RESEARCH ARTICLE

Adults Expect Physical Activity Advice from **Physiotherapists**

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Objective: To investigate the factors that influence adults' expectations of getting services from physiotherapists in Saudi Arabia, particularly about physical treatments, general health counseling, and advice on physical activity (PA). Methods: An online nationwide crosssectional survey was used to collect data. Participants: Saudi adults aged 18 years and older who have visited or have not visited physiotherapy clinics for treatment. *Outcome measures:* The questionnaire included questions regarding the expectations from physiotherapists about providing advice related to PA and general health as well as physical interventions. A 5-point Likert scale was used to evaluate the responses. Out of 357 responses received, 344 participants were eligible to participate in this study. To improve their PA levels, most participants reported it is essential (46%) or extremely important (30.5%) that they receive guidance from a physiotherapist. Moreover, 22% reported it is extremely important and 44% of participants reported that it is important that a physiotherapist offers massage. Satisfaction with physiotherapy was highest when respondents expected a physiotherapist to offer massage, and the odds ratio for those who preferred to visit a physiotherapist to improve their level of health was highest when expecting general health advice. Older and more educated participants are more likely to expect PA advice. Saudi adults expect PA and general health advice from physiotherapists more than physical interventions; therefore, physiotherapists should not hesitate to provide it.

Keywords: Saudi adult expectations, Exercise, Advice, Physical activity, Physiotherapy, Healthcare

INTRODUCTION

The World Health Organization (WHO) highlighted the significance of physical activity (PA) as an essential part of public health which can help in disease prevention (Carty et al. 2021). PA positively affects health, including preventing numerous cancers, such as breast, colon, and stomach cancer (Patel et al. 2019). Adults need to perform 150 minutes weekly of moderate-intensity exercise. To reach worldwide requirements, they must engage in 75 minutes of intense activity each week or whole-body muscle-strengthening exercises twice a week (Carty et al. 2021; Taylor et al. 2021). Nevertheless, 23% of individuals worldwide do not adhere to PA recommendations (Cunningham et al. 2021). Although physiotherapists work with patients and clients who may engage in unhealthy behaviors such as inactivity, smoking, poor nutrition, sleep deprivation, and stress during their routine clinical practice, physiotherapists, like all other healthcare professionals, face difficulties in addressing the health and wellness status of their patients and clients, specifically when these behaviors did not relate to the medical diagnosis that led the patient to visit the physiotherapist (Bezner, 2015; Lein et al. 2017).

Physiotherapists can help shift the medical system from illness to health and wellness (Bezner, 2015), as they are qualified professionals to improve PA levels (Shaikh and Gad, 2020; Wittink et al. 2011). Moreover, they can utilize PA to cope with a variety of conditions, including, but not limited to, musculoskeletal disorders (i.e., osteoarthritis) (Hunter and Eckstein, 2009; Peter et al. 2021) and contribute to improving general fitness (Shaikh and Gad, 2020). As members of healthcare practitioners, physiotherapists can also help promote different fitness behaviors, including a healthy diet and smoking cessation (Straker, 2012). However, the significant role of physiotherapists focused mainly on promoting general health by advising on PA rather than other aspects of general health (O'Donoghue et al. 2014).

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American Physical Therapy Association (APTA) asserts that physiotherapists must be competent in health promotion to educate patients and clients; physiotherapists need knowledge of injury and disease epidemiology, risk factors, and prevention (Bezner, 2015)

Although understanding factors influencing patient satisfaction is essential for organizational and clinical decision-makers to reach higher levels of satisfaction, physiotherapists' awareness of interpersonal issues can improve the patient experience and promote patient response; understanding these factors in the context of physiotherapy clinics can help develop tools to evaluate patient satisfaction (Waters et al. 2016). In addition to treatment, patients seek physiotherapy for diagnosis, pain relief, increased function, education, and prevention (McRae and Hancock, 2017). Thus, Physiotherapists should adhere to practice guidelines, use patient trust, develop strategies to overcome barriers, and meet patient expectations (Adje et al. 2022) which are still unknown among Saudi adults. Therefore, the main purpose of this study was to investigate Saudi adults' expectations of receiving PA guidance, general health advice, and physical treatments from physiotherapists, as well as the factors related to these expectations.

MATERIALS AND METHODS

Study design and instrument

This study was designed as a cross-sectional survey following the strengthening of reporting observational studies in epidemiology (STROBE) guidelines (Von Elm et al. 2014). The sample size was calculated based on statistics of the Saudi population in 2022 (32.2 million people, 65.5% of them aged 18 or older (General Authority of Statistics, 2022). According to this number, a margin of error of 5%, a confidence level of 0.95%, and a minimum intended sample size of 300 people were calculated for this study.

The survey tool utilized in this research was derived from an Australian cross-sectional study (Kunstler et al. 2019a) and translated to Arabic by the forward-backward translation method; step 1: Forward translation first, translated from English to Arabic with the intention to keep the meaning of the original questionnaire; step 2: Backward translation by translating the Arabic version to English, then comparing it with the initial questionnaire (Vanti et al. 2013) and testing its psychometric properties (reliability) before data collection. Data was collected online using an online survey tool. The survey tool consisted of three main sections: 1) questions related to demographic information, general health, and PA level; 2) questions on the experience of visiting a physiotherapist; 3) From the participant's perspective, questions examined physiotherapy anticipated likelihood of obtaining treatments and the importance of offering these services. Almost all the multiple-choice questions in sections two and three were graded on a Likert scale with a rating of five. (1

= extremely unimportant, 2 = Not important, 3 = important, 4 = extremely important, with an option 'I do not know what this service is').

Participants eligibility criteria and recruitment

This study included male and female Saudi adults at least 18 years old who can read and understand Arabic and have or have not experienced physiotherapy services. Non-Saudi participants were excluded from this study to ensure that the responding cohort accurately reflected the Saudi adult population.

Before the data collection process, ethical approval was obtained from the institutional review board of Taif University's scientific committee (IRB approval number: 43-755). The survey was designed as web-based, using Google Forms, and distributed among Saudi adults online (e.g., via social media) between June 5 and October 6, 2022, to reach a general sample that reflects the Saudi adult population.

Statistical analysis

After exporting the data from the online survey, it was analyzed via the statistical program SPSS version 29.0.1.0 (171). Responses were presented using descriptive statistics (frequency and percentages). Additionally, multivariable analysis (binary logistic regression), and odd ratios (OR) at 95% confidence intervals (CIs) were used to analyze factors influencing adults' expectations for particular services.

RESULTS

A total of 357 respondents responded to the survey of this study. However, after applying eligibility criteria, those who did not agree to participate in the survey (n=4), non-Saudi (n=6), and younger than 18 years old (n=3) were excluded. Three hundred forty-four participants were included in the data analysis. (Figure 1).

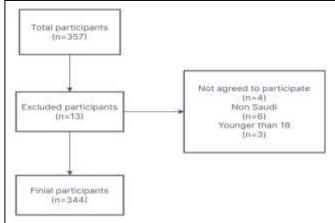


Figure 1: Participants flow diagram.

Out of 344 participants, the majority were males (n = 209, 60.8%), aged between 35 to 54 years (n = 238,

68.6%), holding bachelor's degree or equivalent (n =232, 67.4%), considered themselves to be in similar health to their friends (n = 124, 36%), having consulted a physiotherapist for diagnosis or treatment of any disorders (n = 211, 61%), and lacked 'private health insurance' to pay for physiotherapy services (n = 266, 77.3%) (Table 1).

Table 1: Demographic characteristics of respondents

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Characteristics	Number (percentage) (Total number=344)			
Gender				
Male	209 (60.8)			
Female	135 (39.2)			
Age				
18 to 24	31 (8.9)			
25 to 34	37 (10.7)			
35 to 44	120 (34.6)			
45 to 54	118 (34)			
55 to 64	37 (10.7)			
65 or older	1 (0.3)			
Having private health insurance that includes				
physiotherapy s	ervices:			
Yes	45 (13.1)			
No	266 (77.3)			
Do not know	33 (9.6)			
Level of education				
Primary education	1 (0.3)			
Intermediate education	4 (1.2)			
Secondary education	52 (15.1)			
Bachelor's degree	, ,			
(or equivalent, e.g.,college)	232 (67.4)			
Post Graduate Degree	55 (16)			
(Masters, PhD)				
Health compared to friends?				
Much healthier	30 (8.7)			
Healthier	159 (46.2)			
The same	124 (36)			
More injured or ill than friends	23 (6.7)			
Much more injured or ill than	8 (2.3)			
friends				
Exposure to physiotherapy				
Yes	211 (61.3)			
No	130 (37.8)			
Would not choose to see a	3 (0.9)			
physiotherapist				
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Saudi adults' perceptions towards physiotherapists regarding providing PA advice and general health advice in addition to physical interventions

Many participants reported that it was significant or highly significant for a physiotherapist to advise them on improving their PA and fitness levels (n = 263, 76%) (Figure 2). A physiotherapist providing massage (n = 226, 67%) and taping/strapping (n = 237, 69%) were rated essential or extremely important by few participants. Fewer respondents reported that offering acupuncture by a physiotherapist is essential or highly important (n = 194, 56%) (Figure 2). It does not represent all physical treatments, as few respondents believed that obtaining

specific general health advice from physiotherapists was more significant than receiving advice about PA, such as guidance on how to lose weight with a balanced diet (n = 246, 72%), quit smoking (n= 214, 62%) (Figure 2).

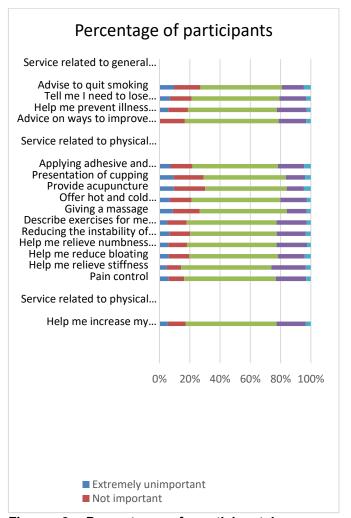


Figure 2: Percentage of participants' responses regarding the importance of having specific services from physiotherapists

Factors influence expectations of Saudi adults when receiving physical treatments from physiotherapists

Older and more educated people were more likely to expect PA advice, but it was less likely to expect that a physiotherapist would offer general health advice and a massage (Table 2). When respondents expected massage, they were more satisfied with physiotherapy than PA advice; the same outcome was obtained for those who believed physiotherapists met expectations (Table 2). Regarding the odds ratio when seeking general health advice, the likelihood for individuals who chose to see a physiotherapist to be in better health is the highest, while the likelihood was the lowest when expecting PA advice (Table 2).

Table 2: Factors influence Saudi adults' expectations regarding physiotherapy services.

Dependent variable	Independent variable	Odd Ratio	Confidence Interval (95%)	
Expecting physical activity advice from physiotherapists	Age	1.461	0.926 to 2.305	
	Gender	0.762	0.477 to 1.217	
	Education	0.954	0.526 to 1.731	
	Level of satisfaction with physiotherapy services	0.375	0.224 to 0.627	
	Physiotherapist meets their expectations ^a	0.468	0.258 to 0.850	
	Preferred to visit a physiotherapist to improve level of health	0.628	0.368 to 1.070	
Expecting general health advice from physiotherapists	Age	0.803	0.435 to 1.482	
	Gender	0.636	0.337 to 1.200	
	Education	0.584	0.269 to 1.268	
	Level of satisfaction with physiotherapy services	1.040	0.538 to 2.009	
	Physiotherapist meets their expectations a	1.467	0.771 to 2.789	
	Prefer to visit a physiotherapist to improve level of health	21.069	11.068 to 40.107	
Expecting physiotherapists to provide massage	Age	0.714	0.410 to 1.244	
	Gender	0.890	0.508 to 1.559	
	Education	0.677	0.337 to 1.362	
	Level of satisfaction with physiotherapy services	1.277	0.711 to 2.292	
	Physiotherapist meets their expectations ^a	2.003	1.087 to 3.689	
	Prefer to visit a physiotherapist to improve level of health	15.344	8.151 to 28.884	
^a Answered only by respondents who had experienced visiting a physiotherapist.				

DISCUSSION

This study investigated Saudi adults' expectations of essential physiotherapy treatments, their perception of physiotherapists' services, and the factors that affected it. Results showed that older, educated Saudi adults were more likely to receive PA and general health advice. Moreover, they believed that massage and taping treatments important than acupuncture. Physiotherapists must meet patient expectations to ensure satisfaction (Al Azmi et al. 2012). Moreover, expectations impact patients' satisfaction and their desire to continue receiving physiotherapy services (Kunstler et al. 2019b). Age and educational level affect patient satisfaction with Saudi Arabia's physiotherapy treatments (Al Azmi et al. 2012). Saudi physiotherapists must be aware of patient expectations and provide passive and active interventions, as well as other interventions when necessary (Abaraogu et al. 2016). However, physiotherapists may not fully understand the expectations of their patients (Bezner, 2015).

Because physiotherapists believe that patients prefer physical therapies, they may hesitate to offer PA advice (Waters et al. 2016). Based on the findings of this study, PA advice is more critical than massage for some participants. Patients expect self-management strategies supported by other studies (Lim et al. 2019) and hands-on treatment (Bezner, 2015). Patients may not expect PA advice if physiotherapists are not offering it, as they prefer to seek advice from experts rather than making their own decisions, leading them to ignore it (Bezner, 2015).

People are more likely to seek PA advice from physiotherapists due to the profession's relationship with exercise (Kunstler et al. 2019a). Therefore, physiotherapists need to build a quality partnership with patients on the first visit to physiotherapy clinics. Moreover, patients who are in pain may not prioritize the information provided by physiotherapists regarding PA and general

health advice as they come in pain with a focus on receiving specific treatments (e.g., massage) (Bezner, 2015). Physiotherapists are confident of their ability to manage the psychosocial aspects of pain and their ability to identify the potential role of having these tools in the physiotherapy profession (Synnott et al. 2015; Synnott et al. 2016; Cowell et al. 2019). Therefore, as physiotherapy transitions towards a period centered on health promotion, this study addresses a critical gap in the literature on expectations of physiotherapy.

The survey aimed to reach the Saudi adult community, regardless of their experience with physiotherapists. 37% of participants had never seen a physiotherapist before; they may be heard about the profession through media coverage and others' experiences. Instruments not widely available to measure physiotherapy service expectations (Bezner, 2015). The survey of the previous study was used and modified (Kunstler et al. 2019a). A similar Australian study reported that Australian adults prefer to receive PA advice from physiotherapists when compared to general health advice and physical interventions (Kunstler et al. 2019a). Similarly, the results of our study show that Saudi adults would like to receive PA advice from physiotherapists in addition to general health advice.

This study is the first cross-sectional survey of Saudi population to be published that looked at how they felt about receiving PA and general health advice from physiotherapists. The findings of this study supported the notion that Saudi individuals prefer physiotherapists' PA and general health recommendations above physical treatments. However, likewise all survey-based research, there are some limitations due to the selection and response bias of the survey. Moreover, there was a low response rate, so it was impossible to determine why nonresponders did not participate. The survey from the prior research was used and changed because this study could not locate valid and reliable survey items for evaluating physiotherapy service expectations (Kunstler et al. 2019a). Finally, the ability to generalize the survey results on Saudi adults is limited due to a low response rate (although we reached the target sample size) and the nature of the study design as a self-reported cross-sectional study subjected to self-over-estimation or under-estimation of participants.

CONCLUSION

In conclusion, Saudi adults expect PA and general health advice from physiotherapists more than physical interventions; therefore, physiotherapists should not hesitate to provide it. Future studies are advised to investigate whether there may be a connection between comorbidity, body mass index, and individuals' expectations of physiotherapists. Promoting PA is an essential public health and clinical issue, as it helps to manage and improve physical performance and prevent diseases.

The institutional review board of Taif University's scientific committee (IRB approval number: 43-755) has

approved this study. The declaration of Helsinki was followed during the development and conducting this study.

CONFLICT OF INTEREST

The authors declared that the present study was performed in absence of any conflict of interest.

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AUTHOR CONTRIBUTIONS

RK, RA contributed to the study conception and design. RK collected the data, applied the eligibility criteria in the full-texts stage, extracted the data from the included studies, and assessed the included studies for quality (STROBE checklist). RK conducted statistical analysis. RK, RA contributed to drafting the manuscript of this work, and have read and approved the final manuscript.

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