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Level of Pain Experienced by Hospitalized Orthopaedic Patients

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Key words: Orthopedic Patients, Pain.

Abstract:

Background:Pain is experienced by a number of people as a result of the conditions caused by the disease, both during therapy and diagnostic testing. Pain is the fifth vital sign that can lead to various different changes in a person's physiology.

Methods & material: It is experienced by the individual. Research with a descriptive focus using the The goals of the study were to determine the severity of the pain and to establish a connection between that finding and a number of different demographic factors. The research was carried out with the help of the Purposive Sampling Technique on sixty orthopaedic patients who were treated at Krishna Hospital Karad. The Wong-Baker FACES numerical pain scale was utilised for the purpose of data collecting.

Result: The outcomes of the current study showed that out of 70 participants, 0 (zero percent) reported having light pain, 29 (48.3 percent) reported having moderate pain, and 31 (51 percent) reported having severe pain in the pre-test.

Conclusion: According to the findings of the study, additional nurse interventions should be provided to orthopaedic patients in order to lower their overall degree of discomfort..

1. Introduction

Multidimensional subjective experience has been a source of pain for humans for generations, despite their best efforts to articulate it. [1–3] According to the International Association for the Study of Pain (IASP), pain is defined as "an unpleasant sensory and emotional experience connected with prospective or

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actual tissue damage." [3] It is thought of as a personal experience and its significance is mostly determined by the location, length, and speed of the sensation. [4]

Pain evaluations based on self-reported measurements designed to quantify the characteristics of pain, such as its intensity. Visual analogue scale (VAS) is a method that is used to evaluate pain. It is a single-item measure of pain and it consists of a horizontal line that is 100 millimetres (mm) long and has the labels "No Pain" at the leftmost portion of the line and "Worst Pain" at the rightmost portion of the line. VAS is a single-item measure of pain. [5]

Therefore, the patient's vocal report of pain is vital, and it ought to be acknowledged as the one indicator of pain that is the most reliable overall indicator. [6,7–9]

When patients are admitted to the hospital, their primary concern is typically with their pain. A patient-doctor-hospital relationship that has been established over a lengthy period of time results in pain-free hospitalisation. Because they are typically the first point of contact for patients who are admitted to the hospital, nurses play a significant influence in the overall experience that patients have during their time spent in the hospital. [10]

2. Research Question

Level of pain experienced by hospitalized orthopedic patients

3. Objectives of the Study

To assess the Level of pain experienced by hospitalized orthopedic patients

4. Materials and Methods

The design of the study was a descriptive one, and it consisted of one group doing a pre-test. With the help of the Purposive Sampling Technique, the research was carried out on sixty hospitalised orthopaedic patients at Krishna Hospital in Karad. In order to determine how much pain Wong-baker is in, a pain rating scale was applied for the data gathering.

5. Criteria For Selection of Sample

Inclusion Criteria:-

1. Patients hospitalised with orthopaedic conditions.
2. Patients with orthopaedic conditions who were interested in taking part in this trial.
3. The study included both male and female patients seeking treatment for orthopaedic conditions.

Exclusion Criteria:-

1. Patients who were either willing to participate in the study or were not interested in doing so.
2. Patients who were in a life-threatening condition.

6. Data Collection Technique and Instruments

The formal approval needed to proceed was received from the ethical committee of KIMSDU.

The participants in the study were given an explanation of the purpose of the study.

It was necessary to obtain permission from the hospital authority.

It was done with permission from the Dean of the Nursing College.

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Purposive sample was used for the descriptive research design after inclusive and exclusive criteria were taken into consideration. The 60 orthopaedic patients who were admitted to the orthopaedic ward at Krishna hospital in Karad were distributed among the available slots.

The numerical pain scale was evaluated, as well as the baseline demographic data that was acquired from orthopaedic patients.

After compiling the patients' demographic information, the next step will be to obtain their consent.

On the first day, after patient identification, a Wong-baker faces pain rating scale was used to determine the level of discomfort experienced by orthopaedic patients who had been admitted to the Krishna hospital.

The structured numerical pain scale consisted of one portion that served as a pre-test and covered the following topics:

Section A: This section is comprised of seven questions that seek information on socio-demographic factors, such as the respondent's age, gender, residential area, occupation, marital status, religious affiliation, and family income. Section B: This section seeks information on the respondent's religious affiliation. Section C: This

The Numerical Pain Scale is Presented in Section B

The following is a description of how an item scale was scored and categorised. Every question received a score of three points. On a scale of low to high, Wong-baker experiences varying degrees of discomfort. On this scale, a score of 0-2 indicates a mild condition, a score of 4-6 indicates a moderate condition, and a score of 8-10 indicates a severe condition.

7. Description Of Tool

Scoring Key

0-2	Mild
4-6	Moderate
8-10	Severe

Plan for Data Analysis: Section 1: Descriptive and inferential statistics were utilised in order to carry out the data analysis. In the second section, the investigator created a master data sheet so that he could compute the data. We used frequency and percentage to conduct an analysis on the demographic profile that contained the sample characteristics.

In Section III, the data about the levels of pain were evaluated by determining the frequency, percentage, mean, and standard deviation.

In Section IV, a Chi-square test was performed to determine whether or not there was a correlation between the pain score and the demographic factors that were studied. It was decided that a level of significance of 0.05 would be used for the interpretation of both the findings and the hypotheses.

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Section A deals with the examination of socio-demographic factors of the samples. This section can be found in the book.
The score's interpretation of the level of pain is covered in Section B.
In Section C, we perform an analysis of the data to determine whether or not there is a correlation between the level of pain experienced by orthopaedic patients and certain socio-demographic factors.

8. Results

Section A:

Table 1 : Frequency and percentage distribution of sample according to their socio demographic variables**. (N=60)**

Sr. No	Characteristics	Category	Frequency(N)	Percentage (%)
	Age (Yrs.)	Below 40	20	33%
		Above 40	40	67%
	Sex	Male	40	67%
		Female	20	33%
	Residential Area	Urban	24	40%
		Rural	36	60%
	Occupation	Farmer	22	37%
		Business	19	32%
		Government	19	31%
	Marital Status	Married	46	77%
		Unmarried	14	23%
	Religion	Hindu	45	75%
		Muslim	15	25%
	Income	Below 5000	12	20%
		5000-10000	14	24%
		10000-20000	29	48%
		Above 20000	05	08%

Regarding age, 20 (33%) were under the age of 40, while 40 (67%) were beyond the age of 40. In terms of gender, 20 (33%) of the participants were female, whereas 40 (67%) participated as males. In terms of residential area, 24 were located in urban areas (a proportion of 40%), while 36 were located in rural areas (a proportion of 60%). In terms of occupation, 19 (32%) people were employed in business, 19 (31%) people worked for the government, and 22 (37%) people were farmers. In terms of their marital status, 46 (or 77%) of the respondents were married, while just 14 (or 23%) were single. In terms of religion, 45 (75%) consider themselves to be Hindu, whereas 15 (25%) consider themselves to be Muslim. In terms of the family income, there were 12 households with an annual income of less than 5,000

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dollars, 14 households with an annual income of between 5,000 and 10,000 dollars, 29 households with an annual income of between 10,000 and 20,000 dollars, and 5 households with an annual income of more than 20,000 dollars.

Section- B

Table 2: Score Interpretation of Level of Pain

Level of Pain	Frequency	Percentage
Mild	0	0
Moderate	29	48.3%
Severe	31	51.6%

According to the results of the pre-test, the information shown in Table 2 provides a frequency and percentage distribution of the level of pain experienced by orthopaedic patients. In addition, the mean and the mean difference of pain level scores obtained during the pre-test are presented in the table.

This demonstrates that during the pretest, none of the sixty participants experienced mild pain, 29 participants experienced moderate pain, and 31 participants experienced severe pain.

Section-C: It deals with the analysis of data to find association between Level of Pain among Orthopedic Patients with selected socio- demographic variables. **(N =60)**

Sr. No	Variables		Mild	Moderate	Severe	Chi sq.	P value	(NS/S)
1	Age	Below 40	0	13	7	3.337	0.0677	**NS**
		Above 40	0	16	24			
2	Gender	Male	0	18	22	0.5339	0.4650	**NS**
		Female	0	11	9			
3	Residence	Urban	0	12	12	0.0444	0.8329	**NS**
		Rural	0	17	19			
4	Occupation	Farmer	0	10	12	1.064	0.5875	**NS**
		Business	0	8	11			
		Government	0	11	19			
5	Marital Status	Married	0	22	24	0.0203	0.8867	**NS**
		Unmarried	0	7	7			
6	Religion	Hindu	0	22	23			**NS**

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						0.0888	0.7656	
		Muslim	0	7	8			
7	Family Income	Below 5000	0	8	4	3.160	0.3676	**NS**
		5000-10000	0	7	7			
		10000-20000	0	11	18			
		Above 20000	0	3	2			

S*- Significant **NS- Not Significant**

The chi-square value of age was found to be 3.337, the chi-square value of gender was found to be 0.5339, the chi-square value of residence was found to be 0.0444, the chi-square value of occupation was found to be 1.064, the chi-square value of marital status was found to be 0.203, the chi-square value of religion was found to be 0.0888, and the chi-square value of family income was found to be 3.160

Table reveals the frequency and Chi-square values of pain level of back pain.

1. The computed chi square value of 2.727 for the association between the level of pain experienced by orthopaedic patients and their age was not statistically significant at the 0.05 level.
2. The computed chi square value of 0.000 for the connection between the participants' levels of pain and their gender was not significant when tested at the 0.05 level of significance.
3. The calculated chi square value of 0.0112 for the correlation between the amount of pain experienced by orthopaedic patients and their place of residence did not meet the criteria for significance at the 0.05 level.
4. The computed chi square value of 0.8708 for the association between the intensity of pain experienced by orthopaedic patients and their occupation was not statistically significant at the 0.05 level.
5. The computed chi square value of 0.1845 for the connection between the amount of pain experienced by orthopaedic patients and their marital status did not meet the criteria for significance at the 0.05 level.
6. The computed chi square value of 0.5612 for the connection between pain experienced by orthopaedic patients and their religious affiliation was not statistically significant at the 0.05 level.
7. The computed chi square value of 3.651 for the association between the amount of pain experienced by orthopaedic patients and their family income was not statistically significant at the 0.05 level.

9. Discussion

The purpose of the current study was to determine the Level of Pain Experienced by Orthopedic Patients Who Were Admitted to Krishna Hospital in Karad and to investigate the Association of These Results with Selected Demographic Variables. The samples for the investigation were chosen from an orthopaedic patient who was experiencing significant amounts of discomfort. There were sixty people in the sample. When determining the level of pain experienced

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by the orthopaedic patients KINS and Karad, the Wong-Baker Faces pain scale was utilised.

Both descriptive statistics (including mean, frequency, percentage, and standard deviation), as well as inferential statistics, were used to conduct the analysis of the replies (chi square). Discussions on the Findings The primary purpose of the study was to determine the degree of discomfort experienced by orthopaedic patients who took part in the research. According to the findings of the current study, out of 60 participants, 0 (zero) reported having light pain, 29 (48.3%) reported having moderate pain, and 31 (51.6%) reported having severe pain in the pretest.

The second purpose of the research was to determine whether or not there is a correlation between the participants' levels of pain and the demographic information about them.

The calculated chi square value of 2.727 was not significant at the 0.05 level, indicating that the correlation between pain level among orthopaedic patients and their age is not significant.

The chi square value that was obtained was 0.000, which indicated that the link between the participants' level of pain and their gender was not significant at the 0.05 level.

At the 0.05 level of significance, the chi square value that was obtained for the association between pain level among orthopaedic patients and their home was 0.0112, which was not significant.

The calculated chi square value of 0.8708 was significant at the 0.05 level, indicating that the link between pain level among orthopaedic patients and their occupation is significant.

The calculated chi square value of 0.1845 was not significant at the 0.05 level, indicating that the association between pain intensity among orthopaedic patients and their marital status was not significant.

The computed chi square value of 0.5612 for the connection between pain experienced by orthopaedic patients and their religion did not meet the criteria for significance at the 0.05 level.

The resulting chi square value of 3.651 was not significant at the 0.05 level when analysing the association between the intensity of pain experienced by orthopaedic patients and the income of their families.

Similar Study The purpose of this descriptive study was to evaluate the degrees of pain experienced by 150 patients, 150 families, and 50 nurses in order to ascertain the levels of pain experienced by orthopaedic surgery patients and how their relatives and nurses perceive this level of pain. The findings demonstrated that the pain intensity scores provided by nurses (t=9.136, p0.001) were significantly lower than the levels provided by the patients themselves. There was no discernible difference in the levels of pain experienced by patients and their relatives. According to the results of the regression analysis, the pain intensity scores reported by patients' relatives were around forty percent lower than those reported by patients, and the scores reported by nurses were nearly sixty percent lower.

It is essential that nurses who work in surgical clinics have training on pain

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management as well as the psychological and physiological responses that patients have while they are in pain.
[11]
Another Study That Has Been Supported
A quantitative research approach with a prospective observational design was used for the study to assess the level of pain and pattern of analgesic practises among 100 patients undergoing orthopaedic surgeries. The purpose of the study was to develop patient-tailored analgesic practise in a selected orthopaedic inpatient department at the All India Institute of Medical Sciences in Rishikesh, India. The study was carried out by researchers at the All India Institute of Medical Sciences. Patients who had undergone orthopaedic surgery participated in this study. The majority of these patients (49%) were suffering from injuries to their lower extremities. The findings of the study showed that the majority of patients, or 85%, were experiencing severe pain, and that the most common analgesics utilised by these patients were tramadol and paracetamol administered intravenously. After having orthopaedic surgery, pain management is given a high priority during the postoperative phase. However, a suitable pain management approach needs to be put into place in order to reduce the amount of postoperative pain experienced. [12]

10. Conclusion According to the findings of the study, out of 60 participants, none (0%) reported having mild pain, 29 (48.3%) reported having moderate pain, and 31 (51.6%) reported having severe pain in the pretest. Therefore, further nurse involvement is required in order to lessen the amount of discomfort experienced by orthopaedic patients.

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Conflicts of Interest: There are no conflicts of interest.

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