

How to Cite:

Goyal, R., Chakraverty, S., & Zafar, S. (2022). Awareness about physiotherapy in patients with diabetes: A population-based study. *International Journal of Health Sciences*, 6(S6), 3429–3436. <https://doi.org/10.53730/ijhs.v6nS6.11373>

Awareness about physiotherapy in patients with diabetes: A population-based study

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Abstract---Background and Purpose: The main purpose of this study is to see the awareness about physiotherapy in people suffering from a diabetic condition in India. Physiotherapy can play a very important role in the life of people with the diabetic condition. Materials & Methods: The participants who visited doctors for diabetic treatment were asked to volunteer in the study. A total of 40 subjects volunteered in the study. All were informed about the study and data collection was made in google form. Results: By result shows very little awareness in a diabetic patient about physiotherapy and its benefit in the condition. Conclusion: Therefore, by this study and the above data, we can conclude that there is very little awareness in the people in diabetic condition for the benefit in their life. They don't know the advantages of physiotherapy in diabetic conditions and the effects on ROM and their quality of life and pain. Awareness needs to be created in the Indian population about the effects of physiotherapy in diabetic patients and its benefits in their life.

Keywords---physiotherapy, diabetes, awareness.

Introduction

Advances in socioeconomic development, daily routines, dietary habits, aging, and a sedentary lifestyle have resulted in a large increase in the number of diabetic patients (Arora et al., n.d.). Polyuria, polydipsia, weight loss (often accompanied by polyphagia), and hazy eyesight are all typical symptoms. (Singh & Gupta, 2021). Diabetes mellitus is a metabolic condition marked by persistent hyperglycemia caused by inefficient insulin activity. Diabetes mellitus is a metabolic condition

marked by persistent hyperglycemia caused by inefficient insulin activity(van Bysterveldt et al., 2014). Diabetes mellitus, a metabolic disorder, affects roughly 10-15% of the population. In cohort studies with varying lengths of follow-up, the incidence of foot ulcers ranges from 8 to 17 percent, resulting in severe impairment and even hospitalization for patients, as well as a significant financial burden for families(Alex et al., 2010). Diabetes is the most common chronic disease affecting nearly all the population of the world(Singh & Gupta, 2021).

According to a 2007 WHO survey, 60 percent of the diabetic population would originate from developing Asian nations by 2025, bringing the total number of diabetics from 240 million in 2007 to 380 million in 2025. (Al-Eisa et al., n.d.). Physiotherapy is one of the oldest professions in healthcare, having been practiced by outstanding people since 460 B.C. "Physical therapy is concerned with diagnosing and maximizing quality of life," according to the World Confederation of Physical Therapy. Within the areas of promotion, prevention, treatment/intervention, handicapping, and rehabilitation, movement potential exists(Doshi et al., 2017). Diabetes, a long-term condition increasing in prevalence, requires ongoing(Al-Eisa et al., 2016)healthcare management(Higgs et al., 2016). The impact of exercise on people with type 2 diabetes. In the majority of these trials, aerobic (endurance) exercises were included as part of the training strategy. Obesity indexes were significantly reduced in several investigations(Lambers et al., 2008).

The effects of aerobic, resistance and a combination of the two forms of exercise on a patient's physical quality of life were investigated, and it was discovered that all three types of exercise programs increased patients' physical quality of life(Kaur et al., 2015). Besides endurance training, segmental strength training of the major muscle groups is used in the management of type 2 diabetes(Lambers et al., 2008).This study is done to spread awareness amongst Indian society. It is important to spread awareness so that people can take the right preventive measures which will eventually increase the life expectancy of the patients and improve their quality of life(Rahman, 2015). The awareness has become the need of an hour as the number of diabetic patients is increasing rapidly. It needs to be prevented and cured as it may cause some other health issues like foot ulcers and frozen shoulders.(Science & No, 2015)

Statement Question

Is there any awareness about physiotherapy in the people suffering from a diabetic condition in India?

Aims and objectives of the study

The main aim of the study is to find out the awareness about physiotherapy in people suffering from a diabetic condition in India. The main objective of this study is to see the awareness about physiotherapy in people suffering from a diabetic condition in India. Physiotherapy can play a very important role in the life of people with the diabetic condition.

Hypothesis

- Null Hypothesis: There is no awareness about physiotherapy in people suffering from a diabetic condition in India
- Research Hypothesis: There is a significant awareness about physiotherapy in people suffering from a diabetic condition in India

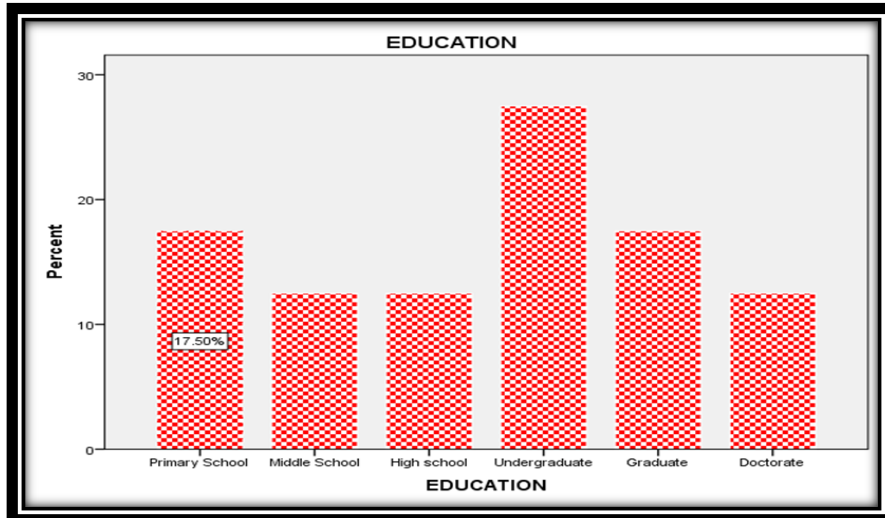
Materials and Methods

The participants who visited doctors for diabetic treatment volunteered in the study. All were guaranteed that their information would be confidential. All participants first filled up the consent form and gave consent for their study and then the demographics which included the name, age, height, weight, gender, and occupation were filled, after all this the following measures were introduced:

- Consent Form: This form provided information regarding the purpose and proposed outcomes of the study and allows the participants to give their agreement for the study and participate anonymously. The subjects were guaranteed about their information is confidential and they will not be receiving any form of compensation or credit for the study as the participation is voluntary.
- After the completion of the consent form, the demographics including the name, age, gender, height, occupation, and address were taken.
- suitable questions were selected from three different validated questionnaires and they were combined to form a single questionnaire whose reliability and validity was checked through focused group interview.
- Then the subjects were asked to fill the question in the google form and the entry was stored in excel.
- After collecting data from the subject they were briefed about the physiotherapy benefits in their condition

Results and Discussion

By result shows very little awareness in a diabetic patient about physiotherapy and its benefit in the condition as shown in the following tables:

List of tables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
WEIGHTKG	160	40.0	95.0	68.950	13.1560
HEIGHTINC	160	4.9	7.0	5.735	.4866
HEIGHTINMETER	160	1.4935200 00000100 0	2.1336000000 001000	1.7480280000 00100	.1483078991 21781
BMI	160	1	4	2.20	.783
Valid N (listwise)	160				

Table Showing T-Test Value Of Variables (Va)

Question	n	Yes	No	Yes%	No%
ARE YOU AWARE ABOUT WHAT PHYSIOTHERAPY IS?	160	95	65	59.4	40.6
DO YOU KNOW ANY PHYSIOTHERPIST AROUND YOUR LOCATION	160	44	116	27.5	72.5
ARE YOU SUFFERING FROM JOINT STIFFNESS	160	90	70	56.3	43.8
HAVE YOU COUNSULTED A PHYSIOTHERPIST AFTER YOUR	160	33	127	20.6	79.4

DIABETIC CONDITION					
Question	n	Yes	No	Yes%	No%
DID YOUR PHYSIOTHERAPIST EXPLAIN YOU PROPERLY ABOUT YOUR CONDITION	160	44	116	27.5	72.5
DO YOU KNOW PHYSIOTHERAPY CAN INCREASE YOUR QUALITY OF LIFE	160	41	119	25.6	74.4
DO YOU KNOW PHYSIOTHERAPY CAN HELP IN INCREASING ROM OF YOUR JOINT IN DIABETIC CONDITION.	160	42	118	26.2	73.8
DO YOU KNOW PHYSIOTHERAPY CAN MAKE YOUR MOVEMENTS PAIN FREE	160	48	112	30.0	70.0
Question	n	Yes	No	Yes%	No%
DOES YOUR DOCTOR CONSULTED YOU FOR EXCERSICE?	160	56	104	35.0	65.0
DO YOU THINK PHYSIOTHERAPIST CAN HELP YOU	160	56	104	35.0	65.0
DO YOU HAVE ANY SKIN RELATED ISSUE: ITCHING, NUMBNESS(SENSORY)	160	63	97	39.4	60.6
DO YOU CONSULT WITH YOUR PHYSICIAN OFTENLY	160	84	76	52.5	47.5
DO YOU HAVE ANY GENERALIZED WEAKNESS	160	86	74	53.8	46.2

This study contributed to a better knowledge of the amount of physiotherapy awareness in the Indian diabetes population. According to the findings of the study, people with diabetes have minimal understanding of physiotherapy and are unaware of the benefits of physiotherapy in their condition. Similar study was done Brendon Stubbs et al 2014 for schizophrenia, To gain a global perspective on the role of mental health physiotherapists in the treatment of people diagnosed with schizophrenia. The International Organization of Physical Therapists

interested in Mental Health (IOPTMH) conducted a cross-sectional study of its members. A thematic analysis was used to examine free text replies to open-ended questions. Two themes emerged: (1) physiotherapists stated that they are physical health experts in the multidisciplinary team (MDT), bridging the gap between physical and mental health; and (2) physiotherapists stated that they are mental health experts in the MDT, bridging the gap between mental and physical health. (2) Physiotherapists play an important role in health promotion efforts in schizophrenia patients, promoting healthier lifestyle choices and increased levels of regular physical activity. Physiotherapists reported a wide range of beneficial benefits on patients' health and well-being as a result of their therapies. Physiotherapists are an important member of the MDT since they are focused on the physical health needs of individuals with schizophrenia(Stubbs et al., 2014).

A study done by Maria Kyhlba"ck et al 2014 The goal of this study was to describe and assess a physiotherapy programme for diabetics with shoulder difficulties that aimed to minimise pain intensity and enhance daily functioning. Patients who received specific physiotherapy treatment were thought to improve more frequently and quickly than diabetes patients who did not receive specific physiotherapy treatment. For a group of ten subjects, a pre-post treatment design was completed. The treatment protocol, which was also used during the subjects' daily activities, aimed to reduce pain intensity and shoulder stiffness while also improving impaired daily functioning through muscle relaxation, light-load exercise, and improving proper shoulder co-ordination. The group analysis revealed a significant reduction in pain intensity, increased shoulder function, and a consistent level of subject self-efficacy beliefs over the course of the trial. Conclusions: The findings suggest that a physiotherapy programme focusing on muscle relaxation, light-load exercise, and the enhancement of proper shoulder co-ordination in daily activities can relieve shoulder pain intensity and improve daily activities in patients with diabetes-related shoulder problems(Kyhlbäck et al., 2014).

Conclusions

Therefore, by this study and the above data, we can conclude that there is very little awareness in the people in diabetic condition for the benefit in their life. They don't know the advantages of physiotherapy in diabetic conditions and the effects on ROM and their quality of life and pain. Awareness needs to be created in the Indian population about the effects of physiotherapy in diabetic patients and its benefits in their life.

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