A Study to Assess the Quality of Life of Patients with Osteoarthritis in a Selected Hospital, Coimbatore, with a View to Develop an Informational Booklet

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Abstract:-

> Background and objectives:

In today's health care, the quality of life is of the utmost significance. Osteoarthritis is a chronic degenerative illness that can have a serious impact on many facets of quality of life. Assessment of patient is the basis of nursing process and it is the integral part of nursing care. To make more accurate and practical intervention choices, healthcare professionals must be aware of the patients' quality of life and the aspects of that quality of life that are being influenced. In this situation, the researcher's goal is to determine which areas of a patient's life are most impacted by osteoarthritis. In this context, the researcher's quest is to assess which domains of life are most affected in a patient with Osteoarthritis based on which the researcher intends to develop an information booklet regarding the disease and management aspect of Osteoarthritis .T he objectives of this study were: to assess the quality of life of patients with Osteoarthritis To determine the association between quality of life and selected baseline variables.

> Methods:

Descriptive research design was used for the study. The setting selected was the Orthopedic OPD of KGH, Coimbatore. 90 subjects with the diagnosis of Osteoarthritis were selected for the study using convenience sampling technique. Structured interview technique was used to collect baseline information sheet data and WHOQoL BREF questionnaire was used to assess the quality of life of subjects with Osteoarthritis. The data was analyzed using descriptive and inferential statistics.

> Results:

The results showed that 51% had rated their quality of life as poor and 55.56% were dissatisfied with their health. Social domain was the least affected and physical domain the strongly affected. The most affected facet score in physical domain was mobility, psychological domain was body image and appearance, social domain was social support and sexual activity and environmental domain was financial resources. The subjects rating of quality of life was found to be lesser compared to their satisfaction for health(mean= be 2.27, SD = 0.90). The mean of overall domain scores was

found to be 216.43(SD= 40.10) which showed that, on an average the QoL of patient as fairly good on WHOQOL BREF, as higher the scores, better the QoL. There is significant association between overall domain scores and baseline variables such as religion, family history, treatment undertaken and treatment undergoing. The physical, social and psychological domain scores showed a significant association with religion, treatment undertaken and undergoing. Physical domain and environmental domain scores showed a significant association with education. Physical, social environmental domain scores showed a significant association with family history. A significant association was also found between psychological domain scores and occupation. There was also a significant association between subjects rating of quality of life and satisfaction of health and variables like education and monthly income.

Keywords:- Osteoarthritis, Quality of Life, Informational Booklet, Domains, WHOQoL.

I. INTRODUCTION

The concept of health is multifaceted and involves biological, psychological, environmental, and social components. Health, or the lack of it, is determined by the complex interactions among environmental or social factors and the psychological and biological characteristics of the individual¹. First and foremost, choosing to be healthy or well-being is a decision to take charge of one's life. It starts with a conscious choice to live a healthy lifestyle, but it's also a state of mind, a propensity to adopt a number of crucial principles in several spheres of life that result in high levels of wellbeing and satisfaction ². There has been a notable rise in the population of senior people, which is interesting given that studies have shown that contentment with the same level of health status might differ among people with the same level of health status ³. Interestingly; there has been a remarkable increase in the growth of the elderly population.

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Quality of life is a state of well being that is composite of mainly 2 components i.e. the ability to perform everyday activities that reflect physical, psychological, social wellbeing and patient satisfaction with the levels of functioning and control of diseases and treatment related symptoms⁷. Care is demanded to enhance quality of life which is the essence of life. To improve quality of life, which is the core of life, care is required. The quality of life is significantly impacted by chronic diseases ⁸. It has complicated people's lives and prevented them from living lives of higher quality. It is well recognized that presence of chronic illness precipitates a major life crisis and affect the quality of life⁸.

> Statement of the Problem

A study to assess the quality of life of patients with Osteoarthritis in selected hospital, Coimbatore, with a view to develop an informational booklet.

➤ Objectives of the Study

- To assess the quality of life of patients with Osteoarthritis.
- To determine the association between quality of life and selected demographic variables.

II. OPERATIONAL DEFINITION

➤ Quality of Life: -

The WHO defines quality of life as an individual's sense of their place in life in relation to their objectives, aspirations, standards, and worries, as well as the culture and value systems in which they live. It is a wide notion that is intricately influenced by a person's physical and mental well-being, level of independence, social connections, religious views, and relationship to key environmental elements9.

In this study, "quality of life" referred to the ratings given to osteoarthritis patients based on their responses to the WHOQOL-BREF questionnaire, which was standardized and covered the areas of physical, psychological, social, and environmental relationships.

> Osteoarthritis Patients: -

it is referred to subjects diagnosed as having Osteoarthritis as evidenced from the records, those who were attending orthopedic outpatient department and those who were admitted in the orthopedic wards of KGH, Coimbatore.

➤ Baseline Variables:-

In this study baseline variables referred to age, gender, religion, education, monthly income, occupation, diagnosis of OA, duration of illness, family history, co-morbidities, treatment undertaken and currently undergoing which would be elicited through interview schedule.

➤ Informational Booklet:-

Informational booklet is a small bound book or pamphlet, usually having a paper cover. In this study it referred to a book which would include the information regarding ways to improve quality of life of osteoarthritis patients.

➤ Hypothesis

• H1: There will be significant association between quality of life and selected baseline variables at 0.05 level of significance

➤ Delimitations

The findings of this study will be limited to patients with Osteoarthritis undergoing treatment in KGH, Coimbatore.

III. RESEARCH APPROACH

In view of the nature of the problem and objectives to be accomplished, descriptive approach was considered appropriate for the study.

➤ Research Design

In view of the objectives of the study, the research design selected was non experimental descriptive design.

➤ Variable

- Three Types of Variables are Identified in this Study:-
- ✓ Independent variable:-In this study patients with osteoarthritis is the independent variable
- ✓ Dependent variable:-The dependent variable in this study is quality of life of osteoarthritis patients
- ✓ Extraneous variables:-The extraneous variable in this study are age, gender, marital status, occupation, family income, duration of illness, diagnosis of osteoarthritis, treatment undertaken and undertaking, family history and presence of co morbidities.
- > Sampling Technique.

Purposive sampling technique was used for the study.

- ➤ Sampling Criteria
- Inclusion Criteria:-
- ✓ Subjects above the age of 20 years
- ✓ Subjects diagnosed as having Osteoarthritis in orthopaedic OPD in KG Hospital Coimbatore.
- Exclusion Criteria:-
- ✓ Those who are critically ill.
- ✓ Those who have undergone orthopaedic surgery.
- ✓ Those who are admitted with fresh trauma.

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IV. DEVELOPMENT AND DESCRIPTION OF THE TOOL

- > Selection and development of the instrument
 The instruments for this study was developed based on:
- Review of literature on related studies, books, journal articles and internet search
- Opinion from experts
- Discussion with health personnel and guides

On the basis of the objectives and conceptual framework of the study, the following instruments were developed to collect data.

The tool used in the present study consists of 2 sections

- Section 1 Baseline data.
- Section 2 Standardized WHOQOL -Brief questionnaire for assessing quality of life.

V. DESCRIPTION OF THE TOOL

> Section A- Baseline variables

Section A consists of a structured interview schedule to elicit the baseline variables such as:-name, age, gender, religion, education, income, support system, marital status, occupation, living locality, diagnosis, duration of illness, family history of osteoarthritis, presence of co morbidities and treatment undertaken and currently undergoing.

➤ Section B- Whoqol-Bref Questionnaire

The WHOQOL-BREF quality of life assessment was developed by the WHOQOL Group with Fifteen international field centers, simultaneously, in an attempt to develop a quality of life assessment that would be applicable cross-culturally. Quality of life was assessed by 4 domains:physical, psychological, social and environmental.

Table 1 Quality of Life was Assessed by 4 Domains:-Physical, Psychological, Social and Environmental

Domains	Facets incorporated within domains		
1. Physical health	Activities of daily living		
	Dependence on medicinal substances and medical aids		
	Energy and fatigue		
	Mobility		
	Pain and discomfort		
	Sleep and rest		
	Work Capacity		
	➤ Body image and appearance		
	➤ Negative feelings		
	➤ Positive feelings		
2. Psychological	➤ Self-esteem		
	➤ Spirituality / Religion / Personal beliefs		
	➤ Thinking, learning, memory and concentration		
	Personal relationships		
3. Social	Social support		
	Sexuality		
4. Environment	➤ Financial resources		
	➤ Freedom, physical safety and security		
	➤ Health and social care: accessibility and quality		
	➤ Home environment		
	➤ Opportunities for acquiring new information and skills		
	➤ Participation in and opportunities for recreation / leisure activities		
	➤ Physical environment (pollution / noise / traffic / climate)		
	➤ Transport		

The WHOQOL-BREF produces a quality of life profile. It is possible to derive four domain scores. There are also two items that are examined separately: question 1 asks about an individual overall perception of quality of life and question 2 asks about an individual's overall perception of their health. The four domain scores denote an individual's perception of quality of life in each particular domain. Domain scores are scaled in a positive direction (i.e. higher

scores denote higher quality of life). The mean score of items within each domain is used to calculate the domain score.

The raw scores are converted to transformed scores by 2 transformations. The first transformation method converts scores to range between 4-20 and the second transformation method converts domain scores to a 0-100 scale.

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➤ Reliability

The WHOQOL-BREF has found to have good validity and reliability. The findings of the validity and reliability of WHOQOL-BREF as stated by WHOQOL group is as follows:

- Cronbagh alpha for each domain scores ranged from 0.66 to 0.84, demonstrating good internal consistency
- The test retest reliabilities for domains were 0.66 for physical health,0.72 for psychological,0.76 for social and 0.87 for environmental domain.

VI. ORGANISATION OF FINDINGS

Data analysis is organized and presented under the following sections

> Section 1

Findings related to baseline variables of the subjects with osteoarthritis.

➤ Section 2

Findings related to the quality of life of subjects with OA

- Findings related to the subjects rating of quality of life
- Findings related to the subjects rating of satisfaction with health
- Findings related to the subjects quality of life scores in four domains
- Findings related to the facet scores of four domains

➤ Section 3

Findings related to association of quality of life with selected baseline variables

> Section 1

Findings related to baseline variables of the subjects with Osteoarthritis

Table 2 Description of Baseline Variables of the Subjects with Osteoarthritis n = 90

S no:-	Baseline variables	Frequency	Percentage
1	Age	•	
	41-55yrs	47	52.22
	56-70yrs	33	36.67
	71-85yrs	10	11.11
2	Gender		
	Male	30	33.33
	Female	60	66.67
3.	Religion		
	Hindu	71	78.89
	Christian	11	12.22
	Muslim	8	8.89
4	Education		
	Middle school	19	21.11
	Secondary	37	41.11
	Higher secondary	15	16.67
	Graduate	19	21.11
5	Marital status		
	Married	90	100
6.	Support system		
	Family	90	100
7.	Monthly income		
	5000- 10000	79	87.78
	10001-15000	5	5.56
	>15001	6	6.67
8	Occupation		
	Semi skilled	39	43.33
	Skilled	5	5.56
	Retired	5	5.56
	Unemployed(housewives)	41	45.56

Table 1:data shows that 47(52.22%) of the subjects with osteoarthrosis were in age group of 41-55yrs.Gender wise, 60(66.67%) subjects were females than males 30(33.33%).Regarding religion, Hindus accounts for 71(78.89%).Considering the educational status,19(21.11%) of the subjects completed their middle school, 37(41.11%) had completed secondary education. All of the subjects who participated in the study were married and had their support

system with families. Seventy nine (87.78%) had a monthly income of 5000-10001, 5(5.56%) had income of 10001-15000 and 6(6.67%) had monthly income of >15000. With regard to occupation, more or less similar proportion of subjects were 39(43.33%) semi skilled workers and 41(45.56%) were unemployed.

VII. CONCLUSION

The study revealed that Osteoarthritis impairs the quality of life and overall perception of the health. OA severely affects the physical domain and social domain being the least affected domain. Thus the clinical outcomes for people with OA typically involve pain, limitation of daily, financial burden, disturbance in body image and appearance and overall diminution of quality of life. The investigator hopes that the information booklet prepared by her will be an effective tool in improving the quality of life to the subjects with Osteoarthritis.

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