



PERCEPTIONS ABOUT KNOWLEDGE AND CLINICAL BEHAVIOR REGARDING CARDIOVASCULAR DISEASE RISK PREVENTION AMONG PHYSIOTHERAPISTS ACROSS INDIA.

Physiotherapy

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ABSTRACT

Background: The study purpose was to assess perceptions of physiotherapists regarding the role of physiotherapy in cardiovascular disease risk prevention.

Methodology: A 20-item questionnaire was provided to the samples electronically and physically (to those who are feasible). The physiotherapists were asked to answer the questionnaire using a scale 5- point Likert Scale.

Results: Mean values of each element were taken and they were calculated into percentage. Then agreement threshold of each element of the questionnaire was calculated in percentages. The final values were in percentages of the elements of the survey.

Conclusion: Physiotherapists support most CVD prevention behaviors, but there less implementation of the behaviors.

KEYWORDS

Cardiovascular diseases, Physiotherapists, India

CONDENSED ABSTRACT

The study was conducted to study the knowledge of clinical behaviours regarding cardiovascular disease risk prevention among physiotherapists in India. The survey was carried out using a 20 item questionnaire and the physiotherapists were asked to grade each element of the questionnaire based on the scale. The conclusion was derived by calculating the agreement threshold of the elements which was calculated in percentages.

INTRODUCTION

Cardiovascular Diseases (CVD) cause disturbance in the functioning of the heart as well as damage the structure of heart and blood vessels to some extent. The disease which are included in this include; cardiomyopathy, arrhythmias, heart defects, heart valve diseases etc¹. The epidemiology of CVD has a higher rate in India. CVD attributes to quarter of all mortality in India. More than 80% of deaths due to CVD include diseases like Ischemic Heart Disease and stroke. As estimated by the Global Burden of Diseases, the global average of 235 per 1,00,000 population is less than age-standard CVD death rate of 272 per 1,00,000 population in India.² Risk factors contribute to the occurrence of CVD. In India, the most common risk factors which can cause CVD are tobacco, smoking, physical inactivity or excessive alcohol intake. The prevalence of tobacco or smoking in India is 44.1%, whereas that of physical inactivity is 25.2%, and excessive alcohol intake sums up to a total of 2.6%.³ Healthy eating, exercise, avoidance of tobacco smoke and limiting alcohol intake are some of the measures which can improve the risk factors and help in prevention of CVD. Prevention of CVD is estimated up to 90%. Diabetes, blood lipids, high blood pressure should also be treated in order to prevent CVD⁴. Haskell et al 2009, conducted prospective observational studies that have demonstrated that the greatest risk of developing a variety of chronic diseases such as obesity, heart diseases or diabetes include people who are least active and unfit. Body size or shape, education, income, ethnicity are not related to the increased risk. Physiotherapists can prevent CVD by explaining lifestyle modifications and play a major role in the education and prevention of CVD⁵. People with recent cerebrovascular accident, acute coronary syndrome, coronary intervention, peripheral arterial disease or current/prior symptoms of heart failure should be recommended with a physiotherapist guided home or community based exercise program or comprehensive risk reduction regimen or cardiovascular or stroke rehabilitation as a secondary prevention strategy⁶. In order to make people aware of the risk factors and how to curb the risk of developing CVD, information leaflets can be provided. A detailed routine history through medical or family history should be taken when the patient visits a cardiac rehabilitation clinic and if suspected, the patient should be referred to a cardiac surgeon or a general physician for a detailed check-up and routine tests. People can consult physiotherapists by reading the information leaflets and decide for themselves if they are at risk and they then can initiate preventive strategies to lower the chances of

developing CVD. Promotion of discussions and other physiotherapy services can be initiated by organizing seminars and sessions by the cardiac rehabilitation clinics⁷. The strongest factor for developing a cardioprotective lifestyle is education. It is essential to make people aware of such a lifestyle. But the general population has very little information of the same⁸. And hence all this forms a vicious cycle and the physiotherapists who are actually known to play a vital role are helpless despite of having tremendous knowledge about the prevention strategies.

STATEMENT OF PURPOSE:

The purpose of the study was to assess the perception of the knowledge and clinical behaviour regarding cardiovascular disease prevention among physiotherapists across India. It will also help to adopt a case study approach to examine a cardiovascular disease risk education intervention in primary healthcare, with the aim of identifying the key elements required for an effective and sustainable approach to coordinate cardiovascular disease risk reduction across the health and community sectors. These elements will be used to consider a new systems-based model for the prevention of cardiovascular disease that informs future practice. The purpose of the study is to survey the perceptions of physiotherapists relative to the knowledge and appropriate clinical behaviour regarding cardiovascular disease prevention

METHODOLOGY

The source of data included Pravara Institute of Medical Sciences and other medical colleges in India and physiotherapy clinics across India. The data was collected by primary investigator. The study design was cross sectional study. The sample size was 1600. It was a cross sectional type of study. The type of sampling was convenient sampling. The duration of the study was 4 months.

PROCEDURE

The inclusion criteria were physiotherapists who are members of the Indian Association Physiotherapy and physiotherapists who have working experience of 0-5 years or 6-10 years or 11-15 years and postgraduate physiotherapy students. The exclusion criteria were physiotherapists who were not members of Indian association of Physiotherapy and undergraduate physiotherapy students including interns. The 20- item questionnaire was given by the author to the physiotherapists. The questionnaires were given physically to those who were feasible and sent through emails across India. The survey questions were classified into 4 groups namely; education of CVD/CVD Risk factors (EDCVD), Development/Administration of Primary CVD Prevention protocols (PRECVD), Identification of underlying (undiagnosed) CVD/CVD Risk (IDCVD), Monitoring CV Status of Patients with known CVD (MONCVD). The physiotherapists were asked to grade the questions on a scale of 0 to 5 known as the Likert Scale. After getting the results the author

calculated the groupwise agree percentages initially and then the agree percentages of individual questions.

RESULT

A total of 990 physiotherapists among 1600 physiotherapists responded to the survey, resulting in a 61.87% response rate. The respondents were members of Indian Association of Physiotherapists and were practicing physiotherapists either in hospitals or clinics. The responses show the knowledge regarding the CVD risk prevention is immense among the physiotherapists across India, but there is very less implementation of the practices regarding it. The physiotherapists have a very important role to play in the CVD risk prevention yet there is no awareness or knowledge regarding the same among Indian population. The groupwise agree percentages were 42.63% agreed to EDCVD, 46.21% agreed to PRECVD, 47.80% agreed to IDCVD and 44.86% agreed to MONCVD. The results show that the physiotherapists are in agreement with the prevention protocols and with good patient knowledge and awareness, it may help them carry out such protocols and prevent CVD in people who are likely to suffer with it. The respondents obtained varied in years of experience and hence they were classified depending upon their years of experience. There were 30% who had 0-5 years of experience, 60% had 5-10 years of experience and 10% of the respondents had 10-20 years of experience. This shows that physiotherapists who have less experience in this field also agree with protocols and have possess knowledge about it.

DISCUSSION

The purpose of this study was to survey the perceptions of physiotherapists regarding cardiovascular disease risk prevention. The results showed while physiotherapists believe the profession has a strong role to play in primary and secondary CVD prevention, there is less implementation of the same. Physiotherapists across India have a vast knowledge regarding the prevention of CVD but there is very less implementation of the clinical practices regarding it. There is need of awareness among the patients regarding such practices and consulting the physiotherapists for exercise prescriptions. With the expanding availability of direct access to physiotherapy services and considering their uniquely qualified skill set, physiotherapists would seem to be in an ideal position to administer quality primary and secondary CVD prevention. Additionally, the ever growing imperative of frontline health practitioners to measure and document health risk factors to meet Physician Quality Reporting System standards provides further impetus for physiotherapists to proactively take the lead in CVD primary prevention methods. As cardiovascular disease is one of the leading causes of deaths in India, there is a need to increase the awareness among individuals to inculcate the importance and knowledge regarding it. Cardiac rehabilitation setups should be increased in order to implement proper protocols. Educational sessions regarding the prevention strategies should be initiated for the patients. Having vast knowledge about the risk prevention and clinical behaviours regarding the same should be of use for the betterment of the Indian population. Statistics may show a decline in the mortality rates due to cardiovascular disease if the behaviours are brought into practice.

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