# **Knowledge Regarding the Benefits of Physiotherapy among Physiotherapy Specialty Students**

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#### **Abstract**

**Background:** Physical treatment is a unique calling with broad clinical applications in the rebuilding, support and advancement of ideal physical capacity

**Aim of study:** To assess the level of knowledge regarding the benefits of physiotherapy among Physiotherapy Specialty students.

**Methodology:** A cross sectional descriptive study included (54) Physiotherapy students of Medical Technical Institute, Technical College of Health and Medicine/Baghdad, during November and December 2018.

They were selected randomly and they were asked to answer a self-administered questionnaire in 3 main domains (general benefits, woman's health, chronic disease management) of physiotherapy. The questionnaire covered different aspects regarding the knowledge of the benefits of physiotherapy. The percent score for each question and overall mean score for each domain was assessed.

**Results:** The total number of included students in the study was 54 distributed an 51.9%males 48.1% females, 64.81% from the Medical Technical Institute and 35.19%from the college of Technical Health and Medicine. Distribution of knowledge of students regarding the general benefits of physiotherapy was with overall mean percent score=80, women's health with overall mean percent score=67% and for the benefits of physiotherapy in chronic diseases with overall mean percent score=84%. The overall mean percent scores for all domains were 77.

**Conclusion:** In general, satisfactory level of knowledge of included students regarding the benefits of physiotherapy.

**Keywords:** Physiotherapy, Benefits, Knowledge, Students.

## Introduction

Physiotherapy (PT) is treatment to reestablish, keep up and take advantage of the patient's portability, capacity and prosperity. It will help physical restoration, injury counteraction and wellbeing and wellness. Non-intrusive treatment is utilized to improve a patient's personal satisfaction through assessment, conclusion, visualization, physical intercession, and patient training.<sup>(1)</sup>

Physiotherapists (PTs) are medical services experts who analyze and treat people, everything being equal, who have clinical and other related issues that limit their capacities to move and perform utilitarian exercises in their day by day lives. (2,3)

PT the board incorporates explicit activities, manual treatment and control, mechanical gadgets, for example, foothold, instruction, electro physical modalities which incorporate warmth, cold, power, sound waves, radiation, assistive gadgets, prostheses, orthoses and different mediations.<sup>(4)</sup>

Active recuperation administrations might be given as essential consideration therapy or close by, or related to, other clinical administrations (including clinics, private practices or outpatient centers.<sup>(1)</sup>

Physiotherapy can be given distinctly by qualified physical advisors or physical specialist partners<sup>(2)</sup>. Physiotherapy therapy alternatives for: Problems brought about by wounds, infections and handicaps, neck and back torment, solid and tendon conditions, for example, joint pain and after removals, lung and heart issues, bladder and entrail issues brought about by labor likewise malignancy treatment (palliative consideration). loss of portability sicknesses because of injury to cerebrum or spine or infections like different sclerosis and Parkinson's malady.<sup>(5)</sup>

A few dated worldwide examinations have analyzed the information view of physiotherapy by physiotherapy understudies<sup>(6)</sup> Health Science understudies.<sup>(7)</sup>

To the best of our knowledge.no study has been acted in Iraq that has assessed the information on physiotherapy college understudies about the advantages of physiotherapy as a calling. The consequences of this examination could help in recommending medical care ways for the improvement of physiotherapy calling for ideal patient consideration.

**Aim of study:** To assess the level of knowledge regarding the benefits of physiotherapy among Physiotherapy specialty students.

# **Subjects and Method**

After all ethical permissions were obtained from the institutional and college Scientific Counsel. A cross sectional descriptive study included (54) second year undergraduate Physiotherapy students of Medical Technical Institute/Baghdad and Technical College of Health and Medicine/Baghdad was conducted. Data was collected during November and December 2018.

They were selected randomly and an invitation to participate in the study along with the explanation of its importance was achieved and willing students gave verbal consents and the data was collected through answering a self-administered. questionnaire. The questionnaire included various sections about students' demographics, knowledge of the benefits of physiotherapy in three domains (general benefits, benefits regarding women health, management of chronic diseases by physiotherapy techniques). Descriptive statistics including frequencies and percentages were used for demographic data analysis. Each knowledge question responses were scored as (3)

for each yes answer, (2) for answering don't know and (1) for answering (No).

The percent score for students' responses in each specific question was calculated according to the following equation:

All out scores for all understudies in each question X 100/most extreme potential scores for all included understudies for a similar inquiry. Where complete scores for all members in the question = [(No. of no x 1) + (No. of don't know x 2) + (No. of yes x 3)]. Furthermore, most extreme potential scores for all members in the equivalent question = [No. of complete understudies' x 3], in light of Triple Likert Scale<sup>(8)</sup>.

#### Results

The total number of included students in the study was 54 distributed an 51.9% males 48.1% females, 64.81% from the Medical Technical Institute/Baghdad and 35.19% from the college of Technical Health and Medicine, 29.62% of students were < 20 years and 70.38% ≥ 20 years, as shown in table 1:

Table 1: Distribution of students regarding socio demographic characteristics: (N=54)

Socio Demographic Characteristics	No	%					
Gender							
Male	28	51.9					
Female	26	48.1					
Academic Setting							
Institute	35	64.81					
College	19	35.19					
Age							
<20 years	16	29.62					
≥ 20 years	38	70.38					

The distribution of students' responses regarding the general benefitsof physiotherapy was highly correct 94.44%, 79.6%, 77.77% with percent score 98%, 90%, 86% regarding recovery from sport injuries, improving balance by using assisting devices, reduction of muscle and joint pain by using therapeutic exercises. While the lowest proportion of correct responses 16.66%, 18.51% with percent score 60%, 57% regarding the help in the recovery of patient with cerebral palsy and recovery from vertigo condition respectively. The overall percent score for this domain is 79.66% as shown in table (2).

Table 2: Distribution of knowledge of students regarding the general benefits of physiotherapy. (N=54)

Benefits of physiotherapy	Yes		No		Don't Know		Percent
	No	%	No	%	No	%	score
To reduce muscle and joint pain by using therapeutics exercises .	42	77.77	11	20.37	1	1.85	86
2. To avoid surgery sometimes	42	77.77	12	22.22	0	0	85
3. To recover before surgery and to decrease health care costs .	32	59.25	17	31.48	5	9.25	76
4. To improve mobility by doing stretching and strong theming exercises.	39	72.22	7	12.96	8	14.81	86
5. To improve balance by using assisting devices	43	79.62	5	9.25	6	11.11	90
6. To help in using orthosis	32	59.25	3	5.55	19	35.18	84
7. To improve mobility of stroke patients	41	75.92	5	9.25	8	14.81	89
8. To prevent and recover from sport injuries	51	94.44	0	0	3	5.55	98
9. To prevent fall of high risk people	40	74.07	3	5.55	11	20.37	90
10. To reduce or recover from vertigo condition.	10	18.51	26	48.14	18	33.33	57
11.To help in rehabilitation of burn condition	18	33.33	20	37.03	16	29.62	65
12. To help the recovery of patient of cerebral palsy	9	16.66	20	37.03	25	46.29	60
13. To help in case of head injuries	32	59.25	8	14.8	14	25.92	81
14. To help cases of quadriplegia contrition	21	38.88	22	40.74	14	25.92	66
15. To help the rehabilitation of fracture cases	34	62.96	9	1.66	11	20.37	82

Overall mean percent score = 79.66%

The distribution of students' responses regarding women's health was highly correct 81.48% with percent sore 91% regarding recovery from osteoarthritis and osteoporosis, the lowest proportion of correct responses

9.25% with percent score 49% regarding the caring of women before and after pregnancy The overall percent score for this domain =67% as shown in table (3).

Table 3: Distribution of knowledge of students regarding women's health (N=54)

Women's Health	Yes		No		Don't Know		Percent
	No	%	No	%	No	%	score
1. To help in caring of women before and after pregnancy	5	9.25	34	62.96	15	27.77	49
2. To help women with breast cancer	13	24.07	19	35.18	22	40.74	63
3. To decrease pelvic pain	14	25.92	17	31.48	23	42.59	65
4. To help in recovery from osteoarthritis and osteoporosis.	44	81.48	4	7.40	6	11.11	91

Overall mean percent score = 67%

The distribution of student's responses regarding the benefits of physiotherapy in the management of chronic diseases was with highest correct proportions 85.18% with percent score 92% regarding helping in case of urinary incontinence while the lowest correct proportions 42.49% with percent 76% regarding care of patients with burns and peptic ulcers. The overall percent score for this domain is84% as shown in table (4).

Chronic disease	Yes		No		Don't Know		Percent
	No	%	No	%	No	%	score
1. To help in rehabilitation of cardiac problems.	23	42.59	6	11.11	16	29.62	66
2. To help in rehabilitation of pulmonary problems	44	81.48	6	11.11	4	7.40	90
3. To improve sensation of feet and legs of patients of diabetes mellitus	37	68.51	6	11.11	11	20.37	86
4. To care for patients with burns and peptic ulcers.	23	42.49	8	14.81	23	42.49	76
5. To help in case of urinary in continuance	46	85.18	5	9.25	3	5.5	92
6. To help cases of fecal continuance.	45	83	5	9.25	4	7.40	93

Table (4): Distribution of knowledge of students regarding the benefits of physiotherapy in chronic diseases (N=54)

Overall mean percent score = 84%

## **Discussion**

Physiotherapy (PT) has been considered as a method of treatment throughout the long term and is quickly developing as a calling, particularly in creating nations. (9,10)

The present study evaluated the knowledge of junior college and institute students regarding the benefits of physiotherapy. The results indicated that the students had a varied knowledge regarding the benefits physiotherapy services.

Regarding the orthopedic prevention and recovery from sport injuries, the students correct responses was 94.44% with percent score 98%, in comparison in Harare, Zimbabwe the participants indicated that physiotherapists should assist the first aid treatment of sport related injuries 92.2%<sup>(11)</sup>.

Physical therapists can fit people with any of assistive devices or orthotic prescription adapted to ensure maximal performance and safety <sup>(12)</sup>and the students correct responses was 79% with percent score 90%.

Remedial activities and manual treatment method, for example, joint and delicate tissue assembly medicines, activation and delicate tissue back rub can assist with easing torment and improve quality<sup>(12)</sup>.

The students' responses were 77.77% with percent score 86% while the results of Harare, Zimbabwe study revealed that the majority knew that physiotherapy optimizing movement efficiency 95.1%.for muscle pain, 88.2% for ligament injuries, use of exercise machines but

only31.4% knew that physiotherapy use electrotherapy equipment, in addition 90.2% knew about massage(11).

Physical advisors can perform explicit moves that can rapidly reestablish appropriate vestibular working, and diminish and dispense with manifestations of unsteadiness or vertigo and improve balance conditions (12). however understudies reactions was baffling 18.51% with percent score,57%.

As a feature of maturing measure, individuals may create joint pain or osteoporosis or need a joint substitution some of the time. Physical advisors can assist patients with recouping from joint substitution, and oversee ligament or osteoporotic conditions moderately (12) and understudy's reactions was 81.48%, with percent score 91%. In Ischikkawa, high school students showed accurate responses regarding instruct a client in exercises 68.4%, doing massage 58.5%, works with joint decrease pain/stiffness 34.7%(13).

In kwazula Natal,the students responses about conditions treated by physiotherapists 79% for arthritis and the majority of respondents knew that physiotherapists could manage musculo-skeletal conditions. (14)

As to's Health,as ladies have explicit medical issue, for example, with pregnancy and baby blues care. Physical advisors can offer particular administration of issues identified with ladies' wellbeing <sup>(12)</sup> and students' responses was 9.2% with percent score 49%. In kwazula Natal students' responses was disappointing 19.4% for ante-natal care<sup>(14)</sup>.

Prati V and Liu H in their study found that the respondents were generally not aware that physiotherapy could manage antenatal care. (15)

Role of physiotherapy in the management of chronic diseases and their complications like urinary incontinence by offering specialized treatment and students correct responses was 85,18%. while the help in rehabilitation of cardiac conditions 42.59% while in Harare, Zimbabwe<sup>(11)</sup>, the majority of students showed awareness in that physiotherapists do not manage cardiac pain 86.3%

The majority of respondents of Kwazulo Natal. not identified that physiotherapists work with patients with respiratory disease or thoracic surgery and fewer identified obstetrics and gynecology.<sup>(14)</sup>.

Cerebral paralysis (CP) is a gathering of perpetual development problems that show up in early childhood<sup>(16)</sup>. Signs and manifestations differ among individuals and after some time.<sup>(16,17)</sup>

There is no solution for CP; be that as it may, steady medicines, prescriptions and medical procedure may support numerous people. Physiotherapy is critical to diminish spasticity and disfigurement<sup>(18)</sup>, furthermore, the understudies' reactions were just right in 33.3%.

#### **Conclusions**

The knowledge level of students regarding benefits of physiotherapy in general was satisfactory.

#### **Recommendations:**

- The examination featured the need to lead a comparative report with bigger example size to evaluate information with different establishments and schools.
- There is consistent requirement for a focused on training and mindfulness program for understudies having a place with various schools present in various Iraqi governorates.

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**Conflict of Interests:** Was just limited time in data collection.

#### References

- 1. Jump up "Physical Therapists". careerswiki. Retrieved 13 November 2014.
- American Physical Therapy Association, Role of physical therapists Guide to physical Therapists practices, 2<sup>nd</sup> Edition 2003.
- 3. Pallavi Vitthal Bargaje, Nilima S Bedekar, Savita Rairikar, etal, perception of junior college students about Physiotherapy as a profession. Journal of Indian Association, 2017, vol 11. Issue 1:30-33.
- American Physical Therapy Association (17 January 2008). "APTA Background Sheet 2008". American Physical Therapy Association. Archived from the original on 29 May 2008. Retrieved 29 May 2008.
- Kerss JJ, Groenew egenPP: Referrals in physiotherapy: the relation between the number of referrals, the indication for referral and inclination to refer. Soc Sci Med. 1990, 30:797-804
- 6. Tuner P. The occupational prestige of phsiotherapy, perceptions of student physiotherapists in Australia, Australian J of Phsiotherapy, 2001,47,191-200.
- Hawk C, Buckwalter K, Byrid L,Cigeman et al. professions students perceptions pf interprofessional relationships Academic Medicine, 2002, 77:345-357
- 8. Harry N. Boone JR, Deborah A. Boone. Analyzing Likert data. Journal of extension, 2012,vol.50,no-2, Article number 2TOT2.
- 9. Murphy BP, Greathouse D, Matsui I: Primary care physical therapy practice models. J Orthop Sports Phys Ther, 2005, 35: 699–707.
- 10. James JJ, Stuart RB: Expanded role for the physical therapist. Screening musculoskeletal disorders. Phys Ther, 1975, 55: 121–131.
- 11. Chiwaridzo M,Msiska MLLevel of physiotherapy among high school sports coaches in Harare,Zimbabwe,International J of Scientific and Research publications,2015,vol5,Tssue 10:1-11.
- 12. Rehab insights Prioneering Rehabilitation 10 reasons why physical therapy is beneficial, 2012.
- 13. Ogiwara SRP R,ONC et al,Knowledge of physiotherapy:A study of Ishikawa high school students of Phys Ther: Sci, 2005,17:9-16;

- 14. Pucknee T, Harinarush RB, Ramdath PB et l. knowledge, perceptions and attitudes of final year medical, occupational theapy and sportscience students regarding physiotheapy in Kwazula Natal, SA journal of Phsiotherapy, 2011, vol 67: no. 3: 19-26.
- 15. Prati V and Liu .Perceptions of college students regarding the current physical therapy profession and professional education process. The Internet journal of Allied sciences and practices, 2006, 4:1-6.
- 16. Jump up to: "Cerebral Palsy: Hope Through Research". National Institute of Neurological Disorders and Stroke. July 2013. Archived from

- the original on 21 February 2017. Retrieved 21 February 2017.
- 17. Haak, Peterson; Lenski, Madeleine; Hidecker, Mary Jo Cooley; Li, Min; Paneth, Nigel (October 2009). "Cerebral palsy and aging". Developmental Medicine & Child Neurology. 51: 16-23. doi:10.1111/j.1469-8749.2009.03428.x. **PMC** 4183123. PMID 19740206.
- 18. "How many people are affected?". National Institutes of Health. 5 September 2014. Archived from the original on 2 April 2015. Retrieved 4 March 2015.