Ortamında Tanıtım, hastalar arasında aktif yaşam tarzının reçetesini incelemek için veri toplamak amacıyla kullanılmıştır. Veriler SPSS 20 versiyonu ile analiz edildi, frekans ve yüzde hesaplandı.

**Bulgular:** Bu çalışmanın sonucu, günün çoğunda kısa süreli egzersizlerin reçetesi ile kabul edilen çoğunluk fizyoterapistinin hastanın sağlığı için iyi olduğunu ve hastalar arasında aktif yaşam tarzının faydalarını reçete ettiğini göstermiştir.

**Sonuç:** Bu çalışma fizyoterapistin çoğunluğunun hastalar arasında aktif yaşam tarzının faydalarını uygulamayı kabul ettiği sonucuna varmıştır. Bu çalışmanın bir sonraki sonucu, fizyoterapistin günün çoğu zaman kısa süreli egzersizler reçete etmeyi kabul etmesinin hastanın sağlığı için daha iyi olduğu sonucuna varmıştır. Bu çalışmanın önerisi, fizik tedavinin yönetim organının fitness eğitimi ile ilgili atölye çalışmaları ve seminerler gibi farklı programlar organize etmesi gerektiğidir.

**Anahtar Kelimeler:** Reçete, aktif yaşam tarzı, yararları, fiziksel uygunluk, fizyoterapist fiziksel aktivite.



## INTRODUCTION

Physical therapists are responsible for the promotion of physical activity because they are basically primary care practitioners. They tell about posture and give guidance about exercises mostly in musculoskeletal cases which require rehabilitation. At this moment, physical therapists are included in the list of tertiary prevention discipline due to their skills.<sup>[1]</sup> Currently, health problems are rapidly growing day by day due to less physical activity which is harmful to public health. Better treatment provides to regain movements, behaviors and functional capacity, which enhances lifestyle and increasing in ability to do work.<sup>[2]</sup> The significance of active life style is to reduce the risk of cardiovascular disease, obesity and diabetes. As a result, they give a message for health promotion that every adult must do physical activity at least half an hour per day a week. Majority adults of United States and Britain go to clinic at least 1 times within 2 years for taking the guidance of general practitioners.<sup>[3]</sup> Physical activity is advantageous for several diseases like heart problem, diabetes & Cancer as well. The complete load of diseases depends upon the physical inactivity. For the Promotion of physical activity, good general practice is required due to numerous reasons. In Australia, due to the doctor's visit of adult once in a year, general practitioners have a power to reach huge population, source of information and other advices which they give to the patients on physical activity. There is a long-lasting follow-up of patients because they have older relation with patients which effects on better counseling as well. After all reviews it is described that patients can adopted physical activity because of GP advice and communication as well as behavior.<sup>[4]</sup> For social marketing and promotion of health, a use of internet and differential internet growth has been parallel by study. Advantages of behavioral change, health promotion and social marketing evaluated with a physical activities interruption. There was harmony that in the behavioral changes low degree of interactivity was not more effective than with high degree interactivity.<sup>[5]</sup> Feasibility and approval of physical activity promotion is the significant measure to determine the research from public health.<sup>[6]</sup> There are three main points on which Primary Care has been based. It includes: (a) Factors which influenced characteristics of patient. (b) Consultation by Primary Health Care staff members. (c) Rules & regulations, agreements as well as manner and attitude.

All these factors are related with a professional who shows their behavior, perception and knowledge as well.<sup>[7]</sup> In this study they go on the results of those patients who come in physiotherapy clinic for the performance of physical activity which indicates behavioral education and skills. Basically this study is based on the improvement of physiotherapist's perception, knowledge and behavior.<sup>[8-10]</sup> Life hope have gained as well as decreased the risk factors of trouble creating disease likewise, diabetes, heart problems, osteoporosis and

fracture of hip by performing physical activity on daily basis. In many industrialized countries, there are the combinations of exercise skill, managed teaching sessions, health care clinics in the form of routine consultations advices by primary care intercession. Furthermore, daily consultation is more effective to any adult as compared to comprehensive intervention because regular advices from consultants increases the support of active physical life style and covers a large proportion of population.<sup>[11]</sup> In all developing countries, it is assumed that there is gaining significance of non-communicable chronic diseases among adult population. General practitioners are responsible for teaching the patient and giving advices for the promotion of physical active life style.<sup>[12]</sup> It is highly complicated process that there is always need a proper assessment about physical active lifestyle for the management of physical inactivity in the patient's lifestyle. General practitioners should assess properly in stepwise pattern of treatment process and try to get information of every individual's health problem. On the other hand GP's also give focus on the environmental factors of adults.<sup>[13]</sup>

Physical therapist works as health care professionals also who are responsible for the promotion of physical activity, wellness and fitness by the help of exercises which can reduce obesity as well. They can play a vital role in the management and prevention of overweight. The complications which occurred due to over body weight can be decreased by increasing the ratio of physical activity daily. Physical therapist must have an ability to treat their patients on different categories to contrive the patient's health problem and physical fitness. As a result patient's can work independently. There are 2 things which effect on physical active lifestyle of patient. These are behavior and knowledge.<sup>[14-15]</sup> Most of the medical comorbid can be reduced by increasing physical activity in the daily routine of patients.<sup>[16]</sup> The quantity of exercises rises by performing aerobic physical activity on daily basis. As a result, adults can prevent from chronic several chronic diseases such as Cardio vascular disease. Adult population must be performing physical exercises in their daily routine for the promotion of health program according to their demand and interest. There are many physical activities such as running, walking, jogging on track, cycling, swimming, rolling and sports activities are also included in it.<sup>[17]</sup>

The Guide to Physical Therapist prefers that there is involvement of physical therapist in all the three categories that is primary, secondary or tertiary. For instance, familial risk factors, psychological performance (memory, depression, anger and reasoning capability), behavioral factors (smoking drug intake abuse), health fitness level and supportive systems as well. Physical therapists are responsible to address the promotion of health problems. On the other hand patients do such physical activities which are essential for them by the assistance of physical therapist.<sup>[18]</sup> A patient's health influence

by all healthcare interactions as well as brief interventions also plays a significant role. Due to daily healthcare consultations brief interventions for PA can be provided in; they have the potential to reach a large proportion of the adult population.<sup>[19-20]</sup> Physical therapists are health professionals who are perfectly appropriate for delivering health education to patients. In the comparison with other well-known health professionals, their practice pattern typically requires expanded time of patient and prolonged visits.<sup>[21]</sup> In daily practice there are sort of strategies which have been implemented with proper counseling sessions.<sup>[22]</sup> Physical activity plays a great role in other health problems and outcomes likewise, cardiovascular disease, depression, Type II diabetes, cardiovascular disease and malignancies.<sup>[23]</sup> In spite of the overpowering proof on the benefits of physical activity in the prevention, rehabilitation and management of chronic health diseases, physical activity levels persist low in all over the world and variable across people of society. In this study, in most of the countries there are policy interventions that can bring about population wide change in physical activity participation. However in all developing countries it is essential to assist with policy and standard program, health professionals with necessary knowledge and expertise are required to participate in effecting adaptations in physical activity attitude.<sup>[24]</sup> An advice into action should be translated by patients. They have to follow advice appropriately, for suitable time and with proper intensity to improve all problems and function. Patients may undertake exercise independently from other healthcare practitioners' advice and encouraged patients may exercise with little or no benefit without any command.<sup>[25]</sup> Objective of the study was to observe the physical therapist's prescription regarding benefits of active life style of patients.

### MATERIAL AND METHOD

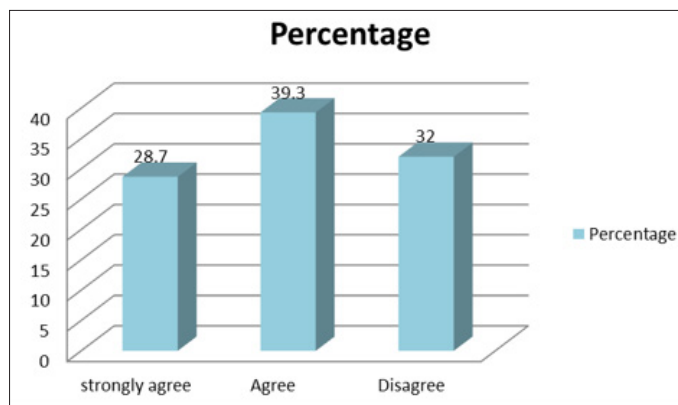
The sample consisted of 150 male and female physical therapist of different hospitals located in Karachi. It was a cross-sectional study. The sample size was calculated by epi sample size calculator. This study approved by Institutional Ethical Review committee of Isra University. The duration of study was six months from April, 2019 to September 2019. Practicing Physical therapists were included by convenient sampling to fill the consent form. Diploma Holders and undergraduate students were excluded. The modified and adopted questionnaire physical activity Promotion in the Physical Therapy Setting (Shirley D et al.<sup>[1]</sup> 2010). Data was analyzed by the use of software Statistical Packages of Social Sciences (SPSS) version 20. Frequency, percentage was applied to examine the physical therapist's prescription regarding benefits of active life style of patients. It was also assured to the participant that the information was completely confidential.

### RESULT

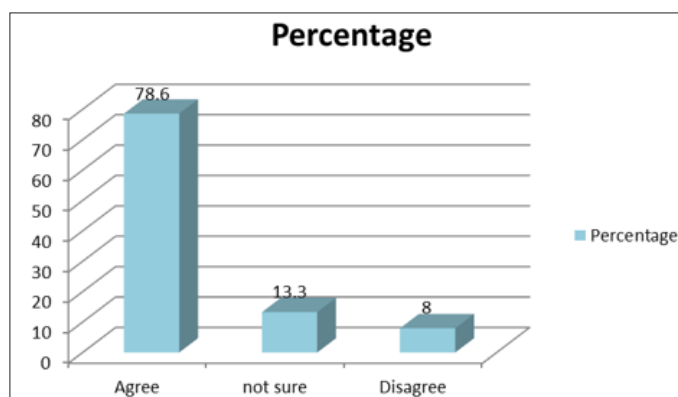
Response rate of this study was 100%. **Table 1** shows that mean age is 29.13 years, the working experience mean is 5.37 years, the mean of number of patients in a week are 39.94 and the mean of working hours of physical therapist are 39.05 hours. **Figure 1** shows that when prescribe the patient for more active each day, 28.7% participants were strongly agree, 39.3% participants were agree and remaining 32% participants were disagree. **Figure 2** shows that when prescribe half an hour or walking on most day is all the exercise that is needed for good health, 78.6% participants were agree and 13.3% respondents were not sure, 8% participants were disagree. **Figure 3** shows that when prescribing the benefits of a physically active life style with patients is part of the physical therapists role, 71.3% participants were strongly agree, 28% were agree and remaining 0.7% participants were not sure.

**Table 1.** Demographic details

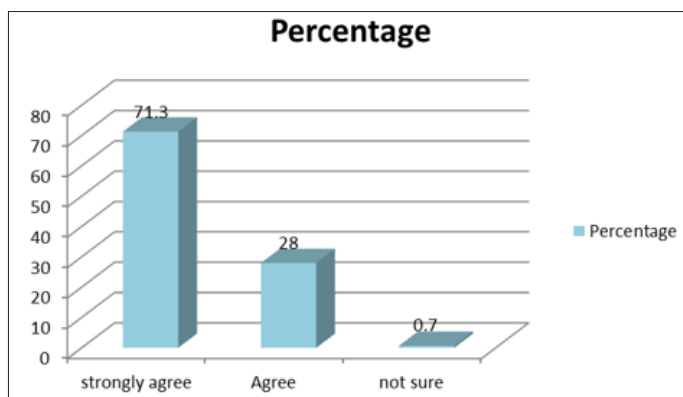
Variables	N	Mean	Std. Deviation
Age in years	150	29.13	4.393
Working experience in years	150	5.37	3.977
Average number of patients you see each week	150	39.94	15.825
Working hours per week	150	39.05	12.111



**Figure 1.** Prescribe the patient for more active each day



**Figure 2.** Prescribe half an hour or walking on most day is all the exercise that is needed for good health



**Figure 3.** Prescribing the benefits of a physically active life style with patients is part of the physical therapists role.

## DISCUSSION

The current study indicates that physical therapists believe on suggestions for health promotion about physical activity and active life style plays a major part in population. On the other hand they feel fear to promote proper knowledge about physical activity due to some obstacles. Mostly, physiotherapists prefer brief counseling into their treatment sessions was thought to be the most feasible form of physical activity promotion in physical therapist practice, by the help of different styles likewise, brochures. Moreover compare results of our study with the American study in which physical therapists of America showed significant believed promotion of physical activity is the part of physical therapist while our findings showed same significant believed that active life style promotion in patient is the part of physical therapist. In the previous study, mostly physicians that participated in the research work believed that physicians play a vital role in physical activity promotion.<sup>[15]</sup> Similarly, in this study mostly participants were strongly agree for suggesting to patients ways to increase daily physical activity in life.

Rea BL et al.<sup>[18]</sup> has done the study on the role of health promotion among physical therapist in California, New York and Tennessee to investigate the perception of practice patterns. As a result, the most common practice setting was related to orthopedics same as the result of our study in which majority physical therapist worked in musculoskeletal practice area.

Lowe A et al.<sup>[19]</sup> has done the study on the Physiotherapy and physical activity: a cross-sectional survey exploring physical activity promotion, knowledge of physical activity guidelines and the physical activity habits of UK physiotherapists this study was to explore PA promotion in routine physiotherapy practice in the UK. As study showed that

Seventy-seven per cent of respondents routinely discussed physical activity with patients and 68% routinely delivered brief interventions. Assessment of physical activity status was not routine practice, neither was signposting to further sources of physical activity support. Despite the promising finding that some form of physical activity promotion is

integrated into most respondents' practice, we report a poor understanding of brief interventions and poor knowledge of the physical activity guidelines. Additionally, the majority of respondents were not sufficiently active to meet current physical activity recommendations which is not similar with our study in which mostly respondents were strongly agreed in discussing the benefits of a physically active life style with patients is part of the physical therapists role.<sup>[19]</sup>

## CONCLUSION

Mostly physical therapists prescribed the benefits of active life style of their patients. The further result of this study concluded that physical therapist agreed to prescribe the short time exercises on most of the day is better for patient's health. The outcomes of this study recommended that the governing body of physical therapy profession to organized different programs like workshops and seminars regarding fitness training.

## ETHICAL DECLARATIONS

**Ethics Committee Approval:** The study was carried out with the permission of Isra University Institutional Ethical Review Committee.

**Informed Consent:** Written informed consent was obtained from all participants who participated in this study.

**Status of Peer-review:** Externally peer-reviewed.

**Conflict of Interest Statement:** The authors have no conflicts of interest to declare.

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**Author Contributions:** All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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## REFERENCES

1. Shirley D, Hidde P, der Ploeg V, Bauman AE. Physical activity promotion in the physical therapy setting: Perspectives from practitioner's and students. *PhysTher* 2010;90(1):1311-22.
2. Verhagen E, Engbers L. The physical therapist's role in physical activity promotion. *J Sports Med* 2009;43(4):99-101.
3. Eaton CB, Menard LM. A systematic review of physical activity promotion in primary care office settings. *Br J Sports Med* 1998;32:11-6.

4. Gnanendran A, Pyne DB, Fallon KE, Fricker PA. Attitudes of medical students, clinicians and sports scientists towards exercise counseling. *J Sports Sci Med* 2011;10:426-31.
5. Kolt GS, Rosenkranz RR, Savage TN, et al. WALK 2.0-using Web 2.0 applications to promote health-related physical activity: a randomised controlled trial protocol. *BMC public health* 2013;13(1):436.
6. Barrett B, Marchand L, Scheder J, et al. Themes of holism, empowerment, access, and legitimacy define complementary, alternative, and integrative medicine in relation to conventional biomedicine. *J Altern Complement Med* 2009;9(6):937-47.
7. Douglas F, Torrance N, Van Teijlingen E, Meloni S, Kerr A. Primary care staff's views and experiences related to routinely advising patients about physical activity. a questionnaire survey. *BMC public health* 2006;6(1):138-44.
8. Sheedy J, Smith B, Bauman A, et al. A controlled trial of behavioural education to promote exercise among physiotherapy outpatients. *Aust J Physiother* 2000;46(4):281-90.
9. Aweto HA, Oligbo CN, Fapojuwo OA, Olawale OA. Knowledge, attitude and practice of physiotherapists towards promotion of physically active lifestyles in patient management. *BMC Health Serv Res* 2013;13(1):21.
10. Hofmann J, Peters S, Geidl W, Hentschke C, Pfeifer K. Effects of behavioural exercise therapy on the effectiveness of a multidisciplinary rehabilitation for chronic non-specific low back pain: Study protocol for a randomised controlled trial. *BMC Musculoskelet Disord* 2013;14(1):89.
11. Lawlor DA, Hanrathy B. The effect of physical therapy advice given in routine primary care consultations: a systematic review. *J Public Health* 2001;23(3):219-26.
12. Maira JP. Do our medical colleges inculcate health promoting life style among medical students: a Pilot study from two medical colleges from Southern India. *J B Prev Med* 2013;4(4):425-9
13. Hinrichs T, Moschny A, Klaaßen-Mielke R, Trampisch U, Thiem U, Platen P. General practitioner advice on physical activity: analyses in a cohort of older primary health care patients (getABI). *BMC Fam Pract* 2011;12(1):26.
14. Harris M. The role of primary health in preventing the onset of chronic disease, with a particular focus on the lifestyle risk factors of obesity, tobacco and alcohol, Primary Health care and Equity. *J B Prev Med* 2008;34(1):567-89
15. Sack S, Radler DR, Mairella KK, Touger-Decker R, Khan H. Physical therapist's attitudes, knowledge and practice approaches regarding people who are obese. *Phys Ther* 2009;89(8):804-15.
16. Nelson ME, Rejeski WJ, Blair SN, et al. Physical activity and public health in older adults: recommendation from the American College of Sports Medicine and the American Heart Association *Med Sci Sports Exerc* 2007;39(8):1435-45.
17. Fletcher GF, Balady G, Blair SN, et al. Statement on exercise: benefits and recommendations for physical activity programs for all Americans: a statement for health professionals by the Committee on Exercise and Cardiac Rehabilitation of the Council on Clinical Cardiology, American Heart Association. *Circulation* 1996;94(4):857-62.
18. Rea BL, Marshak HH, Neish C, Davis N. The role of health promotion in physical therapy in California, New York, and Tennessee. *Phys Ther* 2004;84(6):510-23.
19. Lowe A, Littlewood C, McLean S, Kilner K. Physiotherapy and physical activity: a cross-sectional survey exploring physical activity promotion, knowledge of physical activity guidelines and the physical activity habits of UK physiotherapists. *BMJ Open Sport Exerc Med* 2017;3(1):290-5.
20. Abaraogu UO, Edeonuh JC, Frantz J. Promoting physical activity and exercise in daily practice: current practices, barriers, and training needs of physiotherapists in eastern Nigeria. *Physiother Can* 2016;68(1):37-45.
21. Alexander J, Bambury E, Mendoza A, Reynolds J, Veronneau R, Dean E. Health education strategies used by physical therapists to promote behaviour change in people with lifestyle-related conditions: a systematic review. *Hong Kong Physiother J* 2012;30(2):57-75.
22. Swinburn BA, Walter LG, Arroll B, Tilyard MW, Russell DG. The green prescription study: a randomized controlled trial of written exercise advice provided by general practitioners. *Am J Public Health* 1998;88(2):288-91.
23. Leung W, Roberts V, Gordon LG, et al. Economic evaluation of an exercise-counselling intervention to enhance smoking cessation outcomes: The Fit2Quit trial. *Tob Induc Dis* 2017;15(1):21-7.
24. Oyeyemi AL, Oyeyemi AY, Habib RY, Usman RB, Sunday JU, Usman Z. A survey of physicians and physiotherapists on physical activity promotion in Nigeria. *Arch Physiother* 2017;7(1):5-11.
25. Cottrell E, Roddy E, Foster NE. The attitudes, beliefs and behaviours of GPs regarding exercise for chronic knee pain: a systematic review. *BMC Fam Pract* 2010;11(1):4-10.