



## Perception of Physiotherapist in Saudi Arabia Regarding their Role in Physical Activity Promotion

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### Abstract

**Objectives:** The purpose of this study is to assess the perception of physiotherapist in Saudi Arabia regarding the role of physical activity promotion.

**Methods:** A self-administered questionnaire was developed and distributed to physiotherapist in Saudi Arabia. The study included 279, of which male 68.8% and female 31.2% physiotherapists participated in the study.

**Results:** Two hundred and seven (74.2%) Discuss the benefits of physical activity with patients is strongly agreed is a part of the role of the physiotherapist and 173 (62%) strongly agree providing patients with multiple ideas to increase the daily physical activity is part of the physiotherapist's role. 55.2% of responded were feel confident to suggest specific physical activity programs for their patients.

**Conclusions:** Physiotherapists in Saudi Arabia have a good understanding of how to encourage their patients to be physically active, but due to a lack of consultation time, they do not advise many of them. The most practical form of physical activity promotion in patient management is thought to be integrating brief counseling into regular treatment sessions.

**Keywords:** Perception; Physiotherapist; Saudi Arabia; Physical Activity

### Introduction

Physical activity is defined as any movement resulting in a significant amount of energy expenditure [1]. Physical inactivity, according to the WHO, is the fourth leading global mortality risk factor, accounting for 6% of the global mortality rate. Saudi Arabia was physically inactive in 58.5 per cent of the Saudi adult population [2,3].

When compared to insufficient activity, regular physical activity reduces the risk of all-cause mortality by 20% to 30% [4]. The majority of these effects on all-cause mortality can be attributed to the beneficial effects of physical activity on cardiovascular disease

and cancer, which are two of the most common causes of mortality and morbidity in the Western world. The American College of Sport Medicine and the American Heart Association have combined this epidemiological evidence into recommended levels of physical activity for metabolic health and cardiovascular disease prevention [5-7]. According to international guidelines, at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity physical activity per week should be accumulated for health benefits [3].

Enhanced body composition, overweight prevention, skeletal, metabolism and cardiovascular health improved, are all well-documented physical activity benefits [8-11]. Numerous psychosocial

benefits, such as reduced symptoms of depression, stress, and anxiety, as well as increased self-confidence and self-esteem, are included in addition to the biological benefits [12,13].

It is a well-documented impact of physical inactivity on health, described as the major health issue of the 21<sup>st</sup> century [14,15]. Failure to maintain an active lifestyle places a substantial financial and social burden on the healthcare systems and society as a whole. Inactive individual spend 38% more days in the hospital and consume significantly more healthcare resources than active people [16].

Health care providers have a particularly good chance of promoting physical activity as a health intervention because they deal with people daily. Many of the patients who visit primary care clinics have health issues that could be avoided if they lived a physically active lifestyle [17,18].

The physiotherapist is the best predictor for prescribing programs for physical activity during the consultation [19]. Although physiotherapists are widely assumed to take part in the promotion of physical activities, there is little known about the perspective of individual physiotherapists about their potential role in or confidence in physical activity promotion. This study was therefore intended to investigate the physiotherapists' perception of the role of physical activity in Saudi Arabia.

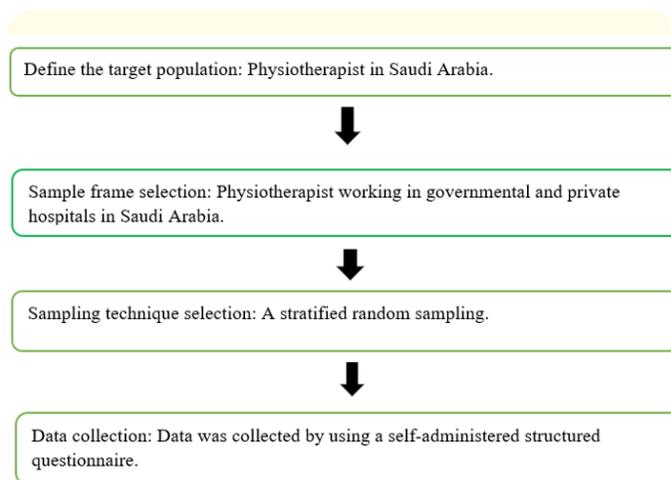
**Methods**

A total of Two hundred and seventy-nine (279) physiotherapists (192 males and 87 females) They were invited to participate through the online survey software (Google Forms). All responses were voluntary, anonymous, confidential, and for research purposes only. This study is target physiotherapist in Saudi Arabia. The sampling process steps illustrated in figure 1.

**Questionnaire design**

The questionnaire titled (perception of physiotherapists in Saudi Arabia regarding role of physical activity promotion). This questionnaire was adopted from a previous study by Shirley, *et al.* [20].

It had four sections. Section A collected information on the demographic data of the participants. Section B (1-8 items) collect information on the physical activity required for health benefits in



**Figure 1:** Sampling process steps.

adults, perception of the role of physiotherapist in physical activity promotion and confidence in promoting physical activity. Section C (9-14 Items) collect information on the barriers to physical activity promotion. Section D (15-18 items) collect information on the feasibility of different physical activity promotion strategies. All items were scored on a 5-point Likert scale.

**Data analysis**

Responses were organized in Microsoft Excel 2019 (Microsoft Corp. Redmond, Washington, United States). Descriptive statistics of frequency, percentages were used to summaries data. Inferential statistics of chi-square was used to determine the association barriers to promotion Physical activity and feasibility of different physical activity promotion strategies with the number of patients counselled in a day. The results were presented using tables, bar, and pie charts. The level of significance was set at  $p < 0.05$

**Result**

279 physiotherapists (192 males and 87 females) completed the survey (Table 1). A 126 (45.2%) of the respondents treated 6-10 patients per day while 116 (41.6%) treated 1-5 patients every day (Table 1).

Two hundred and seven (74.2%) discuss the benefits of physical activity with patients is strongly agreed is a part of the role of the physiotherapist. 173 (62%) strongly support the role of physiotherapists is to provide patients with multiple ideas to improve

Frequency (%)	
Gender	
Male	192 (68.8 %)
Female	87 (31.2 %)
Age group	
20 - 30	162 (58.1 %)
31 - 40	95 (34.1 %)
41 -50	16 (5.7 %)
+51	6 (2.2 %)
Experience (Years)	
< 6	155 (55.6 %)
6 - 10	69 (24.7 %)
11 - 15	32 (11.5 %)
16 - 20	10 (3.6 %)
+20	13 (4.7 %)
Practice Type	
Government Hospital	184 (65.9 %)
Private Hospital	57 (20.4 %)
Clinic	19 (6.8 %)
Not working	19 (6.8 %)
Location of practice	
Western	187 (67%)
Eastern	19 (6.8%)
Middle	36 (12.9%)
Northern	6 (2.2 %)
Southern	31 (11.1%)
Total patient per day	
< 6	116 (41.6 %)
6 - 10	126 (45.2 %)
11 - 15	32 (11.5%)
+15	5(1.8%)
Degree	
Diploma	12 (4.3%)
Bachelor’s degree	208 (74.6 %)
Master’s degree	49 (17.6 %)
Doctor of Physical Therapy (DPT)	3 (1.1 %)
Doctor of Philosophy (PhD) or equivalent	7 (2.5 %)

**Table 1:** Participant Characteristics.

physical activity level (Table 2). 55.2% of responded were feel confident to suggest specific physical activity programs for their patients (Table 2). 68.4% of responded they believes the lake of time will barriers to promote physical activity (Table 3).

Almost all physiotherapists believed that integrating brief physical activity counseling into regular treatment sessions would be feasible. Distribution of resources and group physical activity consultations were thought to be less feasible (Table 4). Chi-Square analysis showed that there was no significant association between barriers to promotion Physical activity with number of patients per day (Table 5).

Chi-square analysis showed that there was a statistically significant association between counseling integrated into regular sessions with number of patients per day (Table 6).

**Discussion**

The purpose of the study is to evaluate physiotherapist perception in order to promote physical activity. There was a high level of knowledge of the promotion of physical activity among the respondents. Nearly all respondents were very good attitudes towards physical activity promotion (role perception and confidence). 68% of participants also found an insufficient time to conduct a consultation as an obstacle for promoting patients’ active lifestyles. Almost all respondents identified brief counseling as the most viable way to promote physical activity in patient management as integrated into regular consultations.

Our findings are similar to those of Australian physicians who responded to a similar survey, with 98 percent believing that encouraging physical activity is part of their job. However, compared to the current sample of physiotherapists, the surveyed physicians were less confident in giving specific physical activity advice [21]. This finding puts physiotherapists ahead of other primary care providers when it comes to successfully integrating physical activity promotion into practice. Our findings have also shown that there were few barriers for promoting an active lifestyle in the study’s physiotherapist, while several of them are often known to prevent physicians from encouraging physical activity, especially lack of time, lack of financial gain and limited counseling skills [21].

It was found that nearly all physiotherapists agree that suggestion was integrated into regular session was considered the most appropriate method of physical promotion. Shirley, *et al.* noted

Variable	Strongly Agree n (%)	Agree n (%)	Not Sure n (%)	Disagree n (%)	Strongly Disagree n (%)	Mean
A: Knowledge of Physical activity message						
Climbing the stairs at work and generally being more active each day is enough physical activity to improve health	75 (20.4)	80 (28.7)	68 (24.4)	59 (21.1)	15 (5.4)	3.38
Half an hour of walking on most days is all the exercise that is needed for good health	26 (9.3)	78 (28)	76 (27.2)	73 (26.2)	26 (9.3)	3.02
Exercise that is good for health must make you very tired and pant	20 (7.2)	36 (12.9)	48 (17.2)	88 (31.5)	87 (31.2)	2.33
Several short walks of 10 minutes each on most days is better than one long round per week for a good health	100 (35.8)	87 (31.2)	63 (22.6)	16 (5.7)	13 (4.7)	3.88
B: Perception of role						
Discussing the benefits of a physically active lifestyle with patients is part of the physiotherapist's role	207 (74.2)	53 (19)	14 (5)	1 (0.4)	4 (1.4)	4.64
Providing patients with multiple ideas to increase the daily physical activity is part of the physiotherapist's role	173 (62)	78 (28)	22 (7.9)	3 (1.1)	3 (1.1)	4.49
C: Confidence in promoting Physical activity						
I feel confident to suggest specific physical activity programs for my patients	154 (55.2)	88 (31.5)	31 (11.1)	4 (1.4)	2 (0.7)	4.39
Physiotherapist should be physically active to act as a role model for their patients	144 (51.6)	86 (30.8)	30 (10.8)	14 (5)	5 (1.8)	4.25

**Table 2:** Knowledge of Physical activity, Perception of role, and Confidence in promoting Physical activity.

Variable	Very often n (%)	Often n (%)	Sometime n (%)	Rarely n (%)	Never n (%)	Mean
Lack of time	47 (16.8)	85 (30.5)	103 (36.9)	27 (9.7)	17 (6.1)	3.42
Lack of counseling skills	11 (3.9)	40 (14.3)	89 (31.9)	66 (23.7)	73 (26.2)	2.46
Lack of financial gain in exchange for promoting physical activity	34 (12.2)	29 (10.4)	62 (22.2)	31 (11.1)	123 (44.1)	2.35
Lack of interest in promoting physical activity	32 (11.5)	48 (17.2)	70 (25.1)	42 (15.1)	87 (31.2)	2.63
Feeling it would not change the patient's behavior	25 (9)	29 (10.4)	85 (30.5)	63 (22.6)	77 (27.6)	2.51
Feeling it would not be beneficial for the patient	9 (3.2)	15 (5.4)	38 (13.6)	54 (19.4)	163 (58.4)	1.76

**Table 3:** Barriers to promotion Physical activity.

Variable	Highly Feasible n (%)	somewhat feasible n (%)	Not Sure n (%)	Not really feasible n (%)	Totally unfeasible n (%)	Mean
counseling integrated into your regular sessions	139 (49.8)	92 (33)	38 (13.6)	8 (2.9)	2 (0.7)	4.28
Separate one-on-one consultations	88 (31.5)	99 (35.5)	70 (25.1)	18 (6.5)	4 (1.4)	3.89
Group session	77 (27.6)	70 (25.1)	78 (28)	35 (12.5)	19 (6.8)	3.54
Distribution of resources (ex: brochures)	91 (32.6)	87 (31.2)	60 (21.5)	23 (8.2)	18 (6.5)	3.75

**Table 4:** Feasibility of different physical activity promotion strategies.

Variable	Chi square		Sig
	n1	n2	
Lack of time	9.4		0.05
Lack of counseling skills	3.5		0.467
Lack of financial gain in exchange for promoting physical activity	3.49		0.479
Lack of interest in promoting physical activity	7.7		.103
Feeling it would not change the patient’s behavior	2.1		0.714
Feeling it would not be beneficial for the patient	6.8		0.145

**Table 5:** Association between barrier to promote physical activity and number of patients per day. (n1: less than 5 or 5 patient per day =121, n2: more than patient per day =158).

Variable	Chi square		Sig
	n1	n2	
Counseling integrated into your regular sessions	24.8		0.00
Separate one-on-one consultations	2.3		0,679
Group session	7.6		0.106
Distribution of resources (ex: brochures)	5.3		0.250

**Table 6:** Association between Feasibility of different physical activity promotion strategies and number of patients per day. (n1: less than 5 or 5 patient per day =121, n2: more than patient per day =158).

that physiotherapists indicated that individual consultations are much more difficult, but that integrating activity promotion advice into regular session is accepted by almost all [20].

In addition to our finding that of the physiotherapist have good knowledge of physical activity messages, (60%) of responded chose Half an hour of walking on most days is all the exercise that is needed for good health. According to international guidelines, at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity physical activity per week should be accumulated for health benefits [3].

The main limitations of this study are that the physiotherapists who chose to participate may be more interested in physical activity and health promotion in general. However, because the sample size for this study was so small, some differences between groups could not be detected.

**Conclusion**

Physiotherapists in Saudi Arabia have a good understanding of how to encourage their patients to be physically active, but due to a lack of consultation time, they do not advise many of them. The

most practical form of physical activity promotion in patient management is thought to be integrating brief counseling into regular treatment sessions.

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