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Physiotherapists' Attitudes and Perceptions of Multidisciplinary Team Approach in Musculoskeletal Rehabilitation in Saudi Arabia: A Cross-Sectional Study

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ABSTRACT

Background: A Multidisciplinary health care team refers to a group of health professionals who collaborate for a particular patient population. However, there is little information on its implementation in Saudi Arabia. This study assessed physiotherapists' attitudes and perceptions of the multidisciplinary team (MDT) approach to musculoskeletal rehabilitation.

Methods: A total of 374 physiotherapists who have at least one year of experience participated in this cross-sectional study. The Attitude Toward Health Care Team Scale, consisting of 14 items, was used to assess their attitudes toward MDT. The responses were scored on a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree).

Results: There was no significant association between attitude toward the MDT approach and gender, age, or years of clinical practice (p=0.124, 0.825, 0.734, respectively). There was a significant association between attitude toward the MDT and the highest level of physiotherapy degree (p= 0.002). There was no significant association between attitude toward MDT and the number of working days/week or the nature of cases handled/day (p=0.680, 0.580, respectively). There was a significant association between attitude toward the MDT and the workplace, region, number of working hours/day, and number of cases handled/day (p=0.000, 0.010, 0.000, 0.003, respectively).

Conclusion: The Saudi physiotherapists had a positive attitude toward the MDT approach in musculoskeletal rehabilitation, especially the senior physiotherapists, who were more positive. Moreover, working 7-9 hours/day and handling only 4-6 cases/day, yet maintaining a positive attitude toward the MDT approach.

Keywords: Attitude, interprofessional care, multidisciplinary team, musculoskeletal rehabilitation, physiotherapy.

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INTRODUCTION

A team of medical professionals (physiotherapists, occupational therapists, and orthopedic specialists) provides musculoskeletal rehabilitation through a range of techniques, including manual therapy, exercise, assistive technology, patient education, and pain management. [1]. In research, musculoskeletal rehabilitation has been gaining increasing interest due to its potential to combat chronic pain and aid functional recovery. Globally, musculoskeletal disorders (MSDs) are thought to be the second leading cause of disability [2]. In Saudi Arabia, rates of MSDs are developing quickly and are now comparable to those in developed nations. About 38% of visits to family practice are related to MSDs [3].

Despite the prevalence of MSDs, Saudi physicians have low confidence in their ability to do physical examinations of MSDs and a negative self-perception regarding their ability to manage them properly [4]. This can be partially explained by the fact that medical students and graduates were not well prepared to treat MSDs [5,6]. Even though musculoskeletal education has changed significantly over the last 50 years, several aspects still require further development. It is reasonable to develop a standardized, nationally approved musculoskeletal assessment and diagnostic skill set that all students should be proficient in before graduation. [7]. The American College of Physicians and other professional practice standards have consistently recommended the early use of physiotherapy for the management of MSDs [8,9], which should also be managed by physiotherapists and other medical specialists, including physicians [10].

Consequently, adding multidisciplinary teamwork (MDT) education to health professional degree programs can lead to a strong positive attitude toward medical teamwork [11]. The term "multidisciplinary health care team" refers to a group of health professionals who collaborate and regularly meet to design a treatment plan for a particular patient [12]. Multidisciplinary care is a widely recognized and well-researched approach to treating chronic pain [13–15], combined with physical exercises, that yields some advantages in long-term monitoring for musculoskeletal pain and fibromyalgia [13].

Therefore, in clinically oriented team training programs, the Attitudes Toward Health Care Teams (ATHCT) scale was developed as a pre- and post-measure or longitudinal monitor of attitudes toward healthcare teams among team members, trainees, and their supervisors [16]. The following components are part of an efficient multidisciplinary team rehabilitation process: Finding the patient's needs, the team's professionals working together and coming to a mutual understanding of how to meet those needs, building a team around those needs, collaboration between all parties involved in the rehabilitation of the patients, in addition to professionals and family, the team members' appropriate level of knowledge, assessment of the goals, and the team members' mutual trust and readiness to share knowledge [17].

The European guidelines for low back pain state that further study is necessary to determine the optimal content of multidisciplinary programs, but stress management and behavioural treatment ought to be essential components of any such program [18]. A Norwegian study compared the effects of a multidisciplinary intervention and a standardized intervention on mental and physical symptoms, functional ability, and use of health services in patients with musculoskeletal pain referred to a physical rehabilitation clinic. It was reported that the MDT may represent an essential supplement in the treatment of those populations [19]. Another study investigated the attitude toward the MDT approach in rehabilitation patients with stroke, which reported that stroke rehabilitation is more effective and attainable by the MDT approach in Pakistan. In addition, when a team approaches treatment, both patient happiness and quality of care can increase [20]. This implies that the best treatment for patients should address various facets of their lives [13,18,21]. In addition to the burden of musculoskeletal diseases, the multifactorial nature of these conditions means that controlling the pain they cause requires a multidisciplinary approach [22]. However, no research has evaluated Saudi physiotherapists' attitudes toward the MDT during the management of MSDs. From these perspectives, the importance of the current study becomes obvious, as it aimed to evaluate physiotherapists' attitudes and perceptions of the MDT approach in musculoskeletal rehabilitation.

METHODS

Participants

This cross-sectional study included medical facilities in Saudi Arabia's regions that have medical rehabilitation centres or clinics. This includes Saudi Ministry of Health (MOH) facilities and community health centers, private hospitals and rehabilitation facilities, university hospitals, and military hospitals. All these facilities were chosen to represent diverse social and cultural contexts across Saudi Arabia. The Scientific Research Ethics Committee at Taif University in Saudi Arabia granted ethical approval for the study (ID: 44-248), demonstrating an accurate review process that ensured compliance with the necessary ethical standards for research involving human subjects.

The inclusion criteria were having a Saudi Commission for Health Specialties (SCFHS) license and working as a full-time musculoskeletal physiotherapist for at least a year. Exclusion criteria were non-practicing physiotherapists, physiotherapists not working in musculoskeletal rehabilitation, and physiotherapist students and assistants. The sample size is estimated to be 373, calculated using the calculator.net website, which Maple Tech operates. International LLC. The calculations took into consideration the Saudi physiotherapists, according to SCFHS statistics, which showed 12544 licensed physiotherapists. The sample size was calculated using a 5% margin of error and a 95% confidence level. A total of 378 physiotherapists were invited to participate in the study; 378 completed the survey, and five declined.

Procedure

The ATHCT scale consisted of fourteen items. A five-point Likert scale, with one indicating "strongly disagree" and five indicating "strongly agree," was used to rate responses. Three items concerning time restraints were reverse-coded because they contained negative statements. Higher scores indicate more positive attitudes toward the MDT or interprofessional (IP) health care teams. Total scores ranged from 14 to 70, with higher scores indicating more positive attitudes toward the IP health care teams [16,23]. The questionnaire was distributed to the participants who met the inclusion criteria. Each participant received an online survey, a consent form, and a letter detailing the study's objectives via email and social media. The participants had complete discretion over whether to participate.

Data analysis

The Statistical Package for the Social Sciences (SPSS version 26.0) was used to analyse the data. Sociodemographic traits of the participants and their attitudes toward the health care teams were presented using descriptive statistics. Physiotherapists' attitudes and perceptions of the MDT approach in musculoskeletal rehabilitation were described using frequencies, percentages, means, and standard deviations. The chi-squared test was used to examine the association between categorical variables (χ^2). Multivariable logistic regression analysis was conducted. Based on a reference baseline category, the odds ratios (ORs) with 95% confidence intervals (CIs) were expressed. Statistical significance was defined as a p-value < 0.05.

RESULTS

The ATHCT scale was completed by 374 of the 378 eligible physiotherapists, yielding a 98.9% response rate. Most participants (54.5%) were male, and 45.5% were female. About 60% of the participants were aged 30-39 years. Most of them have specialist degrees (73.5%) and seniors (12.4%). More than 40% have 5 to 10 years of work experience. About 39% were working in MOH facilities, and 29% in military hospitals. More than thirty percent of the participants live in the western region. Additionally, 64.4% of participants worked 7 to 9 hours/day, and 28.9% worked 4 to 6 hours/day. Most physiotherapists work 4 to 5 days/week (76.7%), during which 54.8% of the cases they handle daily are LBP, and 25.1% are knee osteoarthritis. More than forty percent of them handled 4 to 6 musculoskeletal cases/day (Table 1).

Table 1. Participants' sociodemographic characteristics (n= 374)

Characteristics		Number (%)
Gender	Male	204 (54.5)
	Female	170 (45.5)
Age (years)	24-29	116 (31)
	30-39	225 (60.2)
	40-49	29 (7.8)
	50-59	4 (1.1)
Physiotherapy degree	Physiotherapy technician	36 (9.6)
	Physiotherapy specialist	275 (73.5)
	Physiotherapy doctor	8 (2.1)
	Physiotherapy senior	48 (12.8)
	Physiotherapy consultant	7 (1.9)
Years of clinical practice	1-4	111 (29.7)
	5-10	153 (40.9)
	11-15	80 (21.4)
	16-20	21 (5.6)
	>20	9 (2.4)
Workplace	Ministry of Health Facilities	147 (39.3)
	Military hospitals	109 (29.1)
	University hospitals	40 (10.7)
	Medical cities	8 (2.1)
	Specialized hospitals	10 (2.7)
	Private hospitals	60 (16)
Regions	North	45 (12)
	South	62 (16.6)
	East	64 (17.1)
	West	118 (31.6)
	Center	85 (22.7)
Working hours/day	1-3	13 (3.5)
	4-6	108 (28.9)
	7-9	241 (64.4)
	>9	12 (3.2)
Number of days	1-3	12 (3.2)
	4-5	287 (76.7)
	6-7	75 (20.1)
What are the most common cases you handle daily?	Low back pain	205 (54.8)
	Knee osteoarthritis	94 (25.1)
	Neck pain	58 (15.5)
	Others	17 (4.5)
How many musculoskeletal cases do you handle daily?	1-3	69 (18.4)
	4-6	157 (42)
	7-9	120 (32.1)
	>9	28 (7.5)

The total mean score on the scale was high (3.69 ± 0.53 out of 5). The third item had the highest mean score (4.20 ± 0.92), followed by the first (4.16 ± 1.00) and the seventh (4.14 ± 1.03). Whereas item (4) is in fourth rank with a mean score (4.10 ± 1.05), followed by items (5, 6, 2, 11, respectively). Also, item 10, followed by items (9, 8, respectively). The last three items were 12, 14, and 13, respectively. The total score of attitudes of physiotherapists toward the MDT was (51.71 ± 7.39 out of 70), as shown in Table 2.

Table 2. Attitude of physiotherapists toward the MDT approach (n= 374)

Items	Number (%)					Mean ± SD	Sort
	Strongly disagree	Dis-agree	Neutral	Agree	Strongly agree		
1. The IP approach raises the quality of care to patients.	10 (2.7)	20 (5.3)	41 (11.0)	131 (35.0)	172 (46.0)	4.16±1.00	2
2. The IP approach enables health professionals to address the requirements of both patients and family caregivers.	12 (3.2)	17 (4.5)	51 (13.6)	146 (39.0)	148 (39.6)	4.07±1.00	7
3. When they are required to report observations to the team, the team members gain a greater understanding of the work of other health professionals.	7 (1.9)	15 (4.0)	41 (11.0)	146 (39.0)	165 (44.1)	4.20±0.92	1
4. The IP approach improves the efficiency of care delivery.	18 (4.8)	12 (3.2)	45 (12.0)	140 (37.4)	159 (42.5)	4.10±1.05	4
5. Compared to other hospital patients, those who receive IP team care are more ready for discharge.	11 (2.9)	18 (4.8)	49 (13.1)	146 (39.0)	150 (40.1)	4.09±0.99	5
6. Team meetings raise communication among members of the medical team from different health disciplines.	11 (2.9)	17 (4.5)	55 (14.7)	136 (36.4)	155 (41.4)	4.09±1.00	6
7. Team members' The give and take enable them to make better decisions on patient care.	12 (3.2)	22 (5.9)	37 (9.9)	134 (35.8)	169 (45.2)	4.14±1.03	3
8. Patients taking IP are more likely than others to be treated as complete individuals.	22 (5.9)	24 (6.4)	63 (16.8)	157 (42.0)	108 (28.9)	3.82±1.10	11
9. When health professionals collaborate, they are better able to respond to the financial and emotional requirements of patients.	12 (3.2)	22 (5.9)	64 (17.1)	127 (34.0)	149 (39.8)	4.01±1.05	10
10. Most health professionals maintain their enthusiasm and interest in their work when they work in an IP environment.	12 (3.2)	21 (5.6)	56 (15.0)	136 (36.4)	149 (39.8)	4.04±1.03	9
11. Developing a patient/client care plan with other team members avoids errors in delivering care.	14 (3.7)	18 (4.8)	52 (13.9)	138 (36.9)	152 (40.6)	4.06±1.04	8
12. Most of the time, working in an IP approach makes things unnecessarily complicated.	27 (7.2)	54 (14.4)	76 (20.3)	111 (29.7)	106 (28.3)	2.43±1.24	12
13. Generally, the required time for IP discussions could be better used in other ways.	13 (3.5)	36 (9.6)	73 (19.5)	135 (36.1)	117 (31.3)	2.18±1.08	14
14. Creating an IP patient care plan is extremely time-consuming	21 (5.6)	43 (11.5)	77 (20.6)	134 (35.8)	99 (26.5)	2.34±1.15	13

IP= Interprofessional, Low = 1-2.59, Moderate= 2.6-3.39, High =3.40-5.00

Table 3 showed no significant association between attitude toward the MDT approach and gender, age, or years of clinical practice (p = 0.124, 0.825, 0.734, respectively). There was a significant association between attitude toward the MDT approach and the highest level of physiotherapy degree (p=0.002). The physiotherapy specialist degree increased the positive attitude toward the MDT approach by 14.44 times, and the physiotherapy senior increased it by 54.44 times, as shown in Table 4.

Table 3. Association between attitude toward MDT approach and sociodemographic characteristics (n= 374)

Positive		Attitude toward the MDT approach		x^2value	p-value
		Negative			
Gender	Male	180 (53.3)	24 (66.7)	2.361	0.124
	Female	158 (46.7)	14 (33.3)		
Age (years)	18-29	103 (31.4)	13 (28.3)	0.902	0.825
	30-39	196 (58.8)	29 (63.0)		
	40-49	26 (7.9)	3 (6.5)		
	50-59	3 (0.9)	1 (2.2)		
Physiotherapy degree	Physiotherapy technician	26 (7.9)	10 (21.7)	16.469	0.002
	Physiotherapy specialist	246 (75.0)	29 (63.0)		
	Physiotherapy doctor	7 (2.1)	1 (2.2)		
	Physiotherapy senior	45 (13.7)	3 (6.5)		
	Physiotherapy consultant	4 (1.2)	3 (6.5)		
Years of clinical practice	1-4	96 (29.3)	15 (32.6)	2.011	0.734
	5-10	136 (41.5)	17 (37.0)		
	11-15	68 (20.7)	12 (26.1)		
	16-20	20 (6.1)	1(2.2)		
	More than 20	8 (2.4)	1(2.2)		

X^2: Chi-square; n: number; Significant difference when p-value is less than 0.05

Table 4. Predictors (physiotherapy degree) of attitude toward MDT approach (n= 374)

R^2= 0.163	B	S.E.	Df	p-value	Odds ratio	95% C.I. for OR	
						Lower	Upper
Physiotherapy degree (2)	2.670	1.318	1	0.043	14.443	1.090	191.389

Physiotherapy degree (4)	3.997	1.637	1	0.015	54.444	2.200	1347.214
Constant	1.300	1.599	1	0.416	3.670		

Nagelkerke R Square value (R^2); Unstandardized regression weight (B); Standard error (SE); Degrees of freedom (Df); Confidence interval (CI); Odds ratio (OR); Significant difference when p-value is less than 0.05

There was no significant association between attitude toward the MDT approach and the number of working days per week or the nature of cases they handled daily (p=0.680, 0.580, respectively). There was a significant association between attitude toward the MDT approach and workplace, region, number of working hours/day, and number of cases handled/day (p= 0.000, 0.010, 0.000, 0,003 respectively), as shown in Table 5.

Table 5. Association between attitude toward MDT approach and workplace, region, working hours/day, working days/week, musculoskeletal conditions, and number of cases/day (n= 374)

Positive n (%)		Attitude toward the MDT approach		x^2value	p- value
		Negative n (%)			
Workplace	Ministry of health facilities	121 (36.9)	26 (56.5)	32.602	0.000
	Military hospitals	108 (32.9)	1 (2.2)		
	University hospitals	29 (8.8)	11 (23.9)		
	Medical cities	5 (1.5)	3 (6.5)		
	Specialized hospitals	10 (3.0)	0 (0.0)		
	Private hospitals	55 (16.8)	5 (10.9)		
Region	North region	37 (11.3)	8 (17.4)	13.386	0.010
	South region	47 (14.3)	15 (32.6)		
	East region	60 (18.3)	4 (8.7)		
	West region	108 (32.9)	10 (21.7)		
	Center region	76 (23.2)	9 (19.6)		
Working hours/day	1-3	9 (2.7)	4 (8.7)	20.292	0.000
	4-6	87 (26.5)	21 (45.7)		
	7-9	224 (68.3)	17 (37.0)		
	More than 9	8 (2.4)	4 (8.7)		
Working days/ week	1-3	10 (3.0)	2 (4.3)	0.773	0.680
	4-5	254 (77.4)	33 (71.7)		
	6-7	64 (19.5)	11 (23.9)		
How many muscu-loskeletal cases	1-3	53 (16.2)	16 (34.8)	13.643	0.003
	4-6	137 (41.8)	20 (43.5)		
	7-9	114 (34.8)	6 (13.0)		
	More than 9	24 (7.3)	4 (8.7)		
What are the most common cases you handle daily?	LBP	188 (55.6)	17 (47.2)	1.961	0.580
	Knee osteoarthritis	84 (24.9)	10 (27.8)		
	Neck pain	50 (14.8)	8 (22.2)		
	Others	16 (4.7)	1 (2.8)		

X^2: Chi-square; n: number; Significant difference when p-value is less than 0.05

Working in MOH facilities probably decreased the positive attitude toward the MDT approach by 0.14 times, and working in university hospitals decreased it by 0.10 times. Moreover, working hours ranging from 7 to 9 hours increased the positive attitude toward the MDT approach by 13.6 times, and handling only 4 to 7 cases/day increased it by 5.04 times, as shown in Table 6.

Table 6. Predictors (workplace, working hours, and number of cases) of attitude toward the MDT approach

R^2= 0.372	B	S.E.	Df	p-value	Odds ratio	95% CI for OR	
						Lower	Upper
Workplace (1)	-1.964	0.741	1	0.008	0.140	0.033	0.600
Workplace (3)	-2.339	0.867	1	0.011	0.096	0.018	0.527
Working hours/day (3)	2.613	0.911	1	0.004	13.644	2.289	81.336
Number of cases/day (2)	1.617	0.631	1	0.010	5.040	1.463	17.368
Constant	2.232	1.405	1	0.112	9.323		

Nagelkerke R Square value (R^2); Unstandardized regression weight (B); Standard error (SE); Degrees of freedom (Df); Confidence interval (CI); Odds ratio (OR); Significant difference when p-value is less than 0.05

DISCUSSION

On the 14-item scale, most physiotherapists agreed (or strongly agreed) with the statements that were positively worded, while comparatively fewer agreed with the three statements that were negatively worded. The total mean score was 3.69 out of 5, and physiotherapists' total score was higher (51.71 out of 70), indicating a positive attitude toward the MDT approach in musculoskeletal rehabilitation. Most physiotherapists believed that the MDT approach would benefit the patient, according to an analysis of participants' responses to the scale questions. This is in line with a study that found that the average ATHCT scale score was 3.87, indicating that pediatricians, nurses, and physiotherapists had attitudes toward the IP health care teams that ranged from neutral to agree [24]. Furthermore, physiotherapists' perception of the MDT approach for treating stroke patients is excellent, with better outcomes [20]. Additionally, another study found that Ghanaian health care providers showed a positive attitude toward teamwork (58.15 out of 70) during human immunodeficiency virus (HIV) training [25].

Curran et al. (2008) reported that health students studying health sciences from a variety of professions frequently express a positive attitude toward the concept of IP healthcare teamwork, as demonstrated by above-average results on the measures used [23]. Like the current study, a related study found that healthcare occupations, including nurses, physiotherapists, speech-language therapists, biomedical scientists, and radiographers, generally had positive attitudes toward IP collaboration and neutral attitudes toward IP learning and interactions [26]. This consistency might highlight how the team collaborates and communicates in line with the patient's needs. However, there is a contradiction in the views of Saudi physiotherapists for treating patients using the MDT

approach. A recent study discussed physiotherapists' beliefs regarding direct access and the scope of practice in the management of MSDs. It reported they have faith in their ability to evaluate and treat patients without physicians' transfers [27]. This could be attributed to a small sample size (150 respondents), most of whom were bachelor's degree holders (71.3%). In contrast, the current sample was 374 participants, most of whom had specialist degrees (73.5%) and were seniors (12.4%).

The 1st, 7th, and 4th items of the ATHCT scale had the highest mean values (4.16, 4.14, 4.10, respectively), followed by the 3rd item (4.20), consistent with the findings of Abdelghany et al.[24], who found that the highest mean of 4.44 was for the 1st item, followed by the 4th item with a mean of 4.32. Furthermore, Jabbar et al. [28] reported that the 7th item recorded the highest score, with 73.4% of participants strongly agreeing, and the 4th item ranked second with 72.5%. This could account for the IP approach's ability to boost patient satisfaction and population health. Moreover, it increases patient satisfaction and reduces medical errors, thereby enhancing healthcare quality and health outcomes.

The present results showed no significant differences in the attitude toward the MDT approach of males and females which was consistent with the findings of Mink et al. (2021) who reported no significant differences between the attitudes of males and females views toward the IP health care team, although being conducted on a limited sample of college students (60 medical and 63 nursing undergraduates), as is the case in the current study [29]. On the other hand, the present finding disagreed with Ko et al. (2014), who concluded that the women in healthcare teams had more positive attitudes toward the IP cooperation [30]. In addition, Reynolds (2003) stated that, compared to male students, female students were more interested in IP problem-based learning, and concluded that women are more drawn to its social and cooperative aspects. [31], which could be attributed to the conduct of this study among first-year occupational therapy and physiotherapy students' evaluations rather than professional health care providers.

About 60% of the present participants' ages ranged from 30 to 39 years. Nevertheless, attitudes toward the MDT approach did not differ significantly across age categories or years of clinical practice. This finding concurs with Curran et al. (2007), who concluded that overall attitudes toward IP teamwork were not correlated with age, years of practice experience, or experience as a health professional educator [32]. However, Curran et al. (2008) showed that the older students were more accepting of the IP collaboration, which was inconsistent with the present findings [23]. This discrepancy might result from the fact that these students are more influenced by the accumulated experience of their academic courses than by the realities of the workplace, as the current study demonstrates. On the other hand, Pollard et al. (2004) found that attitudes toward IP collaboration are more negative among older students and those with prior college experience [33]. According to Tanaka and Yokode (2005), medical students and residents reported more positive attitudes toward the standard of treatment delivered by multidisciplinary teams [34]. They explain this finding by pointing out that clinical practice may reinforce doctors' attitudes as central, which runs counter to the present findings.

Approximately 41% of participants had experience ranging from 5 to 10 years, followed by 30% with <5 years. This finding demonstrated that years of clinical practice did not differ significantly, consistent with the non-significant age difference, which could be explained by the small sample sizes across age categories and years of working experience for all participants. However, there were significant differences in physiotherapy degrees in favor of physiotherapy seniors, which is consistent with the recently published studies [35,36]. They observed that attitude toward cooperation increased with more professional experience. Senior healthcare professionals, who had been employed for more than a year or were aged 34 or older, had better attitudes than younger ones. The likelihood of prolonged employment was higher for older professionals. The number of years of professional experience may help to explain some of the differences between facilities and professions. Together, these findings show that team skills training should be implemented or increased during the pre-service phase because they were more frequently acquired on the job and enhanced with years of work experience than during pre-service training [23,32,33].

The present results showed that physiotherapists in MOH facilities and university hospitals had a slightly more pessimistic attitude toward the MDT approach than those in other hospitals, which may be attributed to the high levels of stress they experienced. It is known that the number of patients who are treated in public hospitals is higher than in private hospitals [37]. This result was consistent with a study that quantified the impact of job stressors in regional public physiotherapy departments in Victoria. It reported that among the things that lead to stress in regional physiotherapists are heavy caseloads, spikes in activity, and a lack of staff [38]. Furthermore, the physiotherapists of public hospitals have an overall prevalence of work-related injuries [39,40]. However, the patients receiving physiotherapy services from public hospitals expressed dissatisfaction with the care they received [41], which could be one of the reasons the physiotherapists may have a negative attitude toward the MDT approach, as they think it will increase their workload. Hence, they must be educated about the role of the MDT approach, so they know it will reduce the workload, not increase it.

Additionally, working 7-9 hours daily and handling 4-6 musculoskeletal cases daily had a positive attitude toward the MDT approach. This suggests that reasonable workloads have a positive impact on physiotherapists' attitudes toward the MDT approach. A workload of less than 6 hours/day and fewer than 4 cases/day does not provide an incentive for them to recognize the importance of the MDT approach in managing patients with MSDs. A workload exceeding that does not allow physiotherapists to communicate with members of the health team for cases

and thus reduces the quality of care given to patients, which was supported by the conclusion of Elliott et al. (2014), who reported that the efficiency and cost of care are negatively impacted by increasing the hospitalist workload [42].

Limitations

The study's overall conclusions show that Saudi Arabian physiotherapists had a positive attitude toward the MDT approach in musculoskeletal rehabilitation. However, a few limitations need to be considered. Self-reported attitudes toward the IP teamwork are susceptible to social desirability bias. Because most participants worked in military hospitals and MOH facilities, the findings may not be generalized to the total population of healthcare providers at all levels of care. Finally, these documented positive attitudes could not necessarily translate into collaborative practice, which is an often-mentioned limitation of collaboration attitude research [43]. It is also recommended that future research evaluate the impact of age and clinical experience on the development of the MDT and attitudes toward the IP health care teams in musculoskeletal rehabilitation within each group. Physiotherapists' vital roles as members of health care teams require them to have favorable attitudes toward teamwork and cooperation, which is a good indicator of how well they will contribute to the group. To quickly advance physiotherapists' skills when they enter clinical practice, it is advised that they be taught and trained in the features of MDT collaboration during their professional degree education. Furthermore, the data were gathered in a cross-sectional design, and it would be intriguing to track the evolution of attitudes in future research. Further studies should examine, using a more representative sample, the associated factors with attitudes toward the MDT approach. It would be helpful to investigate whether these positive team attitudes translate into collaborative patient care delivery. The IP health care courses should be integrated into academic programs, and then the level of student satisfaction with field training should be measured, which essentially needs to be improved [6]Taif University, KSA. Methods: A cross-sectional study was conducted. A total of 132 undergraduate physiotherapy students completed a questionnaire consisted of 36 questions divided into five different categories through a 5-point Likert's scale. These categories of learning and teaching satisfaction are evaluation methods, academic advising, teaching and learning strategies, evaluation of teacher and courses, clinical training. Chi-square test was used to determine the significant level of the student degree of agreement. Results: Chi-square analysis revealed that all the items of the questionnaire were statistically significant ($p < 0.05$. More work is needed to examine the effect of the adoption of the MDT approach on the prevalence of work-related MSDs among not only the Saudi physiotherapists but also healthcare professionals of different disciplines, which was recently found in four-fifths of them [40].

CONCLUSION

This study demonstrates that physiotherapists in Saudi Arabia had a positive attitude toward the MDT approach to musculoskeletal rehabilitation. The senior physiotherapists had more positive attitudes toward IP cooperation within health care teams. Also, working 7-9 hours/day and handling 4-6 musculoskeletal cases/day had a positive attitude toward the MDT approach. Physiotherapists working in MOH facilities and university hospitals had a slightly more negative attitude toward the MDT approach than those in other hospitals. Based on these findings, it was recommended that the MDT approach in musculoskeletal rehabilitation should emphasize practice rather than implementing IP courses in the physiotherapy curriculum.

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Data availability statement: Upon reasonable request, the corresponding author will provide the data supporting the study's conclusions.

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