# "A STUDY TO ASSESS KNEE JOINT PAIN AMONG ELDERLY AT SELECTED COMMUNITY AREAS, KOLAR."

#### $\mathbf{BY}$

#### **BINDUSHREE.B**

Research Project submitted to the Sri Devaraj Urs College of Nursing, Tamaka, Kolar

In partial fulfillment of the requirement for the degree of

#### MASTER OF SCIENCE IN NURSING

IN

#### **COMMUNITY HEALTH NURSING**



Under the guidance of

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#### **ABSTRACT**

#### **BACKGROUNDAND OBJECTIVES**

#### INTRODUCTION

Againg is a natural process of living organism. Commonest health problem among elderly population is a musculoskeletal pain based on the health surveys undertaken in both developed and developing counties. Knee and back pain are the most frequent complaints among the elderly people, knee joint pain is more common among elderly rather than back pain.

The study aimed to assess the knee joint pain among Elders and to determine the association between the knee joint pain score with socio demographic variables.

#### METHODS AND MATERIALS

A descriptive survey design was adopted by using Purposive Sampling techniques among 100 Elders and collected data using standardized Oxford knee score Scale was used to collect the data based on expert's validation and inclusion criteria of the study.

#### **MAJOR FINDINGS**

The major findings of the study highlighted that majority 45% (45) of the samples belongs to Moderate score , 31%(31) samples belong to Good score and 20% (20) are having Poor score , where 4%(4) belongs to Excellent , there are many studies conducted which supporting to the study.

Which indicates that majority of respondents were suffering from knee joint pain.

**RECOMMENDATIONS:** 

Similar Studies can be conducted on larger population at different community

settings.

**CONCLUSION:** 

Finally, the researchers concluded the findings of the study clearly showed

that majority of the study sample was having Moderate level of knee joint pain, thus,

study recommended to Early identification, preventive practice to reduce knee joint

pain among the elders and to maintain the quality of life in ageing period.

Key words: Knee joint pain, elderly, community.

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## LIST OF ABBREVIATIONS

Sl.no	Abbreviations
1.	F: Frequency
2.	%: Percentage
3.	SD: Standard deviation
4.	df: Degree of Freedom
5.	NS: Not significant Not significant
6.	SS: Statistically significant
7.	OA: Osteoarthritis

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# **CHAPTER I**

# INTRODUCTION



#### **CHAPTER-I**

#### INRODUCTION

Againg is a natural process of living organism. Commonest health problem among elderly population is a musculoskeletal pain based on the health surveys undertaken in both developed and developing counties. Knee and back pain are the most frequent complaints among the elderly people, knee joint pain is more common among elderly rather than back pain. (1)

Elderly people are troubled with severe knee joint pain caused by osteoarthritis. Its prevalence increases with age and generally affects female than male.it affects the majority of the elderly and contributes major ill effect on health and their quality of life. (2)

Chronic Rheumatic diseases, hip and knee osteoarthritis(OA) is leading cause of pain and disability in most countries worldwide. (3)

Osteoarthritis is a condition of cartilage which leads to degradation of joint and inflammation of the synovial membrane, it acts as a cushion-like structure present in-between the joints and bones and prevent the rubbing of each other. (4)

A systematic review and meta-analysis was conducted of cohort studies for risk factors for the onset of knee pain. 6554 paper were identified and after screening 46 studies were included, the main factors associated with onset of knee pain were being overweight(pooled OR 1.98, 95% confidence intervals (CI) 1.57–2.20), obesity (pooled OR 2.66 95% CI 2.15–3.28), female gender (pooled OR 1.68, 95% CI 1.37–2.07), previous knee injury (pooled OR 2.83, 95% CI 1.91–4.19). Hand OA (pooled OR 1.30, 95% CI 0.90–1.87) was found to be non-significant. Smoking was found not to be a statistically significant risk or protective factor (pooled OR 0.92, 95% CI

0.83–1.01).PAFA indicated that in patients with new onset of knee pain 5.1% of cases were due to previous knee injury and 24.6% related to being overweight or obsess.<sup>(5)</sup>

The signs and symptoms of osteoarthritis it include stiffness, crepitus, swelling, bony tenderness, and limp. Osteoarthritis affects every of an individual's day-to-day activities and quality of life. The second most common Rheumatic problem is osteoarthritis and frequent knee disease with the prevalence rate of 22-39% in India.

The prevalence rate increases with aging process. Nearly 45 and 70% of the women have the symptoms and radiological evidence of pathology. It is one the major causes of mobility impairment among females.<sup>(4)</sup>

Several key prevention strategies have been proposed to prevent osteoarthritis and control the disease progression. In particular, reducing overuse of joint and promoting healthy lifestyles play an important role .<sup>(6)</sup>

Management should be comprehensive and individualized. The management plan should be reviewed regularly which is based on non-pharmacological and pharmacological measures. People residing in rural area prefer non-pharmacological treatment plan which include exercise, hot application, cold application, oil massage, yoga, electrical heat application, and use of naturopathy. Sever complementary therapies may play an important role in the management of joint pain. Epsom salt is a natural mineral. Magnesium and sulphates are absorbed through the skin and into the body, which have an effect to reduce knee pain. The study aims to compare Epsom salt, hot water ,or both for knee joint relief on prior research. (7)

#### **NEED FOR THE STUDY:**

#### Key facts as per who,

- In 2019, about 528 million people worldwide were living with osteoarthritis; an increase of 113% since 1990.
- About 73% of people living with osteoarthritis are older than 55 years, and
   60% are female.
- With a prevalence of 365 million, the knee is the most frequently affected joint, followed by the hip and the hand.
- 344 million people living with osteoarthritis experience osteoarthritis.
- With ageing populations and increasing rates of obesity and injury, the prevalence of osteoarthritis is expected to continue to increase globally. (8)

According to world health organization(who),18.0% of women and 9.65% of men over the age of years have symptomatic osteoarthritis which leads knee pain in worldwide. They have limitation in movement around 80% of 25% of them cannot perform their major daily day-to-day activities of life.<sup>(3)</sup>

As prevalence of knee OA is leading cause of pain and disability in most countries worldwide, in modern science, treatment of osteoarthritis of knee joint mainly includes steroids, calcium supplement & pain management(NSAID).long term use of steroids and anti-inflammatory drugs has its side effects like gastritis etc. Last option is knee replacement which is a major surgery and too costly. Total knee replacement will have a growing impact on health care and public health systems in the future. It is necessary to work on cost effective and easily available effective. (12)

Total knee replacement will have a growing impact on health care and public health systems in the future. It is necessary to work on cost effective and easily available effective treatment in OA of knee joint. (10)

During the preliminary survey in the community area the research found that, majority of elderly were expressed of joint pain, difficulty in walking and sitting, considering the high prevalence of knee joint pain among older adults this study aimed to assess the knee joint pain elderly population with age of 60 years and above.

#### **OBJECTIVES**

This chapter deals with the statement of the problem, objectives of the study, hypothesis, operational definitions, limitation of the study and conceptual framework, which provides a frame of reference.

The statement of the problem and objectives of this study are as follows.

#### STATEMENT OF THE PROBLEM

"A STUDY TO ASSESS KNEE JOINT PAIN AMONG ELDERLY AT SELECTED COMMUNIYAREAS, KOLAR."

#### **OBJECTIVES OF THE STUDY**

- 1. To assess the knee joint pain among elderly.
- 2. To determine the association between knee joint pain with selected sociodemographic variables.

#### **HYPOTHESES**

H<sub>1</sub>: There will be a significant association between Knee joint pain and selected demographic variables.

#### **ASSUMPTIONS**

1. Client with knee Osteoarthritis have pain, swelling, inflammation.

#### **OPERATIONAL DEFINITIONS:**

#### 1. Elderly people:

It refers to an individual, who is in the age group of 60 years and above residing in selected community areas, Kolar.

#### 2. Knee Joint pain:

It is an inflammatory joint pain, perceived and expressed the symptoms by the elderly, as swelling, stiffness, congestion as a result of deterioration of the involved knee joint which will be measured by oxford knee score scale.

#### **DELIMITATIONS OF THE STUDY**

- 1. The study is limited to elderly with knee pain.
- 2. The study is limited to only one setting.

#### PROJECTED OUTCOME

This study will help to understand that The level of knee joint pain in elders and there life factors affected due to knee pain.

#### **SUMMARY**

This chapter has outlined on the statement of the problem, objectives, operational definitions, hypothesis, assumptions, delimitation conceptual framework and the projected outcome of the study.

#### **CONCEPTUAL FRAMEWORK**

Conceptual framework deals with abstractions that are assembled by virtue of their relevant to a common theme. Conceptualization is a process of forming ideas, which is utilized and forms conceptual framework for development of research design. It helps the researcher by giving direction to go about entire research process.

The present study aimed to assess the knee joint pain among elderly people at selected community Area, Kolar.

The framework of the present study was developed by investigator based on General System.

Theory which consists of 4 major components as Input, Throughput, Output, and Feedback.

General system theory was first introduced by Ludwig Von Bertanffy in 1968. He defines a system as an organized whole unit that produces an effect or product when interdepends component parts interact with environment. All living systems are open system, which promote the exchange matter, energy and information with other system(subsystem).and environment(supra-system), the exchange within open system, between the system, the subsystem and supra-system is continuous. The dynamic balance within and between the system, the subsystem and supra-system helps to

creates and maintain internal stability. The change in one part of the system creates change in other parts.

**INPUT:** Input refers to the information, energy or matter, which enters the system.

In this study knee joint pain among elders is a system and has input with the system itself(subsystem) which is acquired from the environment(supra system). Thes input includes Elders like Age, Gender, Qualification, religion, marital status ,socio Economical status type of family diet pattern, occupation ,Duration of knee pain , history of comorbid illness which may influence the Elders level of knee joint pain.

**THROUGHPUT:** Throughput refers to the action needed to accomplish the desired task to achieve the desired output.

In this study it refers to the standardized Oxford knee score scale Questionnaire and its administration to assess the level of knee joint pain scale.

**OUTPUT:** Output refers to the result or product of the system.

In this study it refers to the result outcome of care received by Elders on knee joint on knee joint pain showing there pain level as Poor( score 0 to 19), Moderate(Score 20 to 29), Good (Score 30 to 39), Excellent (Score 40 to 48) in relation to assess level of knee joint pain. If the pain level is found poor and moderate advised the Elder to visit the Nearest hospital for further management, which is not under the preview of the study.

#### **SUMMARY**

This Chapter dealt with the statement of problem, objectives of the study, operational definitions, assumptions and Conceptual framework.

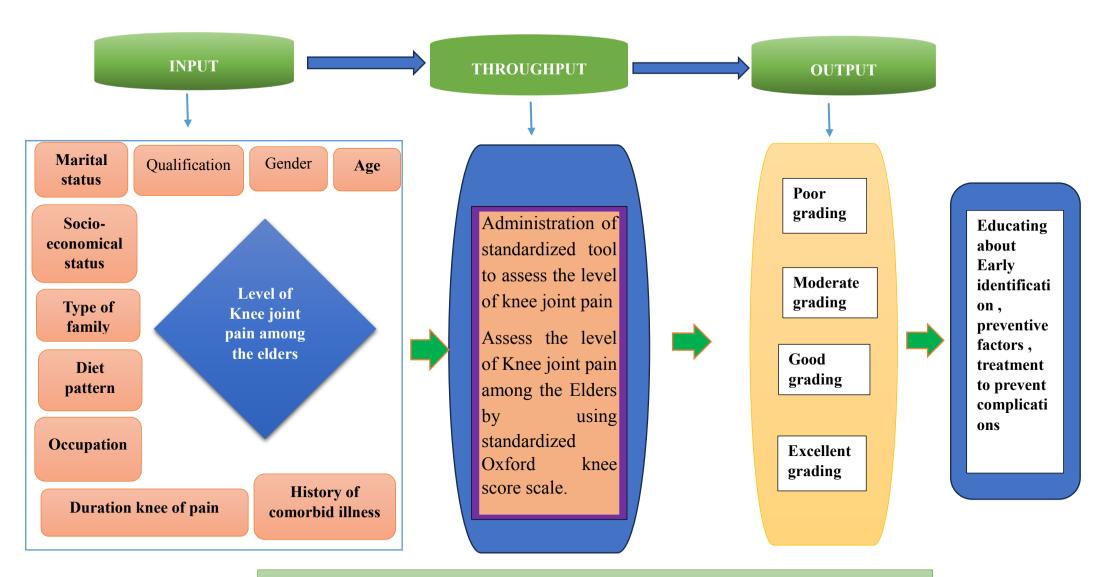


Fig (1). Modified & Adopted General System Theory by Ludwig Von Bertanffy

# **CHAPTER II**

# REVIEW OF LITERATURE



#### **CHAPTER II**

#### **REVIEW OF LITERATURE:**

A cross sectional study was carried out in a tertiary care Centre to study the risk factors of Osteoarthritis of Knee among patients attending Orthopedics OPD, SDM College of Medical Sciences and Hospital, Dharwad, India, a study sample are all patients aged between 40 and 65 years were included in the study, a total of 102 patients for a period of four months were studied, a study results relived that A total of one hundred and two subjects were enrolled in the study of whom 35 (34.3%) were males and 67 (65.7%) were females. Table no. 1 shows that majority of them, 26 (25.5%) were in the age group of 55 – 59 years. Only a quarter of study subjects 26 (25.5%) had positive family history of OA. Of these, men (37.1%) had higher percentage of family history compared to women (19.4%). This difference was not statistically significant ( $\chi 2 = 3.81$  at df=1 and p>0.05).Most of the women 55 (82.1%) were homemakers while majority of the men in the study 17 (48.6%) were unskilled workers. Most of the study subjects 96 (94.2%) belonged to Hindu religion. 76 (74.5%) of the study subjects were literates. Most of them belonged to nuclear type of family 65 (63.7%).<sup>(11)</sup>

A Cross-Sectional Study on Screening for Knee Osteoarthritis and Associated Factors in a Rural Area of India, study conducted in Amalapuram, Andhra Pradesh, India, sample are elders total 100 (50 men and 50 women )by purposive sampling technique, by using Western Ontario and McMaster Universities (WOMAC) OA index a five-point Likert version was used to detect patients for OA. It is a 24-item questionnaire focusing on pain, stiffness, and functional limitation. The results reveled according to WOMAC Index 38% of the subjects belonged to high risk and 62% belonged to low risk. (12)

A cross- sectional study on Prevalence of osteoarthritis of knee joint among adult population in a rural area of Kanchipuram District, Tamil Nadu , Data collection was done by the postgraduates, trained health workers under the supervision of principal investigator, by using OA was diagnosed using the criteria laid down by the American College of Rheumatology, total of 1986 adult are involved among in this study respondents were interviewed out of which 27.1% had OA of knee. Age more than 50 years, female gender, tobacco usage, illiteracy, lower socioeconomic class, positive family history of OA, diabetes, and hypertension were found to be associated with OA knee (P < 0.05). (13)

A cross-sectional study to Study of magnitude of knee osteoarthritis among adult population with age 40 years and above in rural area at, Maharashtra, India. The technique adapted is a stratified multistage random sampling method, sample size 150 with knee joint pain were included in the study. The tool used for the study is American rheumatology criteria (ACR),statistics is Chi square test and Fischer's exact test was applied, result of the study revealed that prevalence of knee OA was found higher in age group >60 years 32 (43.2%) as compared to age group 40-60 years 20 (26.3%) and it was statistically significant In this study, males were having a prevalence of 26 (36.6%) compared to females which were having 26 (32.9%)and found to be significant , hence study highlighted that The prevalence of knee osteoarthritis was higher in client, The sociodemographic factors like age >60 years, education, occupation, low socioeconomic status and lifestyle risk factors like DM and BMI≥25 was found to be significantly associated with knee osteoarthritis. (14).

A community-based, cross-sectional study on Prevalence, risk factors, and health seeking behavior for knee osteoarthritis among adult population in rural Jammu, in 2020among 232 adults, by using clinical criteria laid down by the

American College of Rheumatology (ACR) tool . the study relieved overall prevalence of knee osteoarthritis was 35.7% (females: 44.5% Males: 23.1%). Age more than 60 years, female gender, history of trauma, BMI >30 were found to be significantly associated with higher odds of OA knee (P < 0.05). Descriptive statistics, OR with 95% CI and Chi-square test were used for the purpose of analysis.<sup>(15)</sup>

A Cross-sectional Study Prevalence of Knee Osteoarthritis and its Associated Factors in Type 2 Diabetes Mellitus Patients in selected geographical areas Barabanki, Uttar Pradesh, India, This study primarily focuses on the prevalence of knee OA in T2DM, with 40 years of age with Type 2 DM, A convenient sample technique used, sample size is 200, results reveled Out of 200 patients with T2DM, 103 (51.5%) were males, and 97 (48.5%) were females. The demographic and disease variables of the patients are shown in [Table/Fig-1]. The mean age of the patients was 53.93±9.94 years, and the mean BMI was 23.28±3.60 kg/m2. A total of 87 (43.5%) patients belonged to the lower socio-economic class. Hypertension was seen in 85 (42.5%) patients, Knee OA was present in 92 (46%) patients. Among them, 74 (80.4%) patients had Grade-2 knee OA, and 18 (19.6%) patients had Grade-3 knee OA according to the KL grading<sup>(16)</sup>

A cross-sectional study India-Based Knee Osteoarthritis Evaluation (iKare): A Multi-Centre Cross-Sectional Study on the Management of Knee Pain and Early Osteoarthritis in India, where the I Kare questionnaire are used to evaluate the knee pain at 3 hospitals in India, a total of 714 patients met the eligibility criteria and participated in this study. The majority of patients had been ex periencing pain for less than 1 year (64.8%) and had previously been prescribed medications (91.6%), supplements (68.6%), and nonpharmacological (81.9%) treatments to manage their knee OA. Current treatment recommendations included oral medications (83.3%),

intra-articular injections (29.8%), and surgical intervention (12.7%). Prescription of oral medications was related to young er age, lack of deformities, and lower Kellgren-Lawrence grades (p < 0.01). Patients treated in private hospital settings were more likely to have been previously treated with medications (range, 84.3% to 92.6%; p < 0.01) and physical treatments (range, 61.8% to 84.8%; p < 0.01) than patients treated at government hospitals.<sup>(17)</sup>

A cross-sectional study was conducted Knee pain and health-related quality of life among older patients with different knee osteoarthritis severity in Saudi Arabia, sample size was 209 consecutive males and females aged  $\geq$ 55 years with patients were classified into two groups: mild/moderate knee osteoarthritis, severe knee osteoarthritis using the pain visual analogy scale (VAS), a statically association found that on average, one year older than those with mild/moderate knee osteoarthritis. The majority of the patients with severe knee osteoarthritis were female (73%), had primary school or less education (51%), and were self-employed or retired (76%). Most patients with severe knee osteoarthritis had knee osteoarthritis in both knees (83%), high body mass index (BMI) scores (33.5  $\pm$  5.7), long duration of knee osteoarthritis (average 7.5 years), and high pain VAS scores (8.2  $\pm$  0.9). the study concluded that knee pain and osteoarthritis which are high in elders. (18)

A cross-sectional study on Prevalence of Symptomatic Knee Osteoarthritis in Saudi Arabia and Associated Modifiable and Non-Modifiable Risk Factors in region of Saudi Arabia where A large, population-representative sample (n = 2254) of adult subjects aged 18 years and over are include in this study, The American College of Rheumatology (ACR) clinical criteria were used to diagnose OA of the knee, The revels overall prevalence of knee OA was 18.9% (n = 425), and women suffered more compared to their male counterparts (20.3% vs. 13.1%, p = 0.001). The logistic

regression analysis model showed age (OR: 1.06 [95% CI: 1.05–1.07]; p < 0.01), sex (OR: 2.14 [95% CI: 1.48–3.11]; p < 0.01), previous injury (OR: 3.95 [95% CI: 2.81–5.56]; p < 0.01), and obesity (OR: 1.07 [95% CI: 1.04–1.09]; p < 0.01) to be associated with knee OA. (19)

A cross-sectional study to assess the Relationship between knee joint discomfort, self-management behavior, and quality of life in the middle-aged and elderly people in China, the technique adapted is a stratified multistage random sampling method, The tools consist of four parts, including General Information Questionnaire, Self-Rating Scale for Knee Joint , Behavior management Scale for Knee Joint Discomfort, a Descriptive statistics analysis is used, results of the study revealed that The average age of the middle-aged and elderly people was 58.99 ± 12.00 years, and an overwhelming number of them were female (52.7%). The BMI was mostly <24 kg/m2 (67.2%) hence the study found be significant, and study concludes that Knee joint discomfort was prevalent in the middle-aged and elderly people. (20)

A cross sectional study Estimating the Prevalence of Knee Pain and the Association between Illness Perception Profiles and Self-Management Strategies in the Frederiksberg, among elderly citizens between 60 and 69 years of age, the tool used is questionnaire method, the result of the study revealed that Among a total of 9086 citizens aged between 60–69 years, Thus, among the 8204 were invited to respond to the survey. At the end of the six-week data collection period, 4292 (52.3%) had initiated the questionnaire. Among these, 1758 (40.9%) reported knee pain and 570 (13.3%) reported self-reported knee osteoarthritis the proportion having self-reported knee pain ranging from 19.9% to 22.7%. From this sample, it is fair to assume that the prevalence of knee OA is between 6.4% and 7.4% in this group of

individuals in the age 60 to 69 years of age, hence this study found to be significant and the study highlighted found the prevalence of knee pain in the elderly between 60–69 years to be 21.4%, while the prevalence of self-reported knee osteoarthritis was 6.9%. 4(21)

A cross-sectional study was conducted On Prevalence and factors associated with knee osteoarthritis among middle-aged and elderly individuals in rural Tianjin, by using KOA was diagnosed according to the 1995 American College of Rheumatology criteria, This study included 3924 participants (1950 male and 1974 female); the mean age of all participants was 58.53 years. In total, 404 patients were diagnosed with KOA, and the overall prevalence of KOA was 10.3%. The prevalence of KOA was higher in women than in men (14.1% vs. 6.5%). The risk of KOA in women was 1.764 times higher than that in men. The risk of KOA increased following the increasement of age. There was higher risk of KOA in participants who walked frequently than in participants who walked infrequently (OR = 1.572); in participants with overweight than in participants with normal weight (OR = 1.509), in participants with average sleep quality (OR = 1.677) and those with perceived poor sleep quality (OR = 1.978), respectively, than participants with satisfactory sleep quality, and in postmenopausal women than in non-menopausal women (OR = 4.12).

A nationwide cross-sectional observational study, among elderly Koreans, We included 2302 participants in our study: 897 men and 1405 women, by knee joints exhibited radiographic change of Kellgren-Lawrence grade 2 or higher, results reveled that A multiple logistic regression model, the odds ratios (ORs) of knee OA in the <2 cup, 2-3 cup, 4-6 cup, and ≥7 cup groups compared to the no-coffee group in men were 1.13 (95% CI 0.50-2.55), 1.79 (95% CI 0.81-3.97), 2.21 (95% CI 0.91-5.35),

and 3.81 (95% CI 1.46-12.45), respectively. There was no significant association between coffee consumption and knee OA prevalence in women. (23)

A cross-sectional study on Magnitude of knee osteoarthritis and associated risk factors among adult patients presenting in a family practice clinic in Nigeria , convenient sample technique used , by using a semi-structured questionnaire to interview 400 respondents. Knee osteoarthritis was diagnosed clinically using the American College of Rheumatology (ACR) criteria, The point prevalence of knee osteoarthritis was 11.5%. Increasing age, female gender, marital status, low educational status, financial dependency, poor income, obesity, previous knee injury, epigastric pain, peptic ulcer disease, varus deformity of the knee, and poor health status were significantly associated with knee osteoarthritis. Logistic regression analysis showed increasing age (OR = 2.874, CI = 1.294-6.381), history of epigastric pain (OR = 57.044, CI = 1.693-192.24) and varus deformity of the left knee (OR = 3.012, CI = 1.063-8.547) to be the most significant factors associated with knee osteoarthritis.

A Descriptive cross-sectional study on Knowledge and Associated Risk Factors of Knee Osteoarthritis among School Teachers at Assiut City, sample size is 749 teachers, by using tool of Knee Injury and Osteoarthritis Outcome Score scale, knee joint pain was examined, results of the study relived that that 42.6% aged 40 -< 50, 56.9% female and 80.2% were overweight and obese, 51.3% of teachers suffering from knee pain and 70.2% had poor knowledge which affected by age, educational level, residence and years of experience. As well as, pain and symptoms subscales of Knee Injury and Osteoarthritis Outcome were significantly linked with age, sex and body mass index. (25)

# **CHAPTER III**

### RESEARCH METHODOLOGY



#### **CHAPTER-III**

#### **METHODOLOGY**

This Chapter deals with the methodology adopted for the proposed study and the different steps under taken. It involves research approach, research design, setting, sample and sampling techniques sampling criteria development and description of the tool, procedure of data collection and data analysis.

#### RESEARCH APPROACH

The term "research approach" refer to a group of policies and strategies that determine the entire course of research. The researcher has chosen the strategy and gathering, analyzing, and interpreting the data. It is mostly dependent on the nature of the study problem that was chosen and on providing the most precise and effective solution possible. (27)

The research approach used for this study is Qualitative Research approach.

#### RESEARCH DESIGN

Research design is an investigator overall plan for getting answers for the research questions. (25).

A researcher's structural framework to combine several research methodologies and procedures. It is a method for answering the research question that aids in choosing the study's goals and guarantees that the research methods are appropriate for the job and employ the right method pd data analysis. (27)

The research design, adopted for this study is Descriptive survey design.

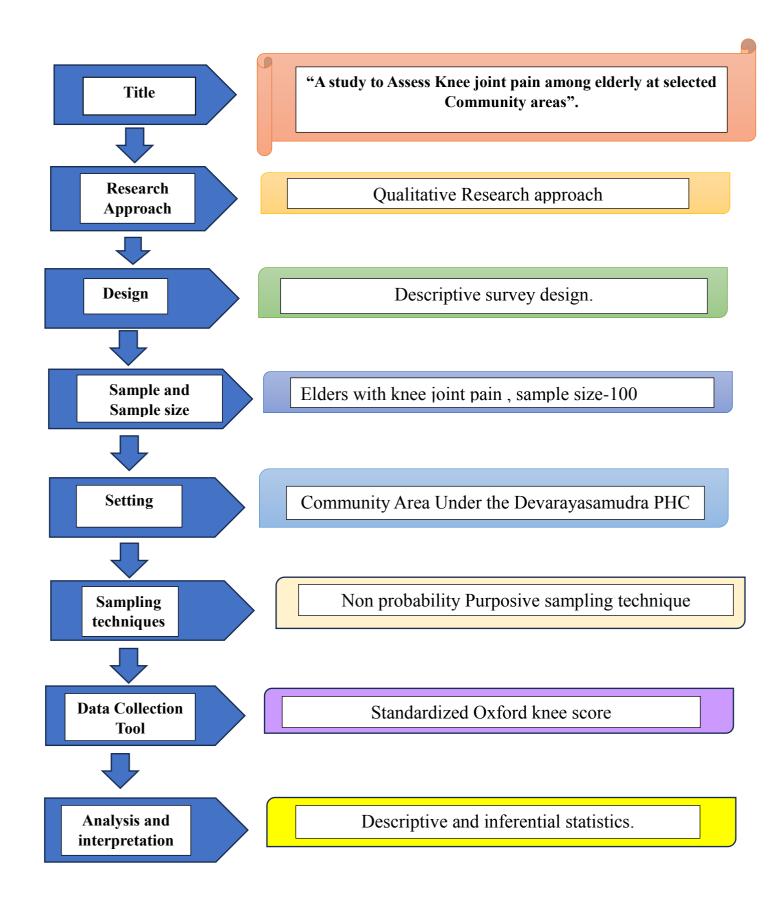


FIG. (2) SCHEMATIC REPRESENTATION OF RESEARCH MATHODOLOGY

#### **SETTING OF THE STUDY**

Setting refers to the area where the study is conducted. (26)

The study will be conducted among Elders under Devarayasamudra community area, Kolar. (Setting of the study selected G. Guttahali Village, under Devarayasamudra PHC, Kothamangala Subcentre.)

#### **POPULATION**

The population for the study refers to the group which represents the entire group or all the elements like individuals that meet inclusion criteria in the study. (26)

All the Elders with age group of 60 years and above in selected community areas, Kolar.

#### **SAMPLE**

Sample refers to subset of the population that is selected to participate in a particular study. (26) The sample for the study consists of Elder clients aged 60 years and above with knee joint pain.

#### **SAMPLE SIZE**

The study sample size consists of 100 Elder people from G. Guttahalli village, Devarayasamudra PHC.

Data has been collected in G. Guttahalli village, under Devarayasamudra PHC, Kothamangala Subcenter. Total population of Guttahalli village is 1362 in this elder population is 360.

#### SAMPLE SIZE DETERMINATION

Power analysis is used to determine the sample size for this study, which considers results from earlier research and a thorough examination of the literature. with a power of 0.5 and a predetermined significance level of 95% (CI) and 5% absolute error (d), the estimated sample size is around 85. If 10% of the sample's dropouts are taken into account, the sample size is around 100 elderly people.

A total of 100 elder population were participated as study participants in the study referred to as the sample size. The sample size was determined by utilizing comparable study literature. (A Cross-Sectional Study on Screening for Knee Osteoarthritis and Associated Factors in a Rural Area of India)

By using Cochran's Formula,

$$\mathbf{N}_0 = \frac{\mathbf{Z}^2.\mathbf{P}.(1-\mathbf{P})}{\mathbf{e}^2}$$

p: the population size

e: the management of error

z: the Z- value, extracted from a Z-table.

#### **SAMPLING TECHNIQUE**

Sampling technique defines the process of selecting a group of people or other elements with which to conduct a study. (28)

For the present study Non probability Purposive sampling technique was adopted to collect the data.

VARIABLES OF THE STUDY

In research, a variable is any quality of a participant, location. Event, or

phenomenon that the researcher attempts to quantify in some way

**Study variable:** Knee joint pain among elderly population.

**Attribute variable:** 

A variable is a measurable quality or trait of a study subject that the researcher

cannot alter; instead, they can only measure or characterize the variable in

accordance with the established system for measurement or categorization. (26)

In this study, "Attribute Variables" describes the Elderly, Age, Gender,

Religion, education status, marital status, Type of physical activity, Type of diet, Body

Mass Index, Previous occupation, Duration of knee pain in years, History of comorbid

illness, Treatment for joint pain.

SAMPLING CRITERIA

**INCLUSION CRITERIA:** Geriatric clients who are

1. Aged 60 years & above, both males and females.

2. Having knee related symptoms

3. Willing to participate

4.who are available at the time of data collection

**EXCLUSION CRITERIA:** 

1. Having other type of joint pains

2. Having other acute illness and psychological

illness.

23

#### **METHOD OF DATA COLLECTION:**

#### **Data collection tool:**

The data collection tool consists of Part I and Part II

**Part-I**: Consists of **Socio-demographic variables**: Family Profile-Such as Age, Gender, Religion, education status, marital status, Type of physical activity, Type of diet, BMI, Previous occupation, Duration of knee pain in years, History of comorbid illness, Treatment for joint pain. Etc.

**Part II:** It consists of standardized Oxford knee score Scale. (The Oxford Knee Score (OKS) was developed by Dawson in 1998, and validated to measure pain and function after total knee replacement.

#### **SCORING**

#### The standardized Oxford knee score Had 12 Questionnaire

The standardized Oxford knee score had 12 Questionnaires. Each Questionnaire having score from 0 to 4 based on the client knee pain and activity level of the client can score each questionnaire, The interpretation of the level of knee joint pain was graded as:

GRADING FOR THE OXFORD KNEE SCORE							
Score 0 to 19 POOR							
Score 20 to 29	MODERATE						
Score 30 to 39	GOOD						
Score 40 to 48	EXCELLENT						

TABLE (1) GRADING OF KNEE PAIN SCORE

#### Method of data collection:

Data will be collected in the following steps.

**Step 1:** Ethical clearance will be obtained from the Institutional Ethical Committee of Sri Devaraj Urs College of Nursing, Tamaka, Kolar.

**Step 2**: Formal permission will be obtained from the concerned Medical officer of selected community areas, Kolar.

**Step 3**: As an investigator, the study objective, purpose and duration of study will be explained and obtain informed consent and participant information sheet from the participants.

**Step 4**: 100 samples will be selected using purposive sampling technique.

**Step 5**: The survey is carried out until the desired sample achieved for the study, using standardized Oxford knee score Scale.

**Step 6**: Based on the survey standardized Oxford knee score responses of the elderly be scored and analyzed using descriptive and inferential statistics.

**Step 7:** Finally thank all the participants.

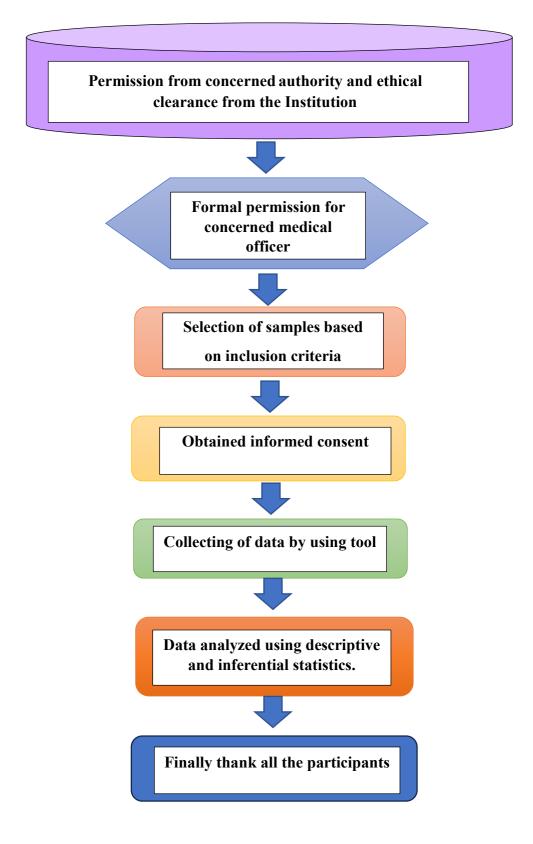


FIG. (3) SCHEMATIC REPRESENTATION OF DATA COLLECTION

#### PLAN FOR DATA ANALYSIS:

Data was analysed on the basis of objective and hypothesis by using descriptive and inferential statistics.

- 1. Descriptive statistics was used to analyse the frequency, percentage, mean and standard deviation of demographic variables.
- 2. Chi-square was used to find out the association between socio-demographic variables.

#### ETHICAL CLEARANCE

Ethical clearance was obtained from SDUCON and to conduct study permission was obtained from MEDICAL OFFICER, Devarayasamudra primary health center And informed consent was taken form study participant before data collection.

#### **SUMMARY**

This chapter of Methodology has dealt on Research Approach, Research design , setting , sample., sample size and sample Technique, Method of data collection , plan for Analysis and ethical clearance related to conducting research .

### **CHAPTER I**

### ANALYSIS AND INTERPRETATION



#### **CHAPTER-IV**

### **DATA ANALYSIS AND INTERETATION**

### Section A: Socio-Demographic variables

Table 2 : Distribution of baseline characteristics in terms of frequency and percentage

N = 100

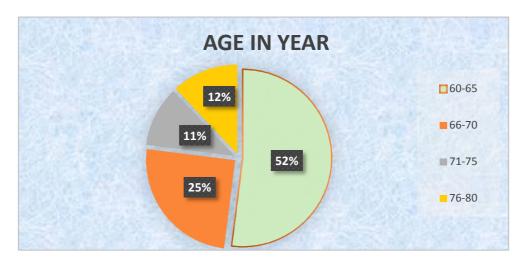
			14 -100						
Sl.no	Socio Demographic variables	Frequency (f)	Percentage (%)						
1.	Age (in Years)								
	60-65	52	52						
	66-70	25	25						
	70-75	11	11						
	76-80	12	12						
2.	Gender								
	Male	30	30						
	Female	70	70						
3.	Educational status								
	Formal education	0	0						
	No-Formal education	100	100						
4.	Religion								
	Hindu	100	100						
5.	Marital status								
	Married	51	51						
	Widowed	49	49						
6.	Socioeconomic status								
	Above poverty level	0	0						
	Below poverty level	100	100						
7.	Type of family								
	Nuclear	76	76						
	Joint Family	24	24						
8.	Diet								
	Mixed Diet	100	100						
9.	Occupation	<u>.L</u>							
	Home marker	67	67						
	Other	33	33						
10.	Duration of pain								
	1-6 Month	23	23						
	7-12Month	29	29						
	1 Year and above	48	48						

11.	Nutritional status						
	Under weight	10	10				
	Normal weight	67	67				
	Over weight	23	23				
12	Treatment for joint pain						
	Yes,	3	3				
	No	97	97				
13	Physical activities						
	No involved	17	17				
	Low(less than 20Min/day)	40	40				
	High(More than 30Min/day)	43	43				
14	History of comorbid Illness						
	Present	10	10				
	Absent	90	90				

# Table 2 and figure 4 to 17 Reveals the socio-demographic variables of the study

#### **AGE**

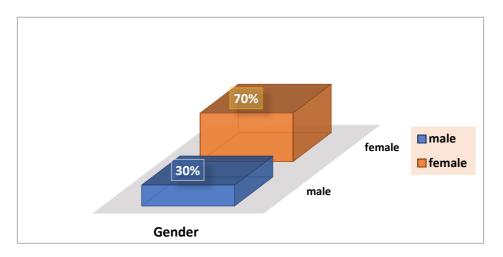
With regards to age majority 52% of the study sample were between the age group of 60-65 years and 25% samples belongs to the age group of 66-70 years , 11% belongs to 71-80 years and 12% samples in the age group of 76-80 years



FIG(4)- Pie diagram depicts the percentage distribution of study Participants according to age

#### 1. GENDER

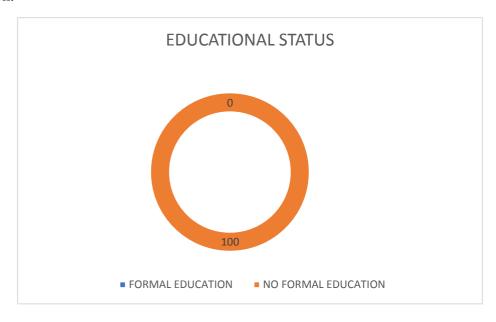
With regards to the gender majority 70% of the study samples were females and 30% of them were males.



Fig(5)- Bar diagram depicts the percentage of study participants according to gender

#### 2. EDUCATIONAL STATUS

As regards to educational stsatus 100% of study sample were on No-Formal Education.



Fig(6)- Pie diagram depicts the percentage distribution of study participants according to Educational status

#### 3. RELIGION

As concerning to Religion 100% of study samples belongs to Hindu.

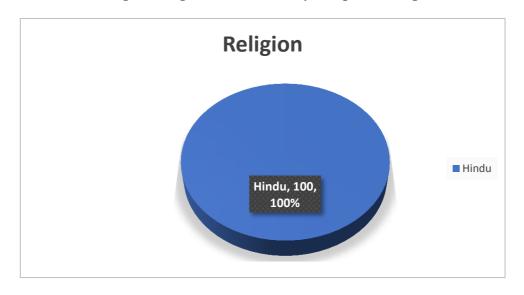


Fig:(7)-Pie diagram depicts the percentage of study participants according to Religion.

#### 4. MARITAL STATUS

As regards to Marital status Majority 51% study sample are married and 49% study samples belongs to Widowed

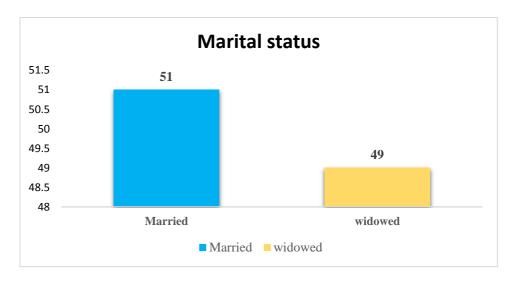


Fig:(8)- Bar diagram depicts the percentage of study participants according to Marital Status

#### 5. SOCIO ECONOMICAL STATUS

As Concerning to socio economic status 100% of study samples belongs to below Poverty level Status

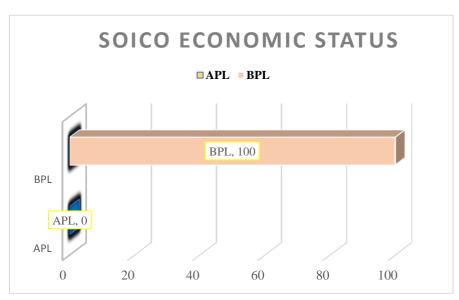


Fig:(9)- Bar diagram depicts the percentage of study participants according to Socio Economical status

#### 6. TYPE OF FAMILY

With regarding to Type of family majority 76% study sample belongs to Nuclear family, 24% belongs to joint family.

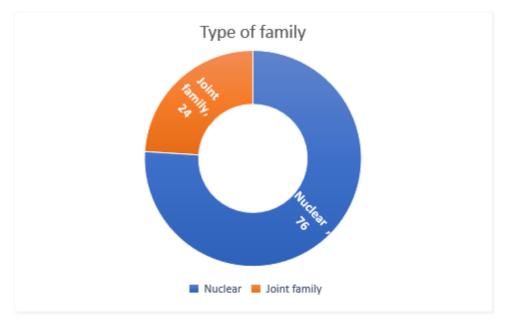


Fig:(10)- Pie diagram depicts the percentage of study participants according to Type of Family

#### 7. DIET

As Regards to Diet 100% study sample belongs to mixed diet

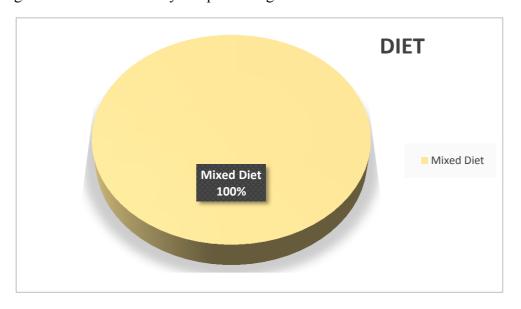


Fig:(11)- Pie diagram depicts the percentage of study participants according to Diet pattern.

#### 8. OCCUPATION

With regarding to Occupation Majority 67% belongs to home makers and 33% belongs to other occupation.

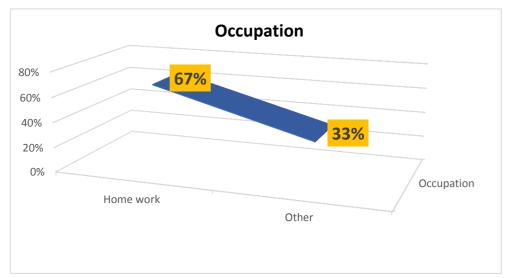


FIG:(12)- Bar diagram depicts the percentage of the study participants according to Occupation.

#### 9. DURATION OF PAIN

With regards to duration of pain majority 48% of study sample duration of pain belongs to >1 year , 29% belongs to 7-12 Months and 23% belongs to 1-6 Month.



FIG: (13) – Bar Diagram depicts the percentage of study participants according to duration of pain.

#### **10.NUTRITIONAL STATUS:**

With Regarding to Nutritional status Majority 67% belongs to normal, 23% of study sample belongs to Overweight and 10% of study sample belongs to underweight

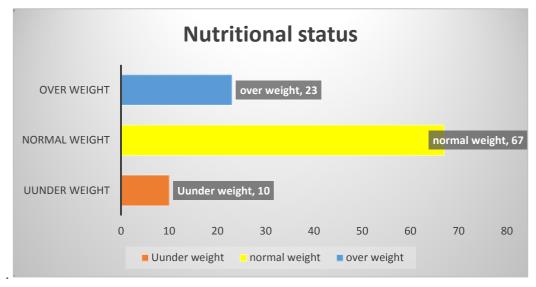


FIG: (14)- Bar Diagram depicts the percentage of study participants according to Nutritional status

#### 11.TREATMENT FOR JOINT PAIN

As Concerning to Treatment for joint pain majority 97% study sample belongs to No( not on treatment) and 3%study sample taking treatment(2%-Ayurvedic treatment 1% on allopathic treatment )

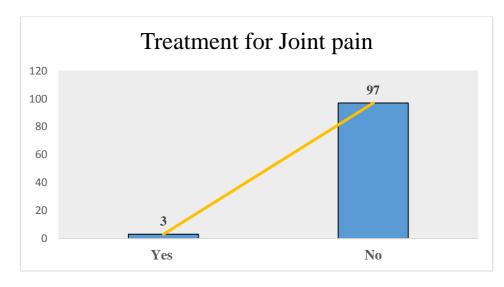


FIG: (15)- Bar diagram depicts the percentage of study participants according to treatment for joint pain

#### 12.PHYSICAL ACTIVITY

With Regarding to Physical activity majority 43% of study sample belongs to High level of activity and 40% of study sample belongs to Low activity and 17% of study sample belongs to No involvement.

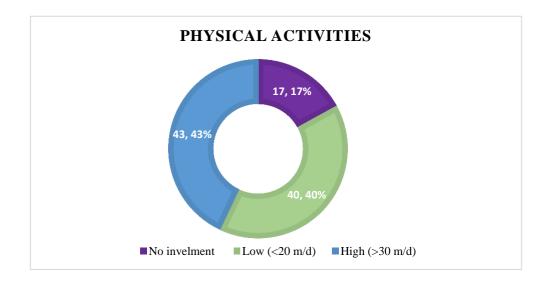


FIG: (17)-Pie diagram depicts the percentage of study participants according to Physical Activities.

#### 13.HISTORY OF COMORBID ILLNESS

With Regarding to history of comorbid illness Majority 90% of study sample belongs to Absent and 10% of study sample belongs to Present

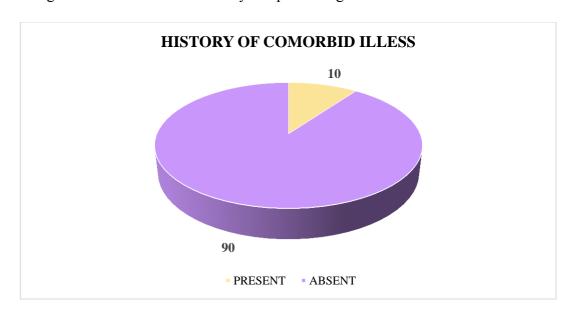


FIG: (17)-Pie diagram depicts the percentage of study participants according to Physical Activities

#### **SECTION: B**

Table 3: ASSOCIATION BETWEEN KNEE JOINT PAIN WITH SELECTED SOCIO-DEMOGRAPHIC VARIABLES

N=100

	Variables	Below Median <22	Median and above > 22	Chi square	df	P value (0.05)	Inference	
1	Age (in Years)	<u> </u>						
	60-70	30	46	$x^{2=}$	1	.0004	SS* at $p < .05$ .	
	71-80	21	03	16.83	1	.0004		
2	Gender	<u> </u>			ļ	<u> </u>	I	
	Male	12	18	2.075	1	.1497	<i>NS</i> at $p < .05$ .	
	Female	39	31					
3.	<b>Educational status</b>	ļ.		Į.	<u>I</u>			
	Formal education	0	0		1		NS at p<.05.	
	No-Formal education	51	49	-		F-1		
4.	Religion	<u> </u>						
	Hindu	51	49	_		F-1	NS at p<.05.	
5.	Marital status	<u> </u>		1	<u> </u>	1		
	Married	19	32	7.869	1	.0050	SS*at p<.05.	
	Widowed	32	17					
6.	Socioeconomic status							
	Above poverty level	0	0	_	1	F-1	NS	
	Below poverty level	51	49				at p<.05.	
7.	Type of family	<u> </u>		<u> </u>	1	<u> </u>		
	Nuclear	36	42					
	Joint Family	16	6	4.855	1	.0276	SS*at p<.05.	
8.	Diet	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	
	Mixed Diet	51	49	-	1	F-1	NS at p<.05.	

9.	Occupation						
	Home marker	39	28	4.22	1	.0399	SS*at p<.05.
	Other	12	21				
10.	Duration of pain					<u> </u>	
	1-6 Month	6	17			.009	SS*at p<.05.
	7-12Month	13	17	9.35	1		
	1 Year and above	30	17				
11.	Nutritional status						
	Under five	8	2				NS at p<.05.
	Normal weight	30	37	3.55	1	.168	
	Over weight	13	10				
12	Treatment for joint pain						
	Yes,	2	1	0.304	1		NS at p<.05.
	No	49	48			0.581	
13	Physical activities						<u> </u>
	No involved	14	03				
	Low(less than 20Min/day)	21	19	1.1716	1	.556	NS at p<.05.
	High(More than 30Min/day)	day) 16 <b>27</b>					
14	History of comorbid Illness						
	Present	6	4	YC-0	-	1	NS at p<.05.
	Absent	44	45				

Note: - P<0.05, NSS-Not Statistically significant, SS-statistically significant, YC-Yates ,F- Fisher exact test ,df-degree of freedom,1(3.841).

**Table- 2** Reveled that there was statistically significant association between the score and socio demographic variables for **Age** with Chi square test(16.83) ,p value (0.0004),at df (1), There was not Statistically Significant association between demographic variables for **Gender** with Chi square value (2.075)and p value (0.1497) at df (1), regarding **education status** with fisher exact value(1),regarding **Religion** with

fisher exact value(1), regarding **Socio demographic** with fisher exact value (1), **Diet** with fisher exact value(1), There was Statistically Significant association between demographic variables for **Marital status** with Chi square value (7.869)and p value (0.0050) at df (1), regarding **Type of family** with Chi square test is (4.855) and p value (0.0276) at df (1), **Occupation** with Chi square test is (4.22) and p value (0.0399) at df (1), **Duration of Pain** Chi square test is (9.3537) and p value (0.0093) at df (1), regarding **Nutritional status** was not statistically significant with Chi square value (3.5574) at df(1), and p value (0.1688), **Treatment for joint pain** Chi square value (0.304) and p value (0.168) at df(1), **physical activities** Chi square value (1.1716) and p value (0.556) at df(1) and regarding **history of comorbid illness** YC-at df (1).

#### **SUMMARY**

This chapter was dealt with the data analysis and interpretation of the data collected from the Elders . The results of the analysis showed that majority 45% (45) of the samples belongs to Moderate score , 31%(31) samples belong to Good and 20% (20) are having Poor , where 4%(4) belongs to Excellent . The association between knowledge scores with selected socio-demographic variable were assessed and its results revealed that variable like, Age, marital status , type of family , occupation , duration of pain ,are statistically significant, were Gender, educational status , religion , socio -economic status , diet , Nutritional status, treatment for joint pain , physical activity, history of comorbid illness are not statistically significant.

### **CHAPTER-V**

### **DISCUSSION**



#### **DISCUSSION**

Elders is Knee joint pain is a prevalent condition among the elderly, significantly impacting their quality of life and mobility. As the global population ages, understanding the experiences and challenges of elderly individuals with knee joint pain is crucial. This study aims to explore the lived experiences of elderly individuals with knee joint pain, individuals 60 years and are selected for this study due to their heightened vulnerability to knee joint pain and associated comorbidities.

The literature reviewed for the present study showed the following gaps;

- Majority of the studies conducted were focusing cross sectional-based studies
- Most of the studies conducted in rural areas
- Only few studies are on innovative method of teaching among students

Hence researcher made an attempt to include few of the above issues which was not addressed by the previous researchers. The present study is an attempt to know level of knee joint pain among the elders. So the obtained data from 100 Elders were analysed in chapter-V and findings were discussed based on the objectives with references in the presence chapter.

#### Distribution of elderly based on their socio-demographic variables.

With regard to distribution of socio demographic variables of Elders with age of 60 years and above, all Elders (100%) majority 52% (52) of the study sample were between the age group of 60-65 years, 25% (25) of them belongs to the age group of 66-70 years and 11%(11) of them belongs to the age group of 70-75 years, 12%(12) belongs to age group between 76-80. Majority 70% (70) of the samples were Females and 30% (30) of them were Males, all the study sample non formal education status

that is 100%(100). all study samples are Hindu religion 100%(100).Majority 51% (51) of the samples are married , 49%(49) belongs to windowed . 100%(100) of sample are belong to below poverty level . majority 76%(76) of sample are belongs to nuclear family , 24% (24) are joint family . and all the study samples are belongs to mixed diet pattern that is 100% (100). 67%(67) study samples occupation is Homemakers ,33%(33)belongs to other(agriculture, daily wages , own bussies ect.).duration of pain majority 48%(48)belongs to 1year and above , 29%(29)are 7-12months , 23%(23) sample pain duration is 1-6 months .Nutritional status majority 67%(67) are normal weight, 23%(23)are belongs to overweight , 10% belongs to low weight status. Majority 97%(97) study samples are not taking any treatment for joint pain , 3%(3) are taking treatment (ayurvedic treatment2%, allopathic 1%) . more 43% (43) study samples physical activity is high (more than 30 min ), 40% (40) Low(less than 20 min), 17%(17) belongs to no involved.

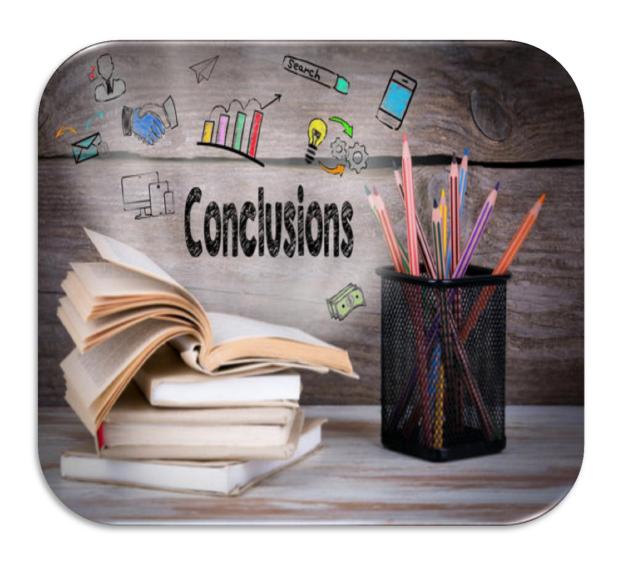
Majority 90% of study samples belongs to absent of comorbid illness, 10%(10) belongs present of comorbid illness .This was supported by the study conducted by Kuti kuppala LV, Madhavi KV, Sathvika MV. (29)

#### Distribution of samples according to level of knee joint pain.

The overall knee joint pain score was assessed out of elderly people. majority 45% (45) of the samples belongs to Moderate score , 31%(31) samples belong to Good and 20% (20) are having Poor , where 4%(4) belongs to Excellent . There are many studies conducted which supporting to the study. (Chakravarty, R D and Maiya, Arun<sup>(30))</sup>

### **CHAPTER-VI**

### SUMMARY AND CONCLUSION



#### SUMMARY AND CONCLUSIONS

#### **SUMMARY**

This chapter deals with conclusion drawn, implication, limitations, and recommendations.

This study aimed to assess the level of knee joint pain among the elders with a view identifying the level of knee joint pain, provide information. A Descriptive design was used for the study. The data was collected from 100 elderly people by using standardized Oxford knee score scale approximately 10 minutes was taken to collect the data from each Elders.

The study was based on the **Ludwig Von Bertanffy**, (1968) General system theory. It provides a schematic representation of conceptual framework for General system theory of elderly people by discussing three functions of client, that were input factors (individual perception), throughput factors (standardized Oxford knee score scale), Participation in health behavior and the major concepts that identify the level of knee joint pain among the elders.

#### Major findings of the study

#### **Description of socio-demographic variables**

Results revealed that majority 52% (52) of the study sample were between the age group of 60-65 years, 25% (25) of them belongs to the age group of 66-70 years and 11%(11) of them belongs to the age group of 70-75 years, 12%(12) belongs to age group between 76-80. Majority 70% (70) of the samples were Females and 30% (30) of them were Males, all the study sample non formal education status that is 100%(100). all study samples are Hindu religion 100%(100). Majority 51% (51) of

the samples are married , 49%(49) belongs to windowed . 100%(100) of sample are belong to below poverty level . majority 76%(76) of sample are belongs to nuclear family , 24% (24) are joint family . and all the study samples are belongs to mixed diet pattern that is 100% (100). 67%(67) study samples occupation is Homemakers ,33%(33)belongs to other(agriculture, daily wages , own bussies etc.).duration of pain majority 48%(48)belongs to 1year and above , 29%(29)are 7-12months , 23%(23) sample pain duration is 1-6 months .Nutritional status majority 67%(67) are normal weight, 23%(23)are belongs to overweight , 10% belongs to low weight status. Majority 97%(97) study samples are not taking any treatment for joint pain , 3%(3) are taking treatment (ayurvedic treatment2%, allopathic 1%) . more 43% (43) study samples physical activity is high (more than 30 min ), 40% (40) Low(less than 20 min), 17%(17) belongs to no involved. Majority 90% of study samples belongs to absent of comorbid illness, 10%(10) belongs present of comorbid illness.

This section deals with the data pertaining to the first objective of the study To assess the knee joint pain among elderly.

#### Distribution of samples according to level of knee joint pain.

The overall knee joint pain score was assessed out of elderly people. majority 45% (45) of the samples belongs to Moderate score , 31%(31) samples belongs to Good and 20% (20) are having Poor , where 4%(4) belongs to Excellent . There are many studies conducted which supporting to the study.

This section deals with the data penetrating to the second objective of the determine the association between knee joint pain with selected sociodemographic variables of the sample.

#### **CONCLUSION**

This present study focused on assess the level of knee joint pain among the Elders at Selected community area, Kolar., based on the findings the conclusions are presented under the following.

Based on the objectives of the study conclusion are presented under the following points.

As per the first objective of the study, findings regarding assessment of knee joint pain among the Elders . The knee joint pain score assessed out of Elders majority 45% (45) of the samples belongs to Moderate score , 31%(31) samples belongs to Good and 20% (20) are having Poor , where 4%(4) belongs to Excellent .

Second objective reveals that, With regard to association: Its Reveled that there was statistically significant association between the score and socio demographic variables for Age with Chi square test square test(16.83), p value (0.0004), at df (1), Marital status with Chi square value (7.869) and p value (0.0050) at df(1), regarding Type of family with Chi square test is (4.855) and p value (0.0276) at df (1), Occupation with Chi square test is (4.22) and p value (0.0399) at df (1), Duration of Pain Chi square test is (9.3537) and p value (0.0093) at df (1), There was not Statistically Significant association between demographic variables for Gender with Chi square value (2.075) and p value (0.1497) at df(1), regarding education status with fisher exact value (1), Nutritional status was not statistically significant with Chi square value (3.5574) at df (1), and p value (0.1688), Treatment for joint pain Chi square value (0.304) and p value (0.556) at df (1), physical activities Chi square value (1.1716) and p value (0.556) at

df(1), regarding **Religion** with fisher exact value(1), **Socio demographic** with fisher exact value (1), Diet with fisher exact value(1), and regarding **history of comorbid illness** YC-0 at df (1)

#### **IMPLICATIONS**

During age of elder many aging factors are affecting there life style in that specially muscle skeleton system problems are more such are lower back ache, joint pain, Marjory knee joint pain hence this study helps to identify the knee joint pain among the elders and projecting a positive attitude.

#### NURSING IMPLICATION

The consequences of the study can be used in the following areas of nursing profession.

#### **NURSING PRACTISES**

Nursing professionals working in the hospital as well as in the community set up should educate

The individual and family members about disorders related to ageing(muscle skeleton) and its management.

Nursing professional play a key role in enhancing the knowledge on early identification and treatment among the elders with knee joint pain.

#### **NURSING EDUCATION**

- 1. Education is the base of knowledge. As a nurse educator they are abundant opportunities to educate the individual and care givers on early identification and treatment.
- The student nurses from college of nursing should be encouraged to attend seminars, conference and workshop regarding elderly care and management of disease in old age.

#### NURSING ADMINISTRATION

Nurses plays major role in completing the purposes of reducing countries.

Knee joint and other muscle skeleton related problems and providing information about Management treatment process.

#### **NURSING RESEARCH**

- 1) Research in nursing is the need of the hour to improve the health status of nurses. If not only helps the nurses in improving their knowledge but also refine quality of care provided to society.
- 2) This study help nurse researcher to carry out studies scheduled the improvement of health and knowledge of elders and family member.

#### LIMITATIONS OF THE STUDY

- 1.The study was limited to the Elderly people with age of 60 years and above in Community areas, Kolar.
- 2. The generalization of the study findings was inadequate as its conducted at only one study setting

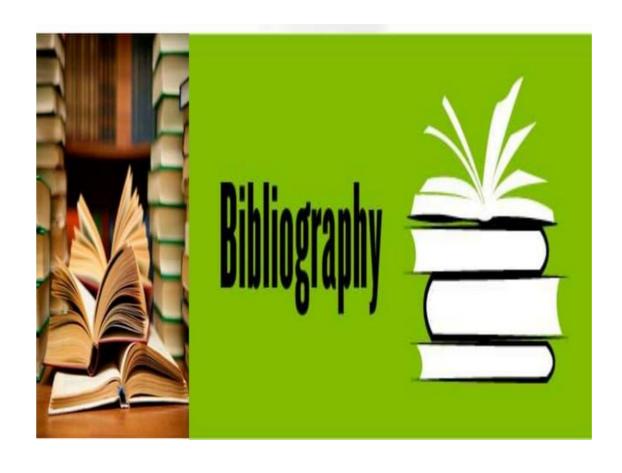
#### RECOMMENDATIONS

- A similar study can be replicated on a large sample in different types of setting.
- A similar study can replicated with True Experimental Study design.

#### **SUMMARY**

This chapter highlighted on overall study findings, implications, limitations and recommendation of the present study. The present study clearly indicated the Early identification and treatment for knee joint pain helps the individual for quality life. The researcher had strongly emphasized the necessity to meet with information needs of the Elderly which will helps them gaining knowledge and to maintain their quality life.

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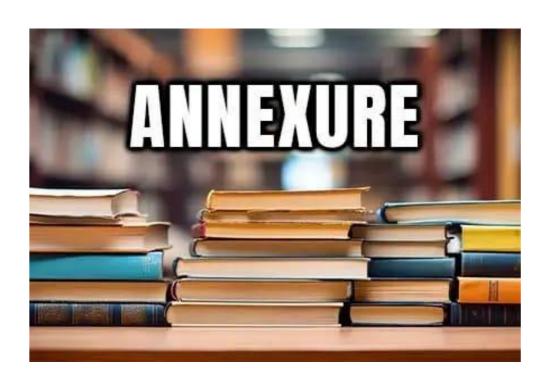
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### **ANNAXURE**



#### **ANNAXURE-A**

#### INSTOTUTIONAL ETHICS COMMITTEE CERTIFICATE



SRI DEVARAJ URS COLLEGE OF NURSING
Tamaka, Kolar-563 103, Karnataka.
(Affiliated to RGUHS, Bangalore and Recognized by KNC, Bangalore & INC, New Delhi)
ISO 9001:2015 Certified& NAAC Accredited Phone: 9480880802 E-mail: sduconson@yahoo.com, Website: sducon.ac.in

Ref,:No. SDUCON/IEC/ PG-141/2023-2024

Date: 09-05-2024

From,

The Institutional Ethics Committee Sri Devaraj Urs College Of Nursing Tamaka, Kolar-563103

To Ms. Bindu Shree MSc Nursing Student Community Health Nursing SDUCON Tamaka Kolar 563103

This is to certify that the Institutional Ethics Committee of Sri Devaraj Urs College of Nursing, Tamaka, Kolar has examined and unanimously approved M.Sc. (N) Topic: : A Community Based Cross Sectional Study to Assess Knee Joint Pain Among Elderly At Selected Community areas, Kolar of Ms Bindu Shree, under the guidance of Mrs Vani R, Assistant Professor, Dept of Community Health Nursing of Sri Devaraj Urs College of Nursing Kolar.

Member Secretary

ETHICS COMMITTEE SRI DEVARAJ URS COLLEGE OF NURSING TAMAKA KOLAR - 563103.

ETHICS COMMITTEE SRI DEVARAJ URS COLLEGE OF NURSING TAMAKA KOLAR - 563103.

# ANNEXURE-B

# LETTER REQUESTING PERMISSION FOR CONDUCTING RESEARCH STUDY

PERMISSION	N TO CONDUCT STUD	Y
From,		Date: 04/04/2024
Ms. Bindushree B		Place: Kolar.
year M.Sc. (N)		
Sri Devaraj Urs College of Nursing		
Tamaka, Kolar – 563101.		
Го,		
The Medical Officer,		
Primary Health Center		
Devarayasamudra, Kolar		
Го,		
Through guide and principal, SDUCON.		
Respected Madam / Sir,		
Sub: Requesting permission to collect data from	om elderly people with kn	ee pain
With the subject to the above, I th	e under signed student	of I year M.Sc. Nursing under the
Department of Community Health Nursing sp	ecialty would like to colle	ect data for the mini research study on
"A study to assess knee joint pain among		
fulfilment of my M.Sc. Nursing curricular req		
Hence, I request you to grant permission	to collect data from elde	rly people with age of 60 years and
above who are under Devarayasamudra prima from the elderly will be kept confidential. Her	ary health centre and do the	research objectives, tool and ethical
clearance for your kind consideration.	, , , , , , , , , , , , , , , , , , ,	10 0
,	Thanking you	Bar B.
Enclosures:		Yours faithfully,
1. Objectives and study		Ms. Bindushree B
2. Tools		A 0
<ul><li>a) Sociodemographic proforma</li><li>b) KDC standardized scale</li></ul>	and and un	medical offices Devous
b) RDC standardized scare	orwanded to	Medical offices, Devous Kolan ca lequest ? Judent to collect
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b) KDC standardized scale  Solver per ded in the need in approval  Solver per ded in the need in the need in approval  Solver per ded in the need in the n	four eldely	Justing at village
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# ANNEXURE-C EXPERT OPINIONS AND SUGGESTIONS FOR CONTENT VALIDITY OF RESEARCH TOOL.

NAME AND SIGNATURE OF THE CANDIDATE	MS. BINDUSHREE.B
REMARKS OF THE GUIDE	NEED BASED STUDY
NAME AND DESIGNATION OF GUIDE	MRS. VANI. R ASSISTANT PROFESSOR DEPARTMENT OF CHN S.D.U.C.O.N TAMAKA, KOLAR.
SIGNATURE	Q.R
SUBJECT EXPART NAME AND DESIGATION	DR., ASHWEEN BILAGI ASSISTANT PROFESSOR AND INCHARGE HOD INTEGRATIVE MEDICINE, TAMAKA (S.D.U.A.E.R.) KOLA
SIGNATURE	Head Medicine
HEAD OF THE DEPARTMENT	DR. MALATHERE HEALTH NURSING S.D.U.C.O.N TAMAKA, KOLAR
SIGNATURE	Cept. of Community Health Nursing Ell Dsyarej Urs College of Nursing Tamaka, Kolar - 563 101.
REMARKS OF THE PRINCIPAL	Need based Study
SIGNATURE	Brincipal

#### **DATA COLLECTION TOOL**

**Instructions to the participant's:** kindly answer to all the questions. Give response to the option Which you prefer. Don't leave any questions unanswered. Your answers will be kept confidential. The information Collect will be only for study purpose.

#### SECTION -A SOCIO-DEMOGRAPHIC VARIABLES

1.	Age (i	n years)
2.	Gende	er
		Male
	b.	Female
3.	Educ	ational status/Qualification
		Formal education
	b.	No formal education
4.	Religi	on
		Hindu
	b.	Muslim
	c.	Christian
	d.	Any other specify
5.	Marit	tal status
٠.		Married
		Unmarried
		Divorce
		Widowed
6.	Socioe	economic status
	a.	APL
	b.	BPL
7.	Type	of Family
		Nuclear family
		Joint family
		Extended family
		Any other Specify
8.	Diet	
	a.	Vegetarian
		Non vegetarian
	c.	Mixed diet

#### 9. Occupation

- a. Homemaker
- b. Private employee
- c. Government employee
- d. Others

#### 10. Duration of pain

- **a.** 1-6 Month
- b. 7-12 month
- **c.** >1 year and above

#### 11. Nutritional status

- a. Under weight
- b. Normal weight
- c. Overweight/Obese

#### 12. Treatment for joint pain

- a. Yes, if yes please specify\_\_\_\_\_
- b. No

#### 13. Physical activities performed per day

- a. Not involved
- b. Low (less than 20 min/day)
- c. High (more than 30min/day)

# 14. History of Comorbid Illness

- a. Present
- b. Absent

#### ದತ್ಯಾಂಶ ಸಂಗ್ರಹ ಸಾಧನ

#### ಭಾಗವಹಿಸುವವರಿಗೆ ಸೂಚನೆಗಳುಃ

ದಯವಿಟ್ಟು ಎಲ್ಲಾ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿ. ನೀವು ಆದ್ಯತೆ ನೀಡುವ ಆಯ್ಕೆಗೆ ಪ್ರತಿಕ್ರಿಯಿಸಿ. ಯಾವುದೇ ಪ್ರಶ್ನೆಗಳನ್ನು ಉತ್ತರಿಸದೆ ಬಿಡಬೇಡಿ. ನಿಮ್ಮ ಉತ್ತರಗಳನ್ನು ಗೌಪ್ಯವಾಗಿಡಲಾಗುವುದು. ಮಾಹಿತಿ ಸಂಗ್ರಹವು ಅಧ್ಯಯನದ ಉದ್ದೇಶಕ್ಕಾಗಿ ಮಾತ್ರ ಇರುತ್ತದೆ.

- 1. ವಯಸ್ಸು. (ವರ್ಷಗಳಲ್ಲಿ) \_ \_ \_ \_ \_
- 2. ಲಿಂಗಭೇದ
  - ಎ. ಪುರುಷ
    - ಬಿ. ಮಹಿಳೆ.
- 3. ಶೈಕ್ಷಣಿಕ ಸ್ಥಾನಮಾನ/ಅರ್ಹತೆ
  - ಎ. ಔಪಚಾರಿಕ ಶಿಕ್ಷಣ
  - ಬಿ. ಔಪಚಾರಿಕ ಶಿಕ್ಷಣವಿಲ್ಲ.
- 4. ಧರ್ಮ
- ಎ. ಹಿಂದೂ
- ಬಿ. ಮುಸ್ಲಿಂ
- ಸಿ. ಕ್ರಿಶ್ಚಿಯನ್
- ಡಿ. ಇತರರು
- 5. ವೈವಾಹಿಕ ಸ್ಥಿತಿ
  - ಎ. ವಿವಾಹಿತ
  - ಬಿ. ಅವಿವಾಹಿತ
  - ಸಿ. ವಿಚ್ಛೇದನ
  - ಡಿ. ವಿಧವೆ

6. ಸಾಮಾ	ಜಿಕ	ಆಥಿಣ	-ੁಕ	స్తిం	වු
	ಎ.	ಎಪಿ	ಎಲ	<del>10</del>	
	ಬಿ.	ಬಿಪಿ	ಎ೮	)E	
ಕುಟುಂಬಾ	ವ ಪ್ರ	ಶ್ರಕಾರ	í		

# 7.

- ಎ. ವಿಭಕ್ತ ಕುಟುಂಬ
- ಬಿ. ಅವಿಭಕ್ತ ಕುಟುಂಬ
- ಸಿ. ವಿಸ್ತರಿಸಿದ ಕುಟುಂಬ
- ಡಿ. ಯಾವುದೇ ಇತರ ಕುಟುಂಬ ನಿರ್ದಿಷ್ಟಪಡಿಸಿ \_ \_ \_ \_ \_ \_

## 8. ಆಹಾರ ಕ್ರಮ

- ಎ. ಸಸ್ಯಾಹಾರಿ
- ಬಿ. ಸಸ್ಯಾಹಾರಿ
- ಸಿ. ಮಿಶ್ರ ಆಹಾರ

# 9. ಉದ್ಯೋಗ.

- ಎ. ಗೃಹಿಣಿ
- ಬಿ. ಖಾಸಗಿ ಉದ್ಯೋಗಿ
- ಸಿ. ಸರ್ಕಾರಿ ಉದ್ಯೋಗಿ
- ಡಿ. ಇತರರು

## 10. ನೋವಿನ ಅವಧಿ

- ಎ. 1-6 ತಿಂಗಳ
- ಬಿ. 7-12 ತಿಂಗಳು
- ಸಿ. 1 ವರ್ಷ ಮತ್ತು ಮೇಲ್ಪಟ್ಟು

11. ಪೌಷ್ಟಿಕಾಂಶದ ಸ್ಥಿತಿ
ಎ. ಕಡಿಮೆ ತೂಕದ
ಬಿ. ಸಾಮಾನ್ಯ ತೂಕ
ಸಿ. ಅತಿಯಾದ ತೂಕ/ಬೊಜ್ಜು
12. ಕೀಲು ನೋವಿನ ಚಿಕಿತ್ಸೆ ಪಡೆಯುತಿರುವಿರ
ಎ. ಹೌದು, ಹೌದು ಎಂದಾದರೆ ದಯವಿಟ್ಟು ಅನ್ನು ಸೂಚಿಸಿ
ಬಿ .ಇಲ್ಲ
13. ದಿನನಿತ್ಯದ ದೈಹಿಕ ಚಟುವಟಿಕೆಗಳನ್ನು ನಡೆಸಲಾಗುತ್ತದ?
ಎ. ಒಳಗೊಂಡಿಲ್ಲ
ಬಿ. ಕಡಿಮೆ (ದಿನಕ್ಕೆ 20 ನಿಮಿಷಗಳಿಗಿಂತ ಕಡಿಮೆ)
ಸಿ. ಹೆಚ್ಚು (ದಿನಕ್ಕೆ 30 ನಿಮಿಷಗಳಿಗಿಂತ ಹೆಚ್ಚು)
14. ದೀರ್ಘಕಾಲದ ಅನಾರೋಗ್ಯ ಸಮಸ್ಯ?
ಎ. ಹೌದು
ಬಿ. ಇಲ್ಲ

#### **OXFORD KNEE SCORE QUESTIONNAIRE**

#### Dear participants,

Please answer the following 12 questions. Choose only one answer per question. The value for each answer is indicated to the right of the answer. Total up all of your answers to obtain a total score out of 48 points. Please only consider how you have been getting on during the past four weeks

Name		
Date		
Left or Right Knee		
1. How would you descri	ribe the pain you have usually from your knee?	Score
None -4		
Very mild	-3	
Mild -2		
Mild mode	rate -1	
Severe -0		
2. Have you had any tro your knee?  No trouble Very little Moderate t Extreme di Impossible	trouble -3 rouble -2 fficulty -1	because of
3. Have you had any trobecause of your knee?	ouble getting in and out of a car or using publ	ic transport
No trouble Very little Moderate Extreme d Impossible	trouble-3 trouble-2 ifficulty-1	

4. If you were to kneel down could you stand up afterwards?	
Yes, easily -4 With little difficulty -3 With moderate difficulty -2 With extreme difficulty -1 No, impossible -0	
5. Have you been limping when walking because of your kne	e?
Rarely/never -4	
Sometimes or just at first -3	
Often, not just at first -2	
Most of the time -1	
All of the time -0	
6. Have you felt that your knee might suddenly give way or le	t you down?
Rarely/never-4	
Sometimes or just at first-3	
Often, not just at first-2	
Most of the time-1	
All of the time-0	
7. Have you been able to do your own household shopping on	your own?
Yes, easily -4	
With little difficulty -3	
With moderate difficulty -2	
With extreme difficulty -1	
No, impossible -0	
8. For how long have you been able to walk before the pain severe (with or without a stick)?	from your knee became
No pain, even after more than 30 minutes-4	
16-30 minutes-3	
5-15 minutes-2	
Around the house only-1	
Unable to walk at all-0	

9. Have you been able to walk down a flight of stairs?	
Yes, easily -4	
With little difficulty -3	7
With moderate difficulty -2	
With extreme difficulty -1	
No, impossible -0	
10. After a meal (sat at a table) how painful has it been for you to stand up from	om a
chair because of your knee?	
Not at all painful -4	7
Slightly painful -3	
Moderately painful -2	
Very painful -1	
Unbearable -0	
11. How much pain from your knee interfered with your usual work (inclu housework)?	ding
Not at all-4	7
A little bit-3	
Moderately-2	
Greatly-1	
Totally-0	
12. Have you been troubled by pain from your knee in bed at night?	
No nights-4	٦
Only 1 or 2 nights-3	
Some nights-2	
Most nights-1	
Every night-0	
Score Total Score	/48

Grading for the oxford knee score	
Score 0 to 19	Poor
Score 20 to 29	Moderate
Score 30 to 39	Good
Score 40 to 48	Excellent

# ಆಕ್ಸ್ಫ್ರ್ ಮೊಣಕಾಲು ನೋವಿನ ಅಂಕಗಳ ಪ್ರಶ್ನಾವಳಿ

ದಯವಿಟ್ಟು ಕೆಳಗಿನ 12 ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ ಒಂದೇ ಉತ್ತರವನ್ನು ಆಯ್ಕೆಮಾಡಿ. ಪ್ರತಿ ಉತ್ತರದ ಮೌಲ್ಯವನ್ನು ಉತ್ತರದ ಬಲಕ್ಕೆ ಸೂಚಿಸಲಾಗುತ್ತದೆ. 48 ಅಂಕಗಳಲ್ಲಿ ಒಟ್ಟು ಸ್ಕೋರ್ ಪಡೆಯಲು ನಿಮ್ಮ ಎಲ್ಲಾ ಉತ್ತರಗಳನ್ನು ಒಟ್ಟುಗೂಡಿಸಿ. ಕಳೆದ ನಾಲ್ಕು ವಾರಗಳಲ್ಲಿ ನೀವು ಹೇಗೆ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿದ್ದೀರಿ ಎಂಬುದನ್ನು ಮಾತ್ರ ಪರಿಗಣಿಸಿ

ಹೆಸರು			
ದಿನಾಂಕ	3		
ಎಡ ಅಥ			
1. ನಿಮ್ಮ	ದೊಣಕಾಲಿನ ನೋವನ್ನು ನೀವು ಸ	ಾಮಾನ್ಯವಾಗಿ ಹೇಗೆ ವಿವರಿಸುತ್ತೀರಿ?	ಅಂಕಗಳು
	ಯಾವುದೂ ಇಲ್ಲ -4		
	ತುಂಬಾ ಸೌಮ್ಯ -3		
	ಸೌಮ್ಯ -2		
	ಸೌಮ್ಯ ಮಧ್ಯಮ -1		
	ಿ .» ತೀವ್ರ -0		
2.ನಿಮ್ಮ ಕ	ಸೊಣಕಾಲಿನ ಕಾರಣದಿಂದ ನಿಮ್ಮನ ಯಾವುದೇ ತೊಂದರೆ ಇಲ್ಲ -4 ಬಹಳ ಕಡಿಮೆ ತೊಂದರೆ -3	್ನ ತೊಳೆಯಲು ಮತ್ತು ಒಣಗಿಸಲು ನಿಮಗೆ ಏನಾದ	ರೂ ತೊಂದರೆ ಇದೆಯೇ?
	ಮಧ್ಯಮ ತೊಂದರೆ -2		
	ತೀವ್ರ ತೊಂದರೆ -1		
	ಮಾಡುವುದು ಅಸಾಧ್ಯ-0		
3.ನಿಮ್ಮ ಕ	ಮೊಣಕಾಲಿನ ಕಾರಣದಿಂದಾಗಿ ನೀ	ವು ಕಾರಿನಲ್ಲಿ ಮತ್ತು ಹೊರಹೋಗಲು ಅಥವಾ	ಸಾರ್ವಜನಿಕ ಸಾರಿಗೆಯನ
ಳಸುವಲ್ಲಿಂ	<mark>ಯ</mark> ಾವುದೇ ತೊಂದರೆಯನ್ನು ಎದುರಿ	ಸಿದ್ದೀರಾ?	
	ಯಾವುದೇ ತೊಂದರೆ ಇಲ್ಲ-4		
	ಬಹಳ ಕಡಿಮೆ ತೊಂದರೆ-3		
	ಮಧ್ಯಮ ತೊಂದರೆ-2		
	ತೀವ್ರ ತೊಂದರೆ-1		
	ಮಾಡಲು ಅಸಾಧ್ಯ -0		

4.ನೀವು ಮೊಣಕಾಲು ಹಾಕಿದರೆ ನೀ	ವು ನಂತರ ಎದ್ದು ನಿಲ್ಲಬಹುದೇ?	
ಹೌದು, ಸುಲಭವಾಗಿ -4		
ಸ್ವಲ್ಪ ಕಷ್ಟದಿಂದ -3		
ಮಧ್ಯಮ ತೊಂದರೆಯೊಂ	oar -2	
ತೀವ್ರ ಕಷ್ಟದಿಂದ -1		
ಇಲ್ಲ, ಅಸಾಧ್ಯ -0		
5.ನಿಮ್ಮ ಮೊಣಕಾಲಿನ ಕಾರಣ ನಡೆ	ಯುವಾಗ ನೀವು ಕುಂಟುತ್ತಾ ಇದ್ದೀರಾ?	
ಅಪರೂಪವಾಗಿ/ಎಂದಿಗು	ତ -4	
ಕೆಲವೊಮ್ಮೆ ಅಥವಾ ಮೊ	ದಲಿಗೆ -3	
ಸಾಮಾನ್ಯವಾಗಿ,ಕೇವಲ	ಮೊದಲ ಅಲ್ಲ -2	
ಹೆಚ್ಚೆನ ಸಮಯ -1		
ಎಲ್ಲಾ ಸಮಯ -0		
6.ನಿಮ್ಮ ಮೊಣಕಾಲು ಇದ್ದಕ್ಕಿದ್ದಂತೆ ಭಾವಿಸಿದ್ದೀರಾ?	' ದಾರಿ ಮಾಡಿಕೊಡಬಹುದು ಅಥವಾ ನಿಮ್ಮನ್ನು ನಿರಾಸೆಗೊಳಿಸಬ	ಹುದು ಎಂದು ನೀವು
ವಿರಳವಾಗಿ / ಎಂದಿಗೂ	4	
ಕೆಲವೊಮ್ಮೆ ಅಥವಾ ಮೊ	ಂದಲಿಗೆ-3	
ಸಾಮಾನ್ಯವಾಗಿ, ಮೊದೕ	ಲಿಗೆ ಮಾತ್ರವಲ್ಲ-2	
ಹೆಚ್ಚೆನ ಸಮಯ -1		
ಎಲ್ಲಾ ಸಮಯದಲ್ಲೂ-0		
7. ನಿಮ್ಮ ಸ್ವಂತ ಮನೆಯ ಶಾಪಿಂಗ್	ಅನ್ನು ನೀವೇ ಮಾಡಲು ನಿಮಗೆ ಸಾಧ್ಯವಾಗಿದೆಯೇ?	
ಹೌದು, ಸುಲಭವಾಗಿ -4		
ಸ್ವಲ್ಪ ಕಷ್ಟದಿಂದ -3		
ಮಧ್ಯಮ ತೊಂದರೆಯೊಂ	ಂದಿಗೆ -2	
ತೀವ್ರ ಕಷ್ಟದಿಂದ -1		
ಇಲ್ಲ ಅಸಾಧ್ಯ -0		

ര. പധ്യൂ ധ	ളെ ഉറെ എന്ത്ര മുതി നുമറീന തന്നെ ചൂതി നമ്മി ചുന്നനന്നെ വ്യാഹന്ദ്ര	വ ഗാധ്യമാധ്യയ
(ಕೋಲಿನೆ	ಾಂದಿಗೆ ಅಥವಾ ಇಲ್ಲದೆ)?	
3	0 ನಿಮಿಷಗಳಿಗಿಂತ ಹೆಚ್ಚು ಸಮಯದ ನಂತರವೂ ನೋವು ಇಲ್ಲ -4	
1	6-30 ನಿಮಿಷಗಳು -3	
5	-15 ನಿಮಿಷಗಳು -2	
۵	ಯನೆಯ ಸುತ್ತಲೂ ಮಾತ್ರ -1	
_	ರಡೆಯಲು ಸಾಧ್ಯವೇ ಇಲ್ಲ-0	
9. ನೀವು ಮೆ	ಟ್ಟಿಲುಗಳ ಕೆಳಗೆ ನಡೆಯಲು ಸಾಧ್ಯವಾಯಿತು?	
a	ಕೌದು, ಸುಲಭವಾಗಿ -4	
7	್ವಲ್ಪ ಕಷ್ <mark>ತದಿಂದ -3</mark>	
2	ಯಧ್ಯಮ ತೊಂದರೆಯೊಂದಿಗೆ -2	
ė	ಕೀವ್ರ ಕಷ್ಟದಿಂದ -1	
g	୧ಲ್ಲ, ಅಸಾಧ್ಯ -0	
	ನಂತರ (ಮೇಜಿನ ಬಳಿ ಕುಳಿತು) ನಿಮ್ಮ ಮೊಣಕಾಲಿನ ಕಾರಣದಿಂದಾಗಿ ನೀವು ಕುರ್ಚಿ ೋವಿನಿಂದ ಕೂಡಿದೆ?	ಯಿಂದ ಎದ್ದು ನಿಲ್ಲುವುದು
2	ೊೇವು ಇಲ್ಲ -4	
₹	ಸ್ವಲ್ಪ ನೋವಿನಿಂದ ಕೂಡಿದೆ -3	
<u> </u>	ುಧ್ಯಮ ನೋವಿನಿಂದ ಕೂಡಿದೆ -2	
ਰ	ಕುಂಬಾ ನೋವಿನಿಂದ ಕೂಡಿದೆ -1	
હ	ಶಸಹನೀಯ -0	
11. ನಿಮ್ಮ ವ	ೊಣಕಾಲಿನ ನೋವು ನಿಮ್ಮ ಸಾಮಾನ್ಯ ಕೆಲಸಕ್ಕೆ (ಮನೆಕೆಲಸ ಸೇರಿದಂತೆ) ಎಷ್ಟು ಅ	ಡ್ಡಿಪಡಿಸಿದೆ?
ď	ಇಲ್ಲವೇ ಇಲ್ಲ -4	
S	ಕ್ವಲ್ಪ -3	
ਕ	ರುಧ್ಯಮವಾಗಿ -2	
<u> </u>	ಯಹತ್ತರವಾಗಿ -1	
7	ರಂಪೂರ್ಣವಾಗಿ -0	

12. ರಾತ್ರಿ ಹಾಸಿಗೆಯಲ್ಲಿ ನಿಮ್ಮ ಮೊಣಕಾಲಿನ ನೋವಿನಿಂದ ನೀವು ತೊಂದರೆಗೊಳಗಾಗಿದ್ದೀರಾ?	
ರಾತ್ರಿಗಳಿಲ್ಲ -4	
ಕೇವಲ 1 ಅಥವಾ 2 ರಾತ್ರಿಗಳು-3	
ಕೆಲವು ರಾತ್ರಿಗಳು-2	
ಹೆಚ್ಚಿನ ರಾತ್ರಿಗಳು-1	
ಪ್ರತಿ ರಾತ್ರಿ-0	

ಒಟ್ಟು ಅಂಕಗಳು :....../48

ಆಕ್ಸ್ಫರ್ಡ್ ಮೊಣಕಾಲು ನೋವಿನ ಅಂಕಗಳ ಗ್ರೇಡಿಂಗ್	
ಅಂಕಗಳು 0 to 19	ಕಡಿಮೆ
ಅಂಕಗಳು 20 to 29	ಮಧ್ಯಮ.
ಅಂಕಗಳು 30 to 39	ಉತ್ತಮ
ಅಂಕಗಳು 40 to 48	ಅತ್ಯುತ್ತಮ

#### ANNEXURE-D

#### **CONSULT FOEM – A) PARTICIPANT INFORMATION SHEET**

# TITLE: "A STUDY TO ASSESS KNEE JOINT PAIN AMONG ELDERLY AT SELECTED COMMUNITY AREAS, KOLAR."

Elderly clients are invited to take part in a research study. Before you decide to participate in this study, it is important for you to understand why this research is being carried out and your role in the project. Please take time to read the following information carefully and discuss it with your friends and relatives if you wish before you decide to participate or not in this study. Don't hesitate to ask us if there is anything that is not clear here or for more information. Take as much as time you need to decide to participate in this study.

#### What is the purpose of the study?

This is purely a research study and your participation may not bring any direct benefit to you.

The present study aims to assess knee joint pain among elderly people with will be effect on their daily living activity

#### Do participants have to take part in the study?

The investigator invites you to participate in the study and will be given a copy of this information sheet and adequate time to read through this, think, and ask any questions before making a decision. If you decide to enrol in the study, you will be asked to sign/thumb impression on a consent form. You are free to withdraw from the study at any time without giving any reason. A decision not to take part or later withdraw from the study whenever you choose will not affect your right or your profession.

#### What is your role in this project?

After your sign/thumb impression in the informed consent, the investigator shall ask questions on the basic details of the age, gender, education, occupation, area of residence and will be screened for knee joint pain by International Knee Documentation Committee Subjective Knee Form, (IKDC) followed by and who have identified with knee pain referred to nearest primary health care to health care facility centre, the duration of the project is 30 days.

#### What are the benefits of participating in the study?

The benefits of this study is elders with a age of 60 and above

#### Are there any risks involved in participating in the study?

The study involves to assess knee joint pain among elderly. There are no risks or inconveniences in participating in this study.

#### **Confidentiality of information**

The data collected will be coded using unique code numbers which will be known only to the investigating team. Only this code will be indicated in all assessment sheets. Your name will not be disclosed outside or appear on any reports or publications resulting from the study. The data generated from this research will be anonymous, with no indication of the identity of the individuals involved. The results of the Intervention carried out, however, will be revealed and explained to you.

#### What will happen to the samples (data) you have given?

The data obtained will be analyzed for scientific purposes. The results obtained from this study may be published in national and international scientific journals. Results may also be presented at scientific conferences /seminars. We will publish the results in scientific journals so that other interested people may learn from our research. However, we assure you that your identity will not be revealed anywhere, in any form, and to anybody. If you withdraw from the study after the samples have been collected, then your data will not be used for this study. Such data will be in safe custody till the completion of the project and will be deleted from records thereafter.

#### Who is organizing/ conducting the study?

The research is being conducted by Bindu Shree B under the guidance of Subject experts and Research guide, Mrs. Vani R Assistant Professor Dept of CHN, SDUCON, Tamaka, Kolar.

#### Who has reviewed this study?

The study has been approved by the Institutional Ethics Committee, Sri Devaraj Urs College of Nursing for ethical aspects/standards.

If you need more information about this study, please contact the following at any time of the study.

Dr. Vani R Assistant professor SDUCON Mob: 9620213112

Email-vanivanir1988@gmail.com

Ms. Bindushree B MSc (N) student Mob: 9742559198

Email- bindugowda361@gmail.com

Thank you for taking time to read this information. If you decide to consider taking part in this study, you will be given a copy of this leaflet for your information. Signature of the investigator

Acknowledgement: Copy of this document received
Signature/Thumb impression of Participant:

#### ಭಾಗವಹಿಸುವ ಮಾಹಿತಿ ಪತ್ರ

#### ಶೀರ್ಷಿಕೆ

ಕೋಲಾರದ ಆಯ್ದ ಸಮುದಾಯ ಪ್ರದೇಶದಲ್ಲಿ ವಯಸ್ಸಾದವರಲ್ಲಿ ಮೊಣಕಾಲು ಕೀಲುಗಳನ್ನು ನಿರ್ಣಯಿಸಲು ಒಂದು ಅಧ್ಯಯನ.

ಹಿರಿಯ ಗ್ರಾಹಕರನ್ನು ಸಂಶೋಧನಾ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಆಹ್ವಾನಿಸಲಾಗುತ್ತದೆ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನೀವು ನಿರ್ಧರಿಸುವ ಮೊದಲು, ಈ ಸಂಶೋಧನೆಯನ್ನು ಏಕೆ ನಡೆಸಲಾಗುತ್ತಿದೆ ಮತ್ತು ಯೋಜನೆಯಲ್ಲಿ ನಿಮ್ಮ ಪಾತ್ರವನ್ನು ನೀವು ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವುದು ಮುಖ್ಯವಾಗಿದೆ. ದಯವಿಟ್ಟು ಈ ಕೆಳಗಿನ ಮಾಹಿತಿಯನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಲು ಸಮಯ ತೆಗೆದುಕೊಳ್ಳಿ ಮತ್ತು ನೀವು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಿರ್ಧರಿಸುವ ಮೊದಲು ನಿಮ್ಮ ಸ್ನೇಹಿತರು ಮತ್ತು ಸಂಬಂಧಿಕರೊಂದಿಗೆ ಚರ್ಚಿಸಿ. ಇಲ್ಲಿ ಏನಾದರೂ ಸ್ಪಷ್ಟವಾಗಿಲ್ಲವೇ ಅಥವಾ ಹೆಚ್ಚಿನ ಮಾಹಿತಿಗಾಗಿ ನಮ್ಮನ್ನು ಕೇಳಲು ಹಿಂಜರಿಯಬೇಡಿ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನೀವು ನಿರ್ಧರಿಸಲು ಅಗತ್ಯವಿರುವಷ್ಟು ಸಮಯವನ್ನು ತೆಗೆದುಕೊಳ್ಳಿ.

ಆಧ್ಯಯನದ ಉದ್ದೇಶವೇನು?

ಇದು ಸಂಪೂರ್ಣವಾಗಿ ಸಂಶೋಧನಾ ಅಧ್ಯಯನವಾಗಿದೆ ಮತ್ತು ನಿಮ್ಮ ಭಾಗವಹಿಸುವಿಕೆಯು ನಿಮಗೆ ಯಾವುದೇ ನೇರ ಪ್ರಯೋಜನವನ್ನು ತರದಿರಬಹುದು.

ಪ್ರಸ್ತುತ ಅಧ್ಯಯನವು ವಯಸ್ಸಾದವರಲ್ಲಿ ಮೊಣಕಾಲು ನೋವನ್ನು ನಿರ್ಣಯಿಸುವ ಗುರಿಯನ್ನು ಹೊಂದಿದ್ದು, ಇದು ಅವರ ದೈನಂದಿನ ಜೀವನ ಚಟುವಟಿಕೆಯ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುತ್ತದೆ.

ಭಾಗವಹಿಸುವವರು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಬೇಕೇ?

ತನಿಖಾಧಿಕಾರಿಯು ನಿಮ್ಮನ್ನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಆಹ್ವಾನಿಸುತ್ತಾನೆ ಮತ್ತು ಈ ಮಾಹಿತಿ ಹಾಳೆಯ ಪ್ರತಿಯನ್ನು ಮತ್ತು ನಿರ್ಧಾರ ತೆಗೆದುಕೊಳ್ಳುವ ಮೊದಲು ಇದನ್ನು ಓದಲು, ಯೋಚಿಸಲು ಮತ್ತು ಯಾವುದೇ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಸಾಕಷ್ಟು ಸಮಯವನ್ನು ನೀಡಲಾಗುತ್ತದೆ. ನೀವು ಅಧ್ಯಯನಕ್ಕೆ ದಾಖಲಾಗಲು ನಿರ್ಧರಿಸಿದರೆ, ಒಪ್ಪಿಗೆ ಅರ್ಜಿಯ ಮೇಲೆ ಸಹಿ/ಹೆಬ್ಬೆರಳಿನ ಗುರುತು ಹಾಕಲು ನಿಮ್ಮನ್ನು ಕೇಳಲಾಗುತ್ತದೆ. ಯಾವುದೇ ಕಾರಣವನ್ನು ನೀಡದೆ ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ನಿಮಗೆ ಸ್ವಾತಂತ್ರ್ಯವಿದೆ. ನೀವು ಆಯ್ಕೆ ಮಾಡಿದಾಗಲೆಲ್ಲಾ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸದಿರಲು ಅಥವಾ ನಂತರ ಹಿಂತೆಗೆದುಕೊಳ್ಳುವ ನಿರ್ಧಾರವು ನಿಮ್ಮ ಹಕ್ಕು ಅಥವಾ ನಿಮ್ಮ ವೃತ್ತಿಯ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುವುದಿಲ್ಲ.

ಈ ಯೋಜನೆಯಲ್ಲಿ ನಿಮ್ಮ ಪಾತ್ರವೇನು?

ಮಾಹಿತಿಯುಕ್ತ ಒಪ್ಪಿಗೆಯಲ್ಲಿ ನಿಮ್ಮ ಚಿಹ್ನೆ/ಹೆಬ್ಬೆರಳಿನ ಗುರುತು ಹಾಕಿದ ನಂತರ, ತನಿಖಾಧಿಕಾರಿಯು ವಯಸ್ಸು, ಲಿಂಗ, ಶಿಕ್ಷಣ, ಉದ್ಯೋಗ, ವಾಸದ ಪ್ರದೇಶದ ಮೂಲಭೂತ ವಿವರಗಳ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಬೇಕು ಮತ್ತು ಮೊಣಕಾಲು ನೋವಿನಿಂದ ಬಳಲುತ್ತಿರುವವರನ್ನು ಇಂಟರ್ನ್ಯಾಷನಲ್ ನೀ

ಡಾಕ್ಯುಮೆಂಟೇಶನ್ ಕಮಿಟಿ ಸಬ್ಜೆಕ್ಟಿವ್ ನೀ ಫಾರ್ಮ್, (ಐ. ಕೆ. ಡಿ. ಸಿ) ಮೂಲಕ ಪರೀಕ್ಷಿಸಲಾಗುತ್ತದೆ. ಮೊಣಕಾಲು ನೋವನ್ನು ಗುರುತಿಸಿದವರು ಮತ್ತು ಹತ್ತಿರದ ಪ್ರಾಥಮಿಕ ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಆರೋಗ್ಯ ಸೌಲಭ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಉಲ್ಲೇಖಿಸಿದವರು, ಯೋಜನೆಯ ಅವಧಿಯು 30 ದಿನಗಳು.

#### ಈ ಯೋಜನೆಯಲ್ಲಿ ನಿಮ್ಮ ಪಾತ್ರವೇನು?

ಮಾಹಿತಿಯುಕ್ತ ಒಪ್ಪಿಗೆಯಲ್ಲಿ ನಿಮ್ಮ ಚಿಹ್ನೆ/ಹೆಬ್ಬೆರಳಿನ ಗುರುತು ಹಾಕಿದ ನಂತರ, ತನಿಖಾಧಿಕಾರಿಯು ವಯಸ್ಸು, ಲಿಂಗ, ಶಿಕ್ಷಣ, ಉದ್ಯೋಗ, ನಿವಾಸದ ಪ್ರದೇಶದ ಮೂಲಭೂತ ವಿವರಗಳ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಬೇಕು ಮತ್ತು ಮೊಣಕಾಲಿನ ನೋವನ್ನು ಅಂತರರಾಷ್ಟ್ರೀಯ ಮೊಣಕಾಲಿನ ದಾಖಲಾತಿ ಸಮಿತಿಯ ವ್ಯಕ್ತಿನಿಷ್ಠ ಮೊಣಕಾಲಿನ ಫಾರ್ಮ್, (ಐ. ಕೆ. ಡಿ. ಸಿ) ನಿಂದ ಪರೀಕ್ಷಿಸಲಾಗುತ್ತದೆ ಮತ್ತು ಯೋಜನೆಯ ಅವಧಿಯು 30 ದಿನಗಳು.

#### ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವುದರಿಂದ ಯಾವುದೇ ಅಪಾಯಗಳಿವೆಯೇ?

ಈ ಅಧ್ಯಯನವು ವಯಸ್ಸಾದವರಲ್ಲಿ ಮೊಣಕಾಲಿನ ಕೀಲು ನೋವನ್ನು ನಿರ್ಣಯಿಸುವುದನ್ನು ಒಳಗೊಂಡಿರುತ್ತದೆ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವುದರಿಂದ ಯಾವುದೇ ಅಪಾಯಗಳು ಅಥವಾ ಅನಾನುಕೂಲತೆಗಳಿಲ್ಲ.

#### ಮಾಹಿತಿಯ ಗೌಪ್ಯತೆಸಂಗ್ರಹಿಸಿದ ದತ್ತಾಂಶವನ್ನು?

ತನಿಖಾ ತಂಡಕ್ಕೆ ಮಾತ್ರ ತಿಳಿದಿರುವ ವಿಶಿಷ್ಟ ಕೋಡ್ ಸಂಖ್ಯೆಗಳನ್ನು ಬಳಸಿ ಕೋಡ್ ಮಾಡಲಾಗುತ್ತದೆ. ಈ ಕೋಡ್ ಅನ್ನು ಮಾತ್ರ ಎಲ್ಲಾ ಮೌಲ್ಯಮಾಪನ ಹಾಳೆಗಳಲ್ಲಿ ಸೂಚಿಸಲಾಗುತ್ತದೆ. ನಿಮ್ಮ ಹೆಸರನ್ನು ಹೊರಗೆ ಬಹಿರಂಗಪಡಿಸಲಾಗುವುದಿಲ್ಲ ಅಥವಾ ಅಧ್ಯಯನದ ಪರಿಣಾಮವಾಗಿ ಯಾವುದೇ ವರದಿಗಳು ಅಥವಾ ಪ್ರಕಟಣೆಗಳಲ್ಲಿ ಕಾಣಿಸುವುದಿಲ್ಲ. ಈ ಸಂಶೋಧನೆಯಿಂದ ಉತ್ಪತ್ತಿಯಾಗುವ ದತ್ತಾಂಶವು ಅನಾಮಧೇಯವಾಗಿರುತ್ತದೆ, ಇದರಲ್ಲಿ ಭಾಗಿಯಾಗಿರುವ ವ್ಯಕ್ತಿಗಳ ಗುರುತಿನ ಯಾವುದೇ ಸೂಚನೆಯಿಲ್ಲ. ಆದಾಗ್ಯೂ, ನಡೆಸಿದ ಹಸ್ತಕ್ಷೇಪದ ಫಲಿತಾಂಶಗಳನ್ನು ನಿಮಗೆ ಬಹಿರಂಗಪಡಿಸಲಾಗುತ್ತದೆ ಮತ್ತು ವಿವರಿಸಲಾಗುತ್ತದೆ.

#### ನೀವು ನೀಡಿದ ಮಾದರಿಗಳಿಗೆ (ದತ್ತಾಂಶ) ಏನಾಗುತ್ತದೆ?

ಪಡೆದ ದತ್ತಾಂಶವನ್ನು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಗಳಿಗಾಗಿ ವಿಶ್ಲೇಷಿಸಲಾಗುತ್ತದೆ. ಈ ಅಧ್ಯಯನದಿಂದ ಪಡೆದ ಫಲಿತಾಂಶಗಳನ್ನು ರಾಷ್ಟ್ರೀಯ ಮತ್ತು ಅಂತಾರಾಷ್ಟ್ರೀಯ ವೈಜ್ಞಾನಿಕ ನಿಯತಕಾಲಿಕಗಳಲ್ಲಿ ಪ್ರಕಟಿಸಬಹುದು. ಫಲಿತಾಂಶಗಳನ್ನು ವೈಜ್ಞಾನಿಕ ಸಮಾವೇಶಗಳು/ವಿಚಾರಗೋಷ್ಠಿಗಳಲ್ಲಿಯೂ ಪ್ರಸ್ತುತಪಡಿಸಬಹುದು. ಇತರ ಆಸಕ್ತ ಜನರು ನಮ್ಮ ಸಂಶೋಧನೆಯಿಂದ ಕಲಿಯುವಂತೆ ನಾವು ಫಲಿತಾಂಶಗಳನ್ನು ವೈಜ್ಞಾನಿಕ ನಿಯತಕಾಲಿಕಗಳಲ್ಲಿ ಪ್ರಕಟಿಸುತ್ತೇವೆ. ಆದಾಗ್ಯೂ, ನಿಮ್ಮ ಗುರುತನ್ನು ಎಲ್ಲಿಯೂ, ಯಾವುದೇ ರೂಪದಲ್ಲಿ ಮತ್ತು ಯಾರಿಗೂ ಬಹಿರಂಗಪಡಿಸಲಾಗುವುದಿಲ್ಲ ಎಂದು ನಾವು ನಿಮಗೆ ಭರವಸೆ ನೀಡುತ್ತೇವೆ. ಮಾದರಿಗಳನ್ನು ಸಂಗ್ರಹಿಸಿದ ನಂತರ ನೀವು ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿದರೆ, ನಿಮ್ಮ

ದತ್ತಾಂಶವನ್ನು ಈ ಅಧ್ಯಯನಕ್ಕೆ ಬಳಸಲಾಗುವುದಿಲ್ಲ. ಅಂತಹ ದತ್ತಾಂಶವು ಯೋಜನೆ ಪೂರ್ಣಗೊಳ್ಳುವವರೆಗೆ ಸುರಕ್ಷಿತ ವಶದಲ್ಲಿರುತ್ತದೆ ಮತ್ತು ನಂತರ ದಾಖಲೆಗಳಿಂದ ಅಳಿಸಲಾಗುತ್ತದೆ. ಅಧ್ಯಯನವನ್ನು ಯಾರು ಆಯೋಜಿಸುತ್ತಿದ್ದಾರೆ/ನಡೆಸುತ್ತಿದ್ದಾರೆ?

ವಿಷಯ ತಜ್ಞರು ಮತ್ತು ಸಂಶೋಧನಾ ಮಾರ್ಗದರ್ಶಿ, ಶ್ರೀಮತಿ ವಾಣಿ ಆರ್ ಸಹಾಯಕ ಪ್ರಾಧ್ಯಾಪಕಿ, ಸಿಎಚ್ಎನ್, ಎಸ್ಡಿಯುಸಿಒಎನ್, ತಮಕಾ, ಕೋಲಾರ ಅವರ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ಬಿಂದು ಶ್ರೀ ಬಿ ಈ ಸಂಶೋಧನೆಯನ್ನು ನಡೆಸುತ್ತಿದ್ದಾರೆ.

ಈ ಆಧ್ಯಯನವನ್ನು ಯಾರು ಪರಿಶೀಲಿಸಿದ್ದಾರೆ?

ನೈತಿಕ ಅಂಶಗಳು/ಮಾನದಂಡಗಳಿಗಾಗಿ ಶ್ರೀ ದೇವರಾಜ್ ಅರಸ್ ನರ್ಸಿಂಗ್ ಕಾಲೇಜಿನ ಸಾಂಸ್ಥಿಕ ನೈತಿಕ ಸಮಿತಿಯು ಈ ಅಧ್ಯಯನವನ್ನು ಅನುಮೋದಿಸಿದೆ.

ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ನಿಮಗೆ ಹೆಚ್ಚಿನ ಮಾಹಿತಿ ಬೇಕಾದರೆ, ದಯವಿಟ್ಟು ಅಧ್ಯಯನದ ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಈ ಕೆಳಗಿನವರನ್ನು ಸಂಪರ್ಕಿಸಿ.

ಶ್ರೀಮತಿ ವಾಣಿ ಆರ್

ಸಹಾಯಕ ಪ್ರಾಧ್ಯಾಪಕಿ

ಎಸ್. ಡಿ. ಯು. ಸಿ. ಓ. ಎನ್. ಎಂ. ಬಿ

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ಶ್ರೀಮತಿ .ಬಿಂದುಶ್ರೀ ಬಿ

ಎಂಎಸ್ಸಿ (ಎನ್) ವಿದ್ಯಾರ್ಥಿನಿ

ದೂರವಾಣಿ ಸಂಖ್ಯೇ 9742559198

#### Email-bindugowda361@gmail.com

ಈ ಮಾಹಿತಿಯನ್ನು ಓದಲು ಸಮಯ ತೆಗೆದುಕೊಂಡಿದ್ದ ಕ್ಕಾಗಿ ಧನ್ಯವಾದಗಳು. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನೀವು ನಿರ್ಧರಿಸಿದರೆ, ನಿಮ್ಮ ಮಾಹಿತಿಗಾಗಿ ಈ ಕರಪತ್ರದ ಪ್ರತಿಯನ್ನು ನಿಮಗೆ ನೀಡಲಾಗುವುದು.

ತನಿಖಾಧಿಕಾರಿಯ ಸಹಿ	_
ಅಂಗೀಕಾರಃ ಈ ದಾಖಲೆಯ ಪ್ರತಿಯನ್ನು ಸ್ವೀಕರಿಸಲಾಗಿದೆ	
ಭಾಗವಹಿಸುವವರ ಸಹಿ/ಹೆಬೆ. ರಳಿನ ಮುದ್ಯೇ	

#### B) WRITTEN INFORMED CONSENT FORM

# STUDY TITLE: "A STUDY TO ASSESS KNEE JOINT PAIN AMONG ELDERLY AT SELECTED COMMUNITY AREAS, KOLAR."

#### Code Number:

I confirm that I have read and understood the information given to me about this study and my role in it. I had opportunities to ask questions and my questions have been answered to my satisfaction.

Or

I confirm that all information about this study and my role in it has been read / explained to me by a member of the investigating team in a language that I understand. I had opportunities to ask questions and my questions have been answered to my satisfaction.

- b) I understand that my participation in this study is voluntary and that I am free to withdraw from the study at any time, without giving any reason and legal rights being affected.
- c) I understand that my identity will not be revealed in any document or publication.
- d) I agree not to restrict the use/publication of any data or results that arise from this study provided such use is only for scientific purposes.
- e) I am aware that by agreeing to my participation in this investigation, I will have to give more time for training and assessments by the investigating team and that these assessments will not interfere with the benefits that I am entitled to or my daily routine.
- f) I give my consent, voluntarily to take part in this study. I also agree for the investigator to record the observation/interview sessions whenever they are held. Signature (or thumb impression) of the study participants /Legally Acceptable Representative:

Study participant signature/Thumb impress	on:
Signature/Thumb impression of Witnesses:	
Study Investigator's Signature:	-

#### ಲಿಖಿತ ಮಾಹಿತಿಯುಕ್ಕ ಸಮ್ಮತಿ ನಮೂನೆ ಅಧ್ಯಯನ ಶೀರ್ಷಿಕೇ

ಶೀರ್ಷಿಕೆ

ಕೋಲಾರದ ಆಯ್ದ ಸಮುದಾಯ ಪ್ರದೇಶದಲ್ಲಿ ವಯಸ್ಸಾದವರಲ್ಲಿ ಮೊಣಕಾಲು ಕೀಲುಗಳನ್ನು ನಿರ್ಣಯಿಸಲು ಒಂದು ಅಧ್ಯಯನ.

#### ಕೋಡ್ ಸಂಖ್ಯೇ

ಈ ಅಧ್ಯಯನ ಮತ್ತು ಅದರಲ್ಲಿ ನನ್ನ ಪಾತ್ರದ ಬಗ್ಗೆ ನನಗೆ ನೀಡಲಾದ ಮಾಹಿತಿಯನ್ನು ನಾನು ಓದಿದ್ದೇನೆ ಮತ್ತು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ ಎಂದು ನಾನು ದೃಢೀಕರಿಸುತ್ತೇನೆ. ನನಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುವ ಅವಕಾಶಗಳು ದೊರೆತಿದ್ದವು ಮತ್ತು ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ನನ್ನ ತೃಪ್ತಿಯಂತೆ ಉತ್ತರಿಸಲಾಗಿದೆ.

ಅಥವಾ ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ಮತ್ತು ಅದರಲ್ಲಿ ನನ್ನ ಪಾತ್ರದ ಬಗ್ಗೆ ಎಲ್ಲಾ ಮಾಹಿತಿಯನ್ನು ತನಿಖಾ ತಂಡದ ಸದಸ್ಯರೊಬ್ಬರು ನನಗೆ ಅರ್ಥವಾಗುವ ಭಾಷೆಯಲ್ಲಿ ಓದಿದ್ದಾರೆ/ವಿವರಿಸಿದ್ದಾರೆ ಎಂದು ನಾನು ದೃಢೀಕರಿಸುತ್ತೇನೆ. ನನಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುವ ಅವಕಾಶಗಳು ದೊರೆತಿದ್ದವು ಮತ್ತು ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ನನ್ನ ತೃಪ್ತಿಯಂತೆ ಉತ್ತರಿಸಲಾಗಿದೆ.

- ಬಿ) ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನನ್ನ ಭಾಗವಹಿಸುವಿಕೆಯು ಸ್ವಯಂಪ್ರೇರಿತವಾಗಿದೆ ಮತ್ತು ಯಾವುದೇ ಕಾರಣವನ್ನು ನೀಡದೆ ಮತ್ತು ಕಾನೂನು ಹಕ್ಕುಗಳ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರದೆ ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ನಾನು ಸ್ವತಂತ್ರನಾಗಿದ್ದೇನೆ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ.
- ಸಿ) ನನ್ನ ಗುರುತನ್ನು ಯಾವುದೇ ದಾಖಲೆ ಅಥವಾ ಪ್ರಕಟಣೆಯಲ್ಲಿ ಬಹಿರಂಗಪಡಿಸಲಾಗುವುದಿಲ್ಲ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ.
- ಡಿ) ಈ ಅಧ್ಯಯನದಿಂದ ಉಂಟಾಗುವ ಯಾವುದೇ ಡೇಟಾ ಅಥವಾ ಫಲಿತಾಂಶಗಳ ಬಳಕೆ/ಪ್ರಕಟಣೆಯನ್ನು ನಿರ್ಬಂಧಿಸದಿರಲು ನಾನು ಒಪ್ಪುತ್ತೇನೆ, ಅಂತಹ ಬಳಕೆಯು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಗಳಿಗಾಗಿ ಮಾತ್ರ.
- ಇ) ಈ ತನಿಖೆಯಲ್ಲಿ ನನ್ನ ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು ಒಪ್ಪಿಕೊಳ್ಳುವ ಮೂಲಕ, ತನಿಖಾ ತಂಡದ ತರಬೇತಿ ಮತ್ತು ಮೌಲ್ಯಮಾಪನಗಳಿಗೆ ನಾನು ಹೆಚ್ಚಿನ ಸಮಯವನ್ನು ನೀಡಬೇಕಾಗುತ್ತದೆ ಮತ್ತು ಈ ಮೌಲ್ಯಮಾಪನಗಳು ನನಗೆ ಅರ್ಹವಾದ ಪ್ರಯೋಜನಗಳಿಗೆ ಅಥವಾ ನನ್ನ ದೈನಂದಿನ ದಿನಚರಿಯಲ್ಲಿ ಹಸ್ತಕ್ಷೇಪ ಮಾಡುವುದಿಲ್ಲ ಎಂದು ನನಗೆ ತಿಳಿದಿದೆ.

ಎಫ್) ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಾನು ಸ್ವಯಂಪ್ರೇರಣೆಯಿಂದ ನನ್ನ ಒಪ್ಪಿಗೆಯನ್ನು ನೀಡುತ್ತೇನೆ.
ವೀಕ್ಷಣೆ/ಸಂದರ್ಶನಗಳು ನಡೆದಾಗಲೆಲ್ಲಾ ಅವುಗಳನ್ನು ದಾಖಲಿಸಲು ತನಿಖಾಧಿಕಾರಿಗೆ ನಾನು ಒಪ್ಪುತ್ತೇನೆ.
ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವವರ ಸಹಿ (ಅಥವಾ ಹೆಬ್ಬೆರಳಿನ ಗುರುತು)/ಕಾನೂನುಬದ್ಧವಾಗಿ ಸ್ವೀಕಾರಾರ್ಹ
ಪ್ರತಿನಿಧಿಃ
ಅಧ್ಯಯನ ಭಾಗವಹಿಸುವವರ ಸಹಿ/ ಹೆಬ್ಬೆರಳಿನ ಮುದ್ರೇ
ಸಾಕ್ಷಿಗಳ ಸಹಿ/ಹೆಬ್ಬೆರಳಿನ ಮುದ್ರೇ
ಅಧ್ಯಯನ ತನಿಖಾಧಿಕಾರಿಯ ಸಹಿಃ

# ANNEXURE -E

#### INFORMED CONSENT FORM

I'm here by giving my consent to participants in the study on "a study to assess knee joint pain among elderly at selected community areas, Kolar." conducting by Ms. Bindushree B, I<sup>st</sup> year MSc Nursing student of SDUCON Kolar.

Sl.no	Name of the participant	Phone number	Signature
1.	Venkataramage 8/0		
2.	new Bataranalle.	5	
3.	bak. Ranskrishne Pope	8147086113	ತೆ.ಕೋಬಲ್ಟ
ц.	horsen Katoppa	9964082396.	>
5.	chanzeppedo	7892059764.	7
6.	chopage som som so	8095384371	>2000000198000
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8.	mrs. Sakperonaudo	_	
9.	mr venkateshappe .» slo Venkataramappe	· 9741983931	· lelen
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15.	ven Kataramappe 810 Nadupana	8792819881	>
16.	Konthamma wlo venkatarangen		>903ed

SL.	Name of the participant	Phone number	Signature
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6-	RaghuvaRDa	8971999058	25/ E)
2.	mrs. venkatamas	8123943540-	Y
3.	Nagama	7204787994	504000
ų.	hrish neppe	7204787996	
5.	Vegayanna	886738661	-ವಿಜಯಮ್ಭ
6	Manayanama	- Sky -	2 January
ন	Mrs. Papamera who	7760924188	
8	Bhanagyya.	J760924188	
۹.	munige ~~	7795738U79	
10	me Padroma	9901222896	Staget of
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SL. NO	Name of the participant	Phone number	Signature
21.	Rathamar WD	7795619445	70300
23.	Muni Nagrayanana Pate. China Fayya	7995192873	/_1 (MARKET COME)
23	Parvathammer	28 2 Lamotria	೨ ರಚಿತಿತ್ತು
au.	Rodinama		Rathramma
25	Krishnappa c/o Narayanaswani	7348897438	
26	Narayanappa C/o venkataramappa	A SULL A ALL	
27	Shrivas Clo Vishwanethe	8904119321	31pm
21	Rathnermer. Wo Spinivas.	-11-	पद्म ध्यू
29	Ventatamma W10 Lete Ventatara,		
30	Krishnappa.	9632995461	
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SL. NO	Name of the participant	Phone number	Signature
31	Rathnemmer. Clo Santhoss	7348897750	
32	Lakishmanna. Clo Narayanerswany	8951631397	ec
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34	Warralanines Wo Late Sinivas.	-11-	క్రమలవల్న
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32	Yasho dhamas	7 2 04 023767	
38	Venkatala Karaar Olo Brini vara	7204023767	
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40.	Norayane Swamy	9741282199	
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47	Thisuvalappa elo Subbanas		
48	frish a prona	994573846	
49.	Bhoolakshana Valo Munishwam	8971308246	
50	Venka fama Ob Vresta	77955 43449	elast July

SL. NO	Name of the participant	Phone number	Signature
51	Chingama Sanaxuathi	77 608570	
52	Savas woth:	-12	నర్మక్ ఎకి
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54	Muniverkataono	- x-51 7	
55	Padna mma	953567 8796.	- 3 and
56	Venkatamappa Allo Rathamma	948890760	
57	Venkatamme wlo Late. Puttappe	9632603616	
38	Pakaga mma wolu	7259625275	-
59	Man a na chani	_11_	2M = 0100 509 1 8
60.	Romalpa Act	9886376189	and the second second

SL. NO	Name of the participant	Phone number	Signature
6).	Kanalama Wo Ranapp	9886370189	7
62	Nonjama clo Pagnathaman	7022732983	> = = = = = = = = = = = = = = = = = = =
63	Noorappa Clo Kamalana	8105122753	) 37 J E.S.
Gu	Kanalenam	_ ~~	*
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64	Shendhama	WF _ PROPERTY	074101 <u>22</u>
68	Late obbenna	8971910247	S. Sant
69	Childrapa Pamaa Clo Ra Jamaa	8105805556	
70	chandrappa clo Subama	9611432482	13000

# **ANNEXURES-F CERTIFICATE FROM STATISTICIAN**

#### CERTIFICATE FROM STATISTICIAN

I hereby certify that I have provided statistical guidance in analysis to Miss. Bindushree B ,Ist Year MSc Nursing student ,for her research study titled as "A Study to assess knee joint pain among Elderly at selected community areas, Kolar." at Sri Devaraj Urs college of Nursing, Tamaka Kolar.

Date: 28/12/2024
Place: SDUMC, Jamoka, Kolar

Asst. Professor, Statis

SDUMC, Kolar-56310.

Name & Designation

Mr. RAVISHANKER

Assistant Professor

Dept of Community Health Medicine,

SDUAHER, Tamaka, Kolar.

# **ANNEXURE-G**

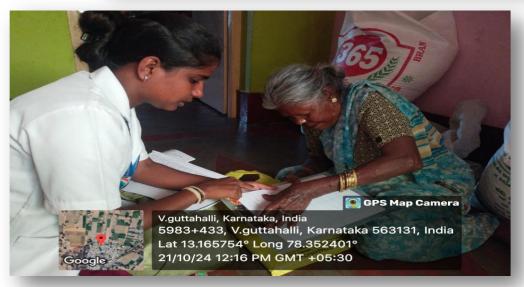
# **PHOTO GALLERY**













# ANNEXURE-G MASTER SHEET

# A. Master sheet of sociodemographic variables

l.no	Age	Gender	Qual ification	Religion	Marital status	Socio- economic status	Type of family	Diet	Occupation	Duration of pain	Nutritional status	Rx for pain	activiti es	comor bid illness
1	60	1	2	1	1	2	1	3	4	1	3	2	3	2
2	78	2	2	1	4	2	1	3	1	3	2	2	2	2
3	60	2	2	1	1	2	1	3	1	2	2	2	3	2
4	68	1	2	1	1	2	1	3	4	3	1	2	3	2
5	60	2	2	1	4	2	1	3	1	3	2	1	2	1
6	78	2	2	1	4	2	1	3	1	3	1	2	1	2
7	65	2	2	1	1	2	1	3	1	1	2	2	3	2
8	68	1	2	1	1	2	1	3	4	3	3	1	2	1
9	67	2	2	1	4	2	1	3	1	3	3	2	3	2
10	60	2	2	1	1	2	2	3	1	1	2	2	3	2
11	65	1	2	1	1	2	2	3	4	2	2	2	3	2
12	75	1	2	1	1	2	1	3	4	3	2	2	1	2
13	60	2	2	1	1	2	1	3	1	2	2	2	3	2
14	68	1	2	1	4	2	1	3	1	3	3	2	2	2
15	68	2	2	1	4	2	1	3	1	2	2	2	3	2
16	76	2	2	1	4	2	1	3	1	2	2	2	3	2
17	62	2	2	1	4	2	1	3	1	2	2	2	3	2

18       60       2       2       1       4       2       1       3       1       1       1       2       3       2         19       60       2       2       1       4       2       2       3       1       2       2       2       3       2         20       65       2       2       1       4       2       2       3       1       3       2       2       3       2         21       70       2       2       1       4       2       1       3       1       3       3       2       3       2         22       75       2       2       1       4       2       2       3       1       3       2       2       1       2         23       65       2       2       1       4       2       2       3       1       2 <th></th> <th></th> <th>_</th> <th>_</th> <th>_</th> <th>_</th> <th>_</th> <th></th> <th></th> <th></th> <th></th> <th>I</th> <th>_</th> <th>_</th> <th>_ 1</th>			_	_	_	_	_					I	_	_	_ 1
20       65       2       2       1       4       2       2       3       1       3       2       2       3       2         21       70       2       2       1       4       2       1       3       1       3       3       2       3       2         22       75       2       2       1       4       2       2       3       1       3       2       2       1       2         23       65       2       2       1       4       2       2       3       1       2	18	60	2	2	1	4	2	1	3	1	1	1	2	3	2
21         70         2         2         1         4         2         1         3         1         3         3         2         3         2           22         75         2         2         1         4         2         2         3         1         3         2         2         1         2           23         65         2         2         1         4         2         2         3         1         2 </td <td>19</td> <td>60</td> <td>2</td> <td>2</td> <td>1</td> <td>4</td> <td>2</td> <td>2</td> <td>3</td> <td>1</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>2</td>	19	60	2	2	1	4	2	2	3	1	2	2	2	3	2
22       75       2       2       1       4       2       2       3       1       3       2       2       1       2         23       65       2       2       1       4       2       2       3       1       2 </td <td>20</td> <td>65</td> <td>2</td> <td>2</td> <td>1</td> <td>4</td> <td>2</td> <td>2</td> <td>3</td> <td>1</td> <td>3</td> <td>2</td> <td>2</td> <td>3</td> <td>2</td>	20	65	2	2	1	4	2	2	3	1	3	2	2	3	2
23       65       2       2       1       4       2       2       3       1       2	21	70	2	2	1	4	2	1	3	1	3	3	2	3	2
24       70       2       2       1       4       2       1       3       1       3       2       2       2       2         25       80       1       2       1       4       2       2       3       4       3       2       2       2       2         26       78       1       2       1       4       2       1       3       4       3       2       2       2       2       2         27       65       1       2       1       1       2       1       3       4       3       2       2       2       2       2         28       62       2       2       1       1       2       1       3       4       3       2       2       2       2         29       70       2       2       1       4       2       2       3       1       3       2       2       2       2       2         30       62       1       2       1       4       2       1       3       4       2       2       2       2       2       2       2       2	22	75	2	2	1	4	2	2	3	1	3	2	2	1	2
25     80     1     2     1     4     2     2     3     4     3     2     2     2     2       26     78     1     2     1     4     2     1     3     4     3     2     2     2     2       27     65     1     2     1     1     2     1     3     4     3     2     2     2     2       28     62     2     2     1     1     2     1     3     4     3     2     2     2     2       29     70     2     2     1     4     2     2     3     1     3     2     2     2     2       30     62     1     2     1     4     2     1     3     4     2     2     2     2     2       31     70     2     2     1     4     2     1     3     1     3     2     2     2     2       32     62     2     2     1     4     2     1     3     1     3     2     2     3     2       33     80     2     2     1     4     2	23	65	2	2	1	4	2	2	3	1	2	2	2	2	2
26       78       1       2       1       4       2       1       3       4       3       2       2       2       2       2         27       65       1       2       1       1       2       1       3       4       3       2       2       2       2       2         28       62       2       2       1       1       2       1       3       4       3       2       2       2       2       2         29       70       2       2       1       4       2       2       3       1       3       2       2       2       2       2         30       62       1       2       1       4       2       1       3       4       2       3       2       2       2       3       2	24	70	2	2	1	4	2	1	3	1	3	2	2	2	2
27       65       1       2       1       1       2       1       3       4       3       2       2       2       2       2         28       62       2       2       1       1       2       1       3       4       3       2       2       2       2       2         29       70       2       2       1       4       2       2       3       1       3       2       2       2       2       2         30       62       1       2       1       4       2       1       3       4       2       3       2       1       2       2       3       1       3	25	80	1	2	1	4	2	2	3	4	3	2	2	2	2
28     62     2     2     1     1     2     1     3     4     3     2     2     2     2       29     70     2     2     1     4     2     2     3     1     3     2     2     2     2       30     62     1     2     1     4     2     1     3     4     2     2     2     2     2     3     2       31     70     2     2     1     4     2     1     3     1     2     2     2     2     2       32     62     2     2     1     4     2     1     3     1     3     2     2     2     2       33     80     2     2     1     4     2     2     3     1     3     3     2     1     2       34     65     1     2     1     4     2     2     3     1     3     3     2     3     2       35     68     2     2     1     1     2     1     3     4     2     2     2     3     2	26	78	1	2	1	4	2	1	3	4	3	2	2	2	2
29       70       2       2       1       4       2       2       3       1       3       2       2       2       2         30       62       1       2       1       4       2       1       3       4       2       2       2       2       3       2         31       70       2       2       1       4       2       1       3       1       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       3       2       2       3       2 <td< td=""><td>27</td><td>65</td><td>1</td><td>2</td><td>1</td><td>1</td><td>2</td><td>1</td><td>3</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></td<>	27	65	1	2	1	1	2	1	3	4	3	2	2	2	2
30     62     1     2     1     4     2     1     3     4     2     2     2     2     3     2       31     70     2     2     1     4     2     1     3     1     2     2     2     2     2     2       32     62     2     2     1     4     2     1     3     1     3     2     2     3     2       33     80     2     2     1     4     2     2     3     1     3     3     2     1     2       34     65     1     2     1     4     2     2     3     1     3     3     2     3     2       35     68     2     2     1     1     2     1     3     4     2     2     2     3     2	28	62	2	2	1	1	2	1	3	4	3	2	2	2	2
31     70     2     2     1     4     2     1     3     1     2     2     2     2     2     2       32     62     2     2     1     4     2     1     3     1     3     2     2     3     2       33     80     2     2     1     4     2     2     3     1     3     3     2     1     2       34     65     1     2     1     4     2     2     3     1     3     3     2     3     2       35     68     2     2     1     1     2     1     3     4     2     2     2     3     2	29	70	2	2	1	4	2	2	3	1	3	2	2	2	2
32     62     2     2     1     4     2     1     3     1     3     2     2     3     2       33     80     2     2     1     4     2     2     3     1     3     3     2     1     2       34     65     1     2     1     4     2     2     3     1     3     3     2     3     2       35     68     2     2     1     1     2     1     3     4     2     2     2     3     2	30	62	1	2	1	4	2	1	3	4	2	2	2	3	2
33     80     2     2     1     4     2     2     3     1     3     3     2     1     2       34     65     1     2     1     4     2     2     3     1     3     3     2     3     2       35     68     2     2     1     1     2     1     3     4     2     2     2     3     2	31	70	2	2	1	4	2	1	3	1	2	2	2	2	2
34         65         1         2         1         4         2         2         3         1         3         3         2         3         2           35         68         2         2         1         1         2         1         3         4         2         2         2         3         2	32	62	2	2	1	4	2	1	3	1	3	2	2	3	2
35         68         2         2         1         1         2         1         3         4         2         2         2         3         2	33	80	2	2	1	4	2	2	3	1	3	3	2	1	2
	34	65	1	2	1	4	2	2	3	1	3	3	2	3	2
36 65 2 2 1 1 2 1 3 1 1 3 2 3 2	35	68	2	2	1	1	2	1	3	4	2	2	2	3	2
	36	65	2	2	1	1	2	1	3	1	1	3	2	3	2

37	78	2	2	1	4	2	2	3	1	3	2	2	1	1
38	70	2	2	1	4	2	2	3	1	3	2	2	2	2
39	62	2	2	1	1	2	2	3	4	1	2	2	3	2
40	60	1	2	1	1	2	1	3	4	1	2	2	3	1
41	60	2	2	1	1	2	1	3	4	1	2	2	2	2
42	68	2	2	1	1	2	1	3	1	3	2	2	2	2
43	63	1	2	1	1	2	1	3	4	1	2	2	2	2
44	60	2	2	1	1	2	1	3	1	2	2	2	2	2
45	65	1	2	1	1	2	1	3	4	1	3	2	3	2
46	61	2	2	1	1	2	1	3	1	2	2	2	3	2
47	78	1	2	1	1	2	1	3	4	3	2	2	2	2
48	67	2	2	1	4	2	1	3	1	3	2	2	3	2
49	82	2	2	1	1	2	1	3	1	3	2	2	2	2
50	68	2	2	1	4	2	1	3	1	3	2	2	1	2
51	80	2	2	1	4	2	1	3	1	3	3	2	1	2
52	60	2	2	1	4	2	1	3	4	2	2	2	3	2
53	73	2	2	1	4	2	1	3	1	3	3	2	1	2
54	75	2	2	1	4	2	1	3	1	3	2	2	1	2
55	61	2	2	1	4	2	1	3	1	3	2	2	2	2

56         60         2         2         1         1         2         1         3         4         1         2         2         3         2         2         3         2         3         2         2         2         3         2															
58         70         2         2         1         1         2         1         3         1         3         3         2         3         4         3         1         1         2         1         1         2         1         1         2         2         3         4         3         1         1         2         1         1         2         1         1         2         1         3         1         2         2         3         1         2         2         3         2         2         3         2         2         3         2         2         3         2         2         3         2         2         3         2         2         3         2         2         3         2         2         2         1         3         1         3         1         1         2         2         2	56	60	2	2	1	1	2	1	3	4	1	2	2	3	2
59         72         1         2         1         1         2         1         3         4         3         2         2         2         2           60         66         2         2         1         1         2         2         3         4         3         1         1         2         1           61         62         1         2         1         1         2         2         3         1         2         2         3         2           62         65         2         2         1         1         2         1         3         1         3         2         2         3         2           63         68         1         2         1         1         2         1         3         4         1         2         2         2         1           64         61         2         2         1         1         2         1         3         1         1         2         2         2         1           65         72         2         2         1         4         2         1         3         4         2	57	67	2	2	1	1	2	1	3	1	3	3	2	2	2
60         66         2         2         1         1         2         2         3         4         3         1         1         2         1           61         62         1         2         1         1         2         2         3         1         2         2         3         2           62         65         2         2         1         1         2         1         3         1         3         2         2         3         2           63         68         1         2         1         1         2         1         3         4         1         2         2         3         2           64         61         2         2         1         1         2         1         3         4         1         2         2         2         1           65         72         2         2         1         4         2         1         3         1         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         <	58	70	2	2	1	1	2	1	3	1	3	3	2	2	2
61         62         1         2         1         1         2         2         3         1         2         2         2         3         2           62         65         2         2         1         1         2         1         3         1         3         2         2         3         2           63         68         1         2         1         1         2         1         3         4         1         2         2         2         1           64         61         2         2         1         1         2         1         3         1         1         2         2         2         1           65         72         2         2         1         4         2         1         3         1         1         2 <th< td=""><td>59</td><td>72</td><td>1</td><td>2</td><td>1</td><td>1</td><td>2</td><td>1</td><td>3</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></th<>	59	72	1	2	1	1	2	1	3	4	3	2	2	2	2
62         65         2         2         1         1         2         1         3         1         3         2         2         3         2           63         68         1         2         1         1         2         1         3         4         1         2         2         2         1           64         61         2         2         1         1         2         1         3         1         1         2         2         2         2         1         3         2         2         2         2         3         2           65         72         2         2         1         4         2         1         3         1         3         2         2         2         2         2           66         61         1         2         1         1         3         1         1         3         2         2         2         2         2         3         2         2         2         2         2         2         2         3         2         2         2         3         2         3         2         3         2 <th< td=""><td>60</td><td>66</td><td>2</td><td>2</td><td>1</td><td>1</td><td>2</td><td>2</td><td>3</td><td>4</td><td>3</td><td>1</td><td>1</td><td>2</td><td>1</td></th<>	60	66	2	2	1	1	2	2	3	4	3	1	1	2	1
63         68         1         2         1         1         2         1         3         4         1         2         2         2         1           64         61         2         2         1         1         2         1         3         1         1         2         2         3         2           65         72         2         2         1         4         2         1         3         1         3         2         2         2         2         2           66         61         1         2         1         1         2         1         3         4         2         2         2         2         2         3         2           67         60         2         2         1         1         2         1         3         1         1         3         2         3         2         2 <th< td=""><td>61</td><td>62</td><td>1</td><td>2</td><td>1</td><td>1</td><td>2</td><td>2</td><td>3</td><td>1</td><td>2</td><td>2</td><td>2</td><td>3</td><td>2</td></th<>	61	62	1	2	1	1	2	2	3	1	2	2	2	3	2
64         61         2         2         1         1         2         1         3         1         1         2         2         3         2           65         72         2         2         1         4         2         1         3         1         3         2         2         2         2         2           66         61         1         2         1         1         2         1         3         4         2         3         2         2         2         3         2         2         3         2         3         2         3         2         3         1         2 </td <td>62</td> <td>65</td> <td>2</td> <td>2</td> <td>1</td> <td>1</td> <td>2</td> <td>1</td> <td>3</td> <td>1</td> <td>3</td> <td>2</td> <td>2</td> <td>3</td> <td>2</td>	62	65	2	2	1	1	2	1	3	1	3	2	2	3	2
65         72         2         2         1         4         2         1         3         1         3         2         3         2         2         2         3         2         2         2         3         2         2         2         3         2         2         2         3         2         3         2         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         1         2         3	63	68	1	2	1	1	2	1	3	4	1	2	2	2	1
66         61         1         2         1         1         2         1         3         4         2         2         2         3         2           67         60         2         2         1         1         2         1         3         1         1         3         2         2         2           68         61         2         2         1         4         2         1         3         1         2         2         2         2         3         2           69         62         2         2         1         4         2         1         3         1         2         3         2         3         2           70         60         1         2         1         4         2         1         3         1         1         2         3         2           71         61         2         2         1         4         2         1         3         1         2         3         2         3         1           72         69         1         2         1         1         2         1         3         4	64	61	2	2	1	1	2	1	3	1	1	2	2	3	2
67         60         2         2         1         1         2         1         3         1         1         3         2         2         2           68         61         2         2         1         4         2         1         3         1         2         2         2         3         2           69         62         2         2         1         4         2         1         3         1         2         3         2         3         2           70         60         1         2         1         1         2         1         3         1         1         2         3         2           71         61         2         2         1         4         2         1         3         1         1         2         3         1           72         69         1         2         1         1         2         1         3         4         1         2         2         2         2         2         2         3         2           73         62         2         2         1         1         2         2	65	72	2	2	1	4	2	1	3	1	3	2	2	2	2
68         61         2         2         1         4         2         1         3         1         2         2         2         3         2           69         62         2         2         1         4         2         1         3         1         2         3         2         3         2           70         60         1         2         1         1         2         1         3         1         1         2         3         2           71         61         2         2         1         4         2         1         3         1         2         3         2         3         1           72         69         1         2         1         1         2         1         3         4         1         2         2         2         2         2           73         62         2         2         1         1         2         2         3         1         2         2         2         3         2	66	61	1	2	1	1	2	1	3	4	2	2	2	3	2
69         62         2         2         1         4         2         1         3         1         2         3         2         3         2           70         60         1         2         1         1         2         1         3         1         1         2         2         3         2           71         61         2         2         1         4         2         1         3         1         2         3         2         3         1           72         69         1         2         1         1         2         1         3         4         1         2         2         2         2           73         62         2         2         1         1         2         3         1         2         2         2         3         2	67	60	2	2	1	1	2	1	3	1	1	3	2	2	2
70         60         1         2         1         1         2         1         3         1         1         2         2         3         2           71         61         2         2         1         4         2         1         3         1         2         3         2         3         1           72         69         1         2         1         1         2         1         3         4         1         2         2         2         2           73         62         2         2         1         1         2         2         3         1         2         2         2         3         2	68	61	2	2	1	4	2	1	3	1	2	2	2	3	2
71         61         2         2         1         4         2         1         3         1         2         3         2         3         1           72         69         1         2         1         1         2         1         3         4         1         2         2         2         2           73         62         2         2         1         1         2         2         3         1         2         2         2         3         2	69	62	2	2	1	4	2	1	3	1	2	3	2	3	2
72         69         1         2         1         1         2         1         3         4         1         2         2         2         2           73         62         2         2         1         1         2         2         3         1         2         2         2         3         2	70	60	1	2	1	1	2	1	3	1	1	2	2	3	2
73         62         2         2         1         1         2         2         3         1         2         2         2         3         2	71	61	2	2	1	4	2	1	3	1	2	3	2	3	1
	72	69	1	2	1	1	2	1	3	4	1	2	2	2	2
74         78         2         2         1         1         2         1         3         1         3         3         2         1         2	73	62	2	2	1	1	2	2	3	1	2	2	2	3	2
	74	78	2	2	1	1	2	1	3	1	3	3	2	1	2

			ı	T						ı	ı			
75	63	2	2	1	4	2	1	3	1	2	1	2	2	2
76	75	2	2	1	1	2	1	3	1	3	2	2	2	2
77	68	1	2	1	4	2	2	3	4	3	3	2	2	2
78	62	2	2	1	1	2	1	3	1	2	3	2	3	2
79	72	2	2	1	1	2	1	3	1	3	1	2	1	2
80	79	1	2	1	4	2	1	3	4	1	2	2	1	2
81	60	2	2	1	1	2	1	3	1	1	1	2	3	1
82	71	2	2	1	1	2	2	3	1	3	2	2	1	2
83	68	1	2	1	1	2	1	3	4	2	2	2	1	2
84	69	2	2	1	4	2	1	3	1	2	1	2	2	2
85	62	1	2	1	1	2	1	3	4	1	3	2	2	2
86	72	2	2	1	4	2	2	3	1	3	2	2	3	2
87	65	2	2	1	1	2	1	3	1	2	3	2	2	2
88	64	2	2	1	1	2	1	3	1	2	2	2	2	2
89	63	2	2	1	4	2	1	3	1	1	2	2	2	1
90	61	1	2	1	4	2	2	3	4	1	2	2	3	2
91	69	1	2	1	4	2	1	3	4	3	3	2	1	2
92	60	2	2	1	1	2	2	3	1	1	2	2	3	1
93	64	1	2	1	1	2	1	3	4	2	2	2	2	2
<b>.</b>		1									l		1	

94	71	1	2	1	4	2	2	3	4	3	1	2	1	2
95	67	2	2	1	4	2	1	3	1	3	3	2	3	2
96	65	2	2	1	1	2	1	3	1	2	2	2	2	2
97	63	2	2	1	1	2	2	3	1	1	1	2	2	2
98	64	2	2	1	4	2	1	3	1	2	2	2	3	2
99	69	1	2	1	4	2	1	3	4	3	2	2	1	2
100	62	2	2	1	4	2	2	3	1	2	2	2	2	2

## B. Master data sheet of scale

	1.RH/2.LHT													
SL.NO	3.ВОТН	Q1	Q2	Q3	Q4	Q5	Q6	<b>Q</b> 7	Q8	Q.9	Q910	Q11	Q12	TOTAL
1	2	3	3	4	2	3	4	3	4	3	4	4	3	40
2	3	0	1	1	1	2	3	1	1	1	2	2	3	18
3	3	1	2	2	1	2	1	3	3	3	3	3	3	27
4	2	3	2	1	2	2	4	3	4	3	4	3	4	35
5	2	1	1	2	2	3	3	2	3	1	2	2	1	23
6	3	0	0	0	1	1	1	1	0	0	1	0	0	5
7	1	1	2	3	1	3	2	1	3	2	3	2	0	23
8	2	0	1	0	0	1	0	0	1	0	1	0	0	4
9	2	3	2	3	3	3	3	3	4	3	4	3	3	37
10	1	3	2	2	3	2	3	4	4	3	4	3	4	37
11	1	2	0	4	3	4	3	3	4	3	3	4	4	37
12	2	0	1	2	2	1	1	1	3	1	2	1	1	16
13	2	2	2	3	3	3	2	3	4	3	3	3	4	35
14	2	2	2	2	1	3	3	2	4	3	3	3	4	32
15	2	0	1	2	2	1	1	2	3	0	2	1	0	15
16	2	2	2	2	3	2	2	3	2	3	3	2	2	28
17	3	2	3	3	3	4	3	3	3	3	3	4	3	37

18	2	2	3	3	2	3	2	2	1	3	2	1	2	26
19	1	1	2	2	1	3	2	2	1	3	2	3	3	25
20	2	2	2	3	3	2	3	2	2	2	3	2	3	29
21	3	2	2	3	3	2	3	3	4	2	3	3	3	33
22	2	0	0	0	0	1	1	0	1	0	1	0	1	5
23	1	1	3	2	3	3	3	2	4	3	3	2	3	32
24	2	1	2	3	2	2	2	2	4	2	3	3	2	28
25	2	2	2	3	2	1	2	2	3	2	2	1	2	24
26	3	0	1	1	1	2	2	1	2	1	1	1	2	15
27	1	2	3	4	3	3	3	4	4	3	3	3	3	38
28	2	1	2	2	1	2	2	3	3	3	3	2	3	27
29	2	2	3	2	2	2	2	0	1	0	1	1	2	18
30	1	3	3	3	2	2	2	1	3	1	3	2	2	27
31	1	1	2	2	1	2	2	3	3	2	2	1	2	23
32	3	1	1	1	1	2	1	2	3	2	2	2	2	20
33	2	0	0	1	0	0	0	1	1	1	0	1	3	8
34	2	2	3	3	2	2	2	3	2	3	2	2	4	30
35	1	3	3	2	2	3	3	2	3	2	2	3	3	31
36	3	2	2	2	2	2	2	3	3	2	3	2	3	28

37	3	1	0	1 1		1								
		1	U	1	0	1	1	0	0	0	0	0	4	8
38	3	1	1	1	2	1	1	0	1	1	1	1	3	14
39	2	3	3	4	3	4	3	4	4	3	4	3	4	42
40	2	2	3	2	3	2	2	2	3	2	3	3	3	30
41	3	2	2	1	2	2	3	2	3	2	3	3	4	29
42	2	3	3	2	1	1	2	1	2	1	2	1	2	21
43	1	3	3	1	2	3	1	3	3	3	3	2	3	30
44	2	3	3	2	3	3	3	3	4	2	3	3	3	35
45	2	1	2	1	2	2	2	2	3	1	2	2	2	22
46	1	3	3	3	3	3	3	3	3	2	2	1	2	31
47	3	0	1	0	1	1	1	0	1	0	1	0	2	8
48	2	2	2	1	3	3	2	2	3	2	1	1	1	23
49	3	1	2	1	2	3	3	3	4	3	4	3	4	33
50	2	2	2	3	4	3	4	3	2	3	3	3	3	35
51	3	1	0	1	1	2	2	0	1	0	1	1	2	12
52	1	2	3	3	4	3	4	4	4	4	4	3	4	42
53	3	1	2	0	1	2	1	0	3	0	1	1	1	13
54	3	1	2	0	1	2	1	0	3	0	1	1	1	13
55	1	2	2	3	3	3	3	3	3	2	3	2	3	32

56	1	2	2	3	3	3	2	2	2	2	3	3	3	30
57	2	2	2	3	3	3	3	3	3	2	2	3	2	31
58	2	1	1	2	1	2	2	2	3	2	4	2	3	25
59	1	1	1	2	2	3	2	3	3	3	2	1	4	27
60	2	2	3	2	2	3	3	2	2	3	3	2	3	30
61	2	2	2	3	2	3	3	3	4	3	3	3	4	35
62	1	3	2	2	2	3	3	3	3	2	3	2	3	31
63	3	2	3	3	2	3	3	4	3	3	3	3	3	35
64	2	3	3	3	2	3	3	2	4	3	3	3	4	36
65	3	1	1	1	1	2	2	0	3	2	2	0	2	17
66	1	2	3	2	3	3	4	4	4	3	2	3	4	37
67	1	3	3	3	4	4	3	4	4	4	3	4	3	42
68	2	3	2	2	3	3	4	3	3	3	4	2	3	35
69	1	3	2	3	2	3	4	3	4	4	3	3	4	38
70	1	2	3	3	3	4	3	4	4	4	3	3	2	38
71	2	1	2	2	2	3	2	1	3	3	2	2	3	26
72	2	2	3	2	3	2	1	2	2	2	3	3	4	29
73	1	2	3	2	2	2	2	1	3	2	2	2	1	24
74	2	0	2	3	1	2	1	0	2	2	3	3	2	21

3	1	2	2	2	2	2	1	1	1	4	2	2	22
2	0	1	1	2	2	2	0	1	0	1	1	1	12
2	1	2	2	3	2	3	1	4	2	2	1	0	23
1	2	1	3	2	3	2	2	3	1	3	2	1	25
3	0	3	2	1	1	1	0	2	3	2	3	2	20
2	1	4	1	1	3	0	1	1	2	1	2	2	19
1	2	3	2	2	2	1	2	4	1	2	1	1	23
1	4	2	2	1	3	2	0	2	0	3	2	2	23
2	2	1	3	3	4	3	3	4	2	1	3	3	32
3	3	2	2	2	3	2	2	2	1	0	2	4	25
1	3	3	3	2	2	1	2	3	1	2	2	3	27
1	2	2	2	3	1	2	1	2	2	0	2	2	21
1	1	1	1	1	2	3	3	1	1	1	3	2	20
2	2	3	2	3	3	3	0	3	2	3	2	1	27
2	2	2	3	4	2	2	1	2	3	2	3	1	27
1	3	1	2	3	1	0	2	4	2	4	2	2	26
3	0	1	3	2	2	1	4	3	0	2	3	3	24
2	1	2	1	1	2	3	2	2	1	1	2	3	21
2	2	3	1	0	3	2	3	1	2	2	2	1	22
	2 2 1 3 2 1 1 1 2 3 1 1 1 2 2 1 3 2	2     0       2     1       1     2       3     0       2     1       1     2       1     4       2     2       3     3       1     2       1     1       2     2       1     3       3     0       2     1       3     0       2     1	2       0       1         2       1       2         1       2       1         3       0       3         2       1       4         1       2       3         1       4       2         2       2       1         3       3       2         1       3       3         1       1       1         2       2       3         2       2       2         1       3       1         3       0       1         2       1       2	2       0       1       1         2       1       2       2         1       2       1       3         3       0       3       2         2       1       4       1         1       2       3       2         2       1       3       3         3       3       2       2         1       1       1       1         2       2       2       2         1       1       1       1         2       2       2       3         1       3       1       2         2       2       3       2         2       3       1       2         3       1       2       1         3       1       2       1	2       0       1       1       2         2       1       2       2       3         1       2       1       3       2         3       0       3       2       1         2       1       4       1       1         1       2       3       2       2         1       4       2       2       1         2       2       1       3       3         3       3       2       2       2         1       3       3       2       2         2       2       2       3         1       1       1       1       1         2       2       3       2       3         2       2       3       4       4         1       3       1       2       3         2       2       3       4       4         1       3       1       2       3         2       2       3       4       4         1      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      0       3         2       2       1       3       3       4       3       3       4       2       1         3       3       2       2       2       3       2       2       1       0       3       1       2       1         1       1       1       1       1       1       2       3</td><td>2       0       1       1       2       2       2       0       1       0       1       1         2       1       2       2       3       2       3       1       4       2       2       1         1       2       1       3       2       3       2       2       3       1       3       2       3         2       1       4       1       1       3       0       1       1       2       3       2       3         2       1       4       1       1       3       0       1       1       2       1       2         1       4       2       2       2       1       2       4       1       2       1         1       4       2       2       1       3       2       0       2       0       3       2       1         1    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94	2	2	2	2	1	2	1	2	0	1	3	3	2	21
95	1	3	1	3	2	2	3	0	2	2	4	2	2	26
96	2	2	3	2	3	1	1	1	1	2	5	2	2	25
97	2	1	2	1	2	2	0	2	1	1	1	1	2	16
98	1	1	2	1	2	1	1	3	0	0	4	0	0	15
99	2	2	2	1	3	2	3	2	3	3	3	2	1	27
100	3	1	1	2	2	3	1	2	2	1	2	3	2	22

# PLAGIARISM CERTIFICATE