

ORIGINAL ARTICLE

THE PERCEPTION OF PHYSIOTHERAPISTS OF KARACHI IN THEIR ROLE TO REHABILITATE AND MANAGE OBESITY

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ABSTRACT

Background: Physiotherapists as providers of primary health care are well placed in promoting physical activity and lifestyles changes, but the role and practice of physiotherapist towards its promotion among obese individuals has not been fully investigated. The objective of this study is to examine perceptions of Karachi physiotherapists regarding their role in management of obesity, the learning needs for, and hurdles facing by them in the rehabilitation.

Methods: It was cross-sectional survey that has been conducted among 100 Physiotherapists from three tertiary care hospitals & universities of Karachi from April to June 2013. There has been used Self-administered questionnaire and sampling was Convenient Purposive sampling in qualitative research. Descriptive statistics were calculated for all variables using the Statistical Package for the Social Sciences (SPSS) version 17. Questionnaire was intended to determine physiotherapist's perceptions of their role and consisted of questions about respondent's demographics profile, practice and domains related to management of obesity and associated conditions.

Result: In this study 93% of participants agreed that physiotherapists has role in the management of patients with obesity by developing exercise interventions. 95% plays role in functional mobility and 94% in cardio respiratory training programme. In this study participants were found less aware about weight loss management. Barrier found in patient treatment is due to lack of patient motivation.

Conclusion: This study revealed physiotherapist played important role in patient rehabilitation management with obesity, especially in a area of mobility and exercise prescription for conditions associated with obesity. In future there is need to take into account the different perspectives of physical therapy and with a larger sample size representing all four states of Pakistan.

Keywords: Obesity, Physiotherapist, Perception, Health Risks, Role of Rehabilitation, Management of Obesity

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INTRODUCTION

Man of present time proudly proclaims himself to be the occupant of era known as science and technology. On the other hand this modernization the civilized society has created ease for the individuals living in it. This ease has resulted in many problems like one at large is obesity. The World Health Organization (WHO) defines obesity as the accumulation of excess body fat to the level that it harms health [1] which can be classified by using body mass index (BMI) (see Table 1). Globally it is one of the major preventable causes of disease and death [2].

Health consequences of obesity includes different diseases i.e. CVA (stroke), type 2 diabetes mellitus, cardiovascular diseases, cancers of different organs [1,3,4,5]. There are many other conditions related with obesity such as osteoarthritis (OA), COPD, depression, anorexia nervosa, bulimia nervosa; and premature death) [6,7,8,9]. The etiology of obesity is multifaceted; obesity is believed to be the result of the amalgamation of genetic, metabolic, patho-physiological, environmental, and behavioral factors.

The Physiotherapists are considered as the front-line providers of health care services and vanguard for the people suffering from the pain or functional limitation resulting from obesity [10,11] like OA, Low back pain. Obesity can be the result of imbalance of input (diet) and output (work), so Physical therapist can advise and guide the effective way of exercises (output) to enhance burnout of calories in diet and as a result can help in reducing the risk of developing obesity. Physiotherapists not only take care of the symptoms, but help reducing the causative factors and teach people better body habit [12]. Apart from the fact, Physiotherapists themselves lack the clarity about their roles and scope of practice in this vicinity. Exercise and physical activity are both essential components of physiotherapy practice

Table 1: body mass status

Body Mass Index	
Category	BMI range
Underweight	less than 18.5
Normal weight	18.50 -24.9
Overweight	25.0 -29.9
Obesity class I	30.0 -34.90
Obesity class II	35.0 -39.90
Obesity class III	over40.0

Few researches are available on this topic, like, Lila You conducted a survey in which she contacted 851 physiotherapists through the Canada and stated that 96% physiotherapists are aware of their role in managing obesity [13].

In Pakistan there is no evidence of such type of research that emphasize about the prevalence of obesity and the position of physiotherapy in the health care organization.

The objective of this study is to examine perceptions of Karachi physiotherapists regarding their role in management of obesity, the learning needs for, and hurdles facing by them in the rehabilitation of the same.

METHODS

A cross-sectional survey has done by using a self-administered questionnaire from April to June 2013. Convenient Purposive sampling was used in qualitative research from three tertiary care hospitals of Karachi. In this study, 100 physiotherapists who had experience in physiotherapy and health care participated voluntarily after an informed consent.

Questionnaire was intended to determine physiotherapists' perceptions of their role and consisted of questions about respondent's demographics profile, practice and domains related to management of obesity, associated conditions, and role in health promotion, barriers, and learning needs. Items were rated on a 5-point non-numeric scale (from "strongly agree" to "strongly disagree").

Statistical Analysis

Descriptive statistics were calculated for all variables using the Statistical Package for the Social Sciences (SPSS) version 17.

RESULTS

There were 100 Physiotherapists who filled the questionnaire. Table 2 presents respondent and workplace characteristics. Respondents were predominantly female 78% and minimum 40 years of age and the majority had a BSc.PT or equivalent degree 70%. Participant's years of experience varied: 45% had been practicing for fewer than 9 years, while 55% had 10 or more years in practice. Majority 74% of the Respondents were of pure practicum, 12% were of pure academics while remaining was mixture of both (As shown in Table 2).

Table 2: Characteristics of Respondents

Characteristics (%)respondents	No.
Age	
25yrs-30yrs	26
31yrs- 35yrs	34
36yrs- 40yrs	22
Greater than40yrs	18
Education level	
BSc.PT	70
MSc.PT	19
D.P.T./PPDPT	11
Years in practice	
Less than10yrs in practice	45
10 -19yrs in practice	27
20 -29yrs in practice	20
Greater than 29yrs in practice	08
Average work hrs/wk	
Approx.48hrs/wk	70
Greater than 48hrs/wk	30
Workplace setting	
Pure practicum	74
Pure academics	12
Combination of academics and practicum	14

The Role of the Physiotherapist

Management of clients with obesity

There was strong agreement that physiotherapists have a role to play in the management of patients with obesity by developing exercise interventions 93%,

Functional mobility training 95%, and cardio-respiratory programme training for impairments due to obesity 94%. Respondents were less clear on their role in the assessment of body fat or in managing patients' weight loss: 35% and 20%, respectively, were neutral about physiotherapists' role.

Management of obese clients with associated conditions

Physiotherapists agreed or strongly agreed that they have a role to play in the assessment and management of conditions such as heart

Disease, diabetes, and osteoarthritis that are associated with obesity, with the exception of one item: 25% were neutral and 11% disagreed that physiotherapists have a role to play in pre-surgical weight loss.

In this study we found System barriers like lack of access to equipment 83%, time constraints 81%, and limited availability of community resources for clients with obesity 78% found. There was found less conformity about barrier because of lack of teamwork and follow-up opportunities. 92% not being motivated to follow through with the programme and 77% clients' not feeling that managing their obesity is a necessary goal. 85% Respondents also acknowledged that physiotherapists have limited professional training and knowledge in managing obesity and 74% lack experience in this area.

Learning Needs

75% agreed that there is a need for information about the medical implications related to obesity and the pathology and physiology of obesity 85%. There was more moderate agreement on the need to learn skills to assess BMI 38%, measure waist-to-hip ratio 39%, and determine waist circumference 30%.

DISCUSSION

Our study results highlight that (93%) physiotherapists play role in the rehabilitation management of clients with obesity), that is comparable to a study done in Nigeria in which 196 (63.6%) of the respondents had high knowledge and 292 (94.8%) had good attitude towards physical activity promotion in patients' management.²⁹ In another similar study, Shirley et al reported that majority (93%) surveyed Australian physiotherapists had a very good role perception and confidence in promoting physical activity to clients.³⁰

In our study physiotherapists had strongest agreement with roles usually linked with physiotherapy practice, like exercise training, functional mobility, and cardio-respiratory training programmes for impairments caused by obesity. Respondents also seemed to have no problem regarding to perceive about the role that physiotherapists play their role in managing conditions associated with obesity.

Physiotherapist treat patients with osteoarthritis, post-arthroplasty to enhance muscle strength, muscle flexibility, posture and gait [14].

However, there was a scarcity of agreement on the role of physiotherapist's in managing adiposity, together with performing assessments like measures of waist circumference.¹⁵ physiotherapists during this survey didn't agree on their role within the management of adiposity. It's doable that, as in different studies, respondents didn't have adequate knowledge of effective interventions or of BMI or waist-circumference measures. It might be that physiotherapists are uncomfortable discussing weight with their some clients [16,17,18].

In our study some respondents indicated that they have inadequate motivation and goals associated with their weight loss. Different literatures suggesting that society at large as well as health care professionals have a strong weight bias and may usually blame individuals who are obese for their condition [19,20]. Bias can also be associated with clinician's uneasiness with raising issues correlated with weight, or it may reflect factors that contribute to obesity, like economic status, life style, community environment, and genetics, all of which have been shown to have an impact on population's raising rates of obesity[19,20]. Schwartz and colleagues found in their study that even health care professionals who work with obese patients, and in spite of having a greater understanding of the etiology, were biased against this group people.

Our study confirms the need to promote awareness regarding obesity and its consequences. Entry level and continuing-education in physical therapy programmes should address attitudes and biases to make sure that clinicians will treat obese clients in a non-biased manner that supports complete care [15,19].

The results in our study are consistent with those of other studies about health care professionals' roles in managing obesity. In these studies, physicians, nurses, dieticians, and physical-therapists all perceived themselves as having significant functions in the management of patients who are overweight or obese. [16,21,22,25] Although, our study did not measure the actual behaviors or practices of physical-therapists, other studies that did so have determined that these beliefs regarding roles do not interpret entirely into the practice [15,26].

In the study carried among Nigerian Physiotherapists, It was also observed that 60.7% of the respondents acknowledged insufficient consultation time being a barrier to the promotion of active lifestyle among patients [29]. As similar to our study when viewing the results about client motivation, time constraints (81%), inadequate equipment (83%) and professional training (73%) were seen as barriers, similar with findings reported for physician and nursing practices [16,18,23,24]. Professional training needs that were identified by physiotherapists in current study focused on enhancing skills/knowledge, awareness of psychological factors, patho-physiology of obesity and other

diseases, effectiveness of comprehensive exercise and medical implications of obesity.

There were fewer physiotherapists who agreed on the need for learning assessment techniques such as Body mass index (BMI, waist-to-hip ratio, and the waist circumference measure). This is unanticipated, known that a smaller group of physiotherapists agreed that they have a role to play in weight-loss management and the assessment of body fat. The right use of assessment measures would help physiotherapists to identify obese individuals whose body weight puts them at increased health risks and provide chances to talk over physical activity and healthy lifestyles changes they need to make [27].

As in this study, majority of the respondents (93%) were positive that physiotherapists have a role to play in the health promotion with people who are overweight /obese. Despite the fact that physiotherapists can initiate to discuss the need for healthy life-styles with their clients, additional work need to be done in this regard to determine effective models of health promotion, as the barriers being identified in this study concerning time constraints and community resources. The reversal of obesity is challenging, and success rates are near to the ground [21,27]so the most practical option for obesity management will be early prevention and prompt management [27]. On the other hand addressing weight issues by means of giving awareness, education, referral, and activity prescription could be a good component of Physical Therapy treatment plans in the early phases of diseases related with obesity [27]. The current vision of physical therapy's role in promotion of health care in the 21st century holds the assurance of lowering the needs for invasive health interventions (i.e. drugs and surgery)[28].

Limitations and Recommendations

The study must be considered in the light of the limitations of sample size, as it was very small and included the views of the Physiotherapists of three tertiary care hospitals of Karachi only. There are other few points in the survey, like cardiovascular training programmes for impairments due to obesity, may have been unclear and therefore respondents interpreted differently. The use of particular examples would help to clarify roles as they relate to these interventions. There were many respondents who reported working in different environments, which may advocate that roles related to obesity cross settings and areas of practice. As a matter of fact we did not pursue or evaluate these sub-groups distinctly; however, further studies in future may need to take into account the different perspectives of physical therapists who work in outpatient settings and in hospital with exclusive patient populations, and with a larger sample size representing all four states of Pakistan.

CONCLUSION

It can be concluded that physiotherapists believe to they have a variety of tasks to play in the rehabilitation management of clients with obesity, predominantly in the area of exercise and mobility prescription for conditions associated with obesity.

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