

FINANCIAL BURDEN ON PATIENTS AVAILING TREATMENT FOR BACK PAIN

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ABSTRACT

Background of the study: Back pain is one of the most common syndromes and it represents a challenge for the medical community. Back pain is a painful clinical, bio psychosocial syndrome with multiple etiologies, causing limitation of current activities and disability. Back pain causes activity limitation which results in work absenteeism, premature retirements, insurance claims and psychological stress on the individual suffering from back pain. The high prevalence rate and effect on sick leave and health care costs on the financial impact of back pain is substantial in western countries.

Aim & Objectives: To explore the financial burden felt by the patients and average cost associated with physiotherapy treatment and other treatment methods for treating back pain.

Methodology: In this study 100 subjects were taken randomly according to inclusion and exclusion criteria. The survey was conducted at Government/private hospitals and clinics in Panchkula among patients suffering from back pain through a self-reported questionnaire containing 37 questions related to the study. The total number of male and female participants were 39 and 61 respectively. The samples were divided into six age groups that were 21-30, 31-40, 41-50, 51-60, 61-70, and 71-80 years. The percentage of patients perceiving back pain as a financial burden is represented by using pie chart.

Results: The result showed that the 14% people doesn't perceived back pain as financial burden and 86% subjects feels that taking physiotherapy as a treatment for back pain is imposing burden on terms in relation to money.

Conclusion: It has been concluded that overall costs in treating back pain can impose significant financial burden on some individuals and may become a barrier to the provision of appropriate care.

Keywords: Physiotherapy, back pain, investigations, orthopaedics, pain killer medicines.

Introduction:

Low back pain is a painful clinical, bio psychosocial syndrome with multiple etiologies, characterized by pain between the twelfth rib and the sacrum, with or without radiation to the lower limbs, causing limitation of current activities and disability. LBP is one of the most common syndromes and it represents a challenge for the medical community (Moldovon, 2012). Apart from this challenge LBP affects a large number of people each year and is the cause of great discomfort and economic loss (Maniadakis & Gray, 2000). The point prevalence of low back pain is ranging from 12% to 33%, the one-year prevalence ranging from 22% to 65% and the lifetime prevalence ranging from 11% to 84%. (Tulder, 2006). Back pain affects both society and individual itself. Society suffers because of lost work days and for the individual back pain means both lower income due to missed employment and a reduced quality of life as a result of pain and immobility (Ekman *et al*,2005). Most of the low back pain cases are classified as non-specific, less than 1% is due to serious spinal pathology and less than 5% are true nerve root compromise. (Lahiri *et al*, 2005). Non – mechanical causes include neoplasia, infection and inflammatory arthritis. Acute low back pain is usually defined as the duration of an episode of low back pain persisting for less than 6 weeks; sub-acute low back pain as low back pain persisting between 6 and 12 weeks; chronic low back pain as low back pain persisting for 12 weeks or more (Tulder *et al*, 2006). Poor posture and abnormal movement patterns can also lead to back pain as these problems can cause wear and tear of spine and large joints and cause muscle spasm. Psychological factors can also play an important role in the development of chronic low back pain (Andrea *et al*, 2013). Low back pain affects children to elderly and is a very common reason for medical consultations. As part of the Global Burden of Disease Study (GBD) 2010, the Expert Group showed that low back pain is among the top ten high burden diseases and injuries, with an average number DALYs (disability-adjusted life years) higher than HIV, road injuries, tuberculosis, lung cancer, chronic obstructive pulmonary disease and preterm birth complications. (Duthey,2013). Low back pain causes activity limitation which result in work absenteeism, premature retirements, insurance claims and psychological stress on the individual suffering from back pain. (Deyo *et al*, 1991). Back pain is more than just a major health problem in western countries. The short- and long-term work absenteeism and premature retirement are costly consequences of back pain (Tulder *et al.*, 2006). Back pain leads to more productivity loss than any other medical condition (Wenig *et al*, 2009). Given the high

prevalence rate and effect on sick leave and health care costs the financial impact of back pain is substantial in western countries (Maniadakis & Gray, 2000). People suffering from back pain can develop major physical, social and mental disruption leading to anxiety, depression and decreased participation in social activities. (Struber, 2003). Treatment of back pain with active rehabilitation protocols such as educational. Psychological, social components along with therapeutic exercises have proved to be very effective in treating back pain (Kankaanpa *et al*, 1999).

Need of the Study:

There is paucity of studies that examine the financial burden on patients availing physiotherapy for low back pain treatment. For the most part, cost studies have examined the economic burden of back pain to the society at large. This study is being done to estimate the total cost of physiotherapy in treating back pain as literature indicates that treating back pain is found to be costly and also new evidences indicate that financial burden borne by individual and their families is very large. This study will also help to minimize cost of the treatment and maximize the health benefits. Also, no such study has been conducted to evaluate the financial burden on the people having back pain.

Methodology:

In this study 100 subjects from general population who had history of low back pain and taking physiotherapy treatment were randomly taken by using a self-reported questionnaire. The design of this study is a survey study using a self-reported questionnaire to get the data on the treatment cost spent by back pain patients. Both male & female subjects of 18 years or more having back pain problem and taking physiotherapy treatment for backpain were included for the study.

The juvenile idiopathic arthritis questionnaire was partially adopted. This questionnaire was reviewed by members of departmental research committee for the correctness of language and appropriateness. The content and validity of the questionnaire was established by submitting the initial questionnaire to the supervisor. Thus, the final questionnaire consisting of 37 questions was established. The survey was successfully done in Panchkula among patients suffering from back pain by self-reported questionnaire. Data was collected from various government hospitals, private hospitals and clinics of Panchkula. The subjects were taken into the confidence by explaining them in detail about the purpose, aim, objective and significance of the study. They

were made explicitly clear that the information given by them will not be utilized for any other purpose other than this research.

Results:

The present study was conducted with an aim to find out financial burden on patients availing physiotherapy treatment for back pain in Panchkula.

The outcome measures to the study were to see the financial burden perceived by patients for availing physiotherapy and other treatment methods for back pain.

The sample was divided into six age groups that were 21-30, 31-40, 41-50, 51-60, 61-70, and 71-80 years. Maximum number of participants falls into the age group of 51-60 (N= 100, 26%) and minimum were in 71-80 (N=100, 3%). The total number of male participants was 39 and that of female participants were 61.

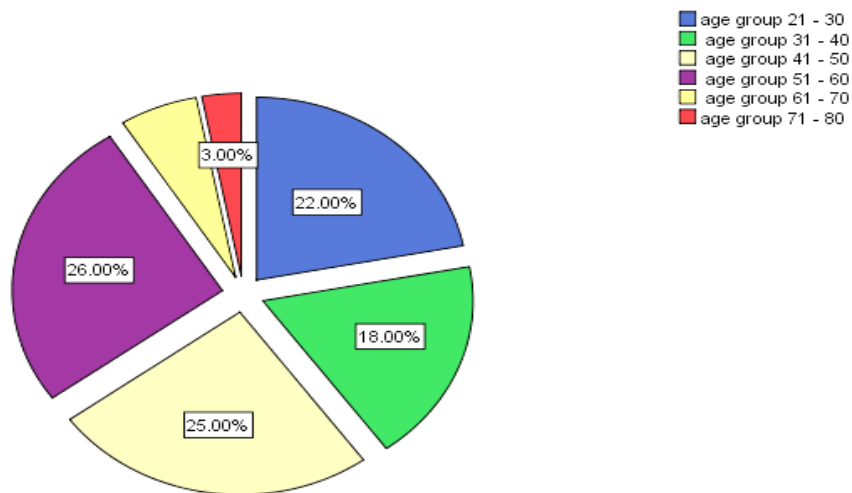


Figure 1: Show Distribution of Subjects According to Various Age Groups

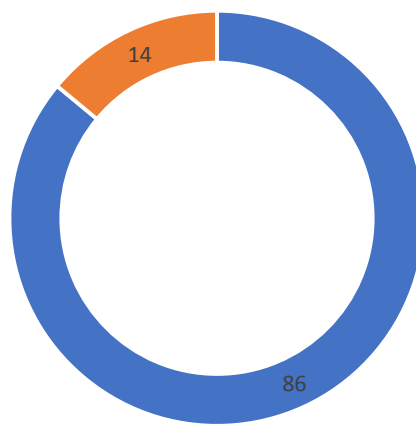
It has been observed that the subjects who perceived back pain and their treatment (physiotherapy) as a financial burden to themselves as well as to their family members constitutes 86% whereas 14% people doesn't perceive back pain as financial burden.

Table 1 showed the distribution of subjects as per the perception of backpain in relation to money

Table 1: Perceived Financial Burden.

Frequency of subjects who feel financial burden due to back pain.	Frequency	%
No	14	14.0
Yes	86	86.0
Total	100	100.0

Figure2: Back pain perceived as a Financial Burden



■ Yes ■ No financial burden

Discussion:

Office of Population Censuses and Surveys (OPCS), 1997 reported that 12% to 16% of all adults visit their doctor every year due to back pain and about 9% of those suffering from back pain visit a government or a private physiotherapist. According to the records of Intercontinental Medical Statistics (IMS), 1993 survey of 500 doctors reported that 9.4% of adults above 15 years of age consult with back pain. In 1997 -1998, the cost of a physiotherapy session in a clinic was £18 and for a domiciliary visit was £40 in UK (Netten *et al*, 1998).

In the present study majority of the affected subjects (86%) reported that treatment of back pain including physiotherapy and other treatment methods impose a financial burden on them and their family members. 14% subjects disbelieve in financial burden of back pain. This result suggests that treating back pain with physiotherapy as well as with medicines is costly not only for the lower class or middle-class families but also for high class families as feeling of burden is somewhat psychological also. It is advised that it is better to prevent the attacks of low back pain rather than cure. Study conducted in Ibadan explore that the direct cost of care accounted for majority of the money spent by patients with LBP receiving physiotherapy. Cost of care in LBP increases with disability (Odole *et al*, 2011). Similar study was conducted in Germany in 2008 which provide important information concerning the relevance of back pain as health problem and its socioeconomic consequences (Weing *et al*, 2008). The study on economic cost of back pain in the Netherlands in 1991 reveals total direct medical costs of back pain was estimated \$367.6 million consisting of \$200 million for hospital care (56.5%), US\$6.6 million for medical specialist care (1%), US\$22 million for general practice care (6%), and US\$139 million for paramedical care (36%) (Tudler *et al*, 2006). In Switzerland in 2005 about 4.4% were absent from work in the last 4 weeks because of LBP, missing an average of 8.2 work days (Rios & Heidi, 2009). Similar cost of illness study was conducted in Sweden in 2002 which reported indirect costs in Sweden accounted for 85% of total costs (Ekman *et al*, 2005).

Some of the limitations of the current study is the Sample size which was relatively very small. The study does not tend to quantify the financial burden and was delimited to a particular city. Furthermore, we were unable to find reliable tool to measure the perceived financial burden.

Conclusion:

Low back pain is a cause of disability and imposing high financial burden. It is not only affecting the elderly population but also the young working population. Treatment now a days are focused on relieving the pain, but not on the exact cause which results in financial burden and the disease enters into its chronic phase. This study reports the financial costs borne by an individual having back pain and their family. It has been concluded that overall costs in treating back pain can impose significant financial burden on some individuals and may become a barrier to the provision of appropriate care.

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