

**A STUDY TO ASSESS THE HEALTH PROBLEMS AND PERCEIVED OCCUPATIONAL  
HEALTH HAZARDS AMONG CASHEW FACTORY WORKERS IN SELECTED  
FACTORIES OF KOLLAM DISTRICT**

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DOI: <https://doi.org/10.5281/zenodo.17539824>

**How to cite this Article:** 1Ms. Shyma S., 2Mrs. Alfiya A. H., Abhirami B., Chinjulekshmi R., Muhammed Saidali S., Sreya Santhosh, Vaishanavi (2025). A Study To Assess The Health Problems And Perceived Occupational Health Hazards Among Cashew Factory Workers In Selected Factories Of Kollam District. European Journal of Pharmaceutical and Medical Research, 12(11), 300–303.

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Article Received on 05/10/2025

Article Revised on 25/10/2025

Article Published on 01/11/2025

**ABSTRACT**

The present study was undertaken to assess the health problems and perceived occupational health hazards among cashew factory workers of selected factories of Kollam district. A non experimental descriptive research design was used. The interviewer administered a general health questionnaire and 5 point rating scale to collect health related issues from 100 female cashew processing workers. Descriptive and inferential statistics were used. The result shows. that 56% of subjects are having chronic illness, 30% of them are having respiratory problems, 79% of them are having musculoskeletal problems, 34% of them are having skin problems, 60% of them are having eye problems, and 18% of them are having ear problems and there is risk for the occurrence of occupational health hazards in 61% of the subjects and 39% of the subjects are having less risk for the occurrence of occupational health hazards and There was a significant association between age and chronic illness ( $\chi^2 = 14.918$ ) job. section and skin problems ( $\chi^2 = 10.438$ ) hours of working and skin problems ( $\chi^2 = 15.776$ ). Health related issues pertaining to musculoskeletal system, respiratory system, skin conditions and perceived occupational health hazards are highly prevalent among women engaged in cashew processing industry.

**KEYWORDS:** Assess, Health Problems, Perceived Occupational Health Hazards and Cashew Factory Workers.

**INTRODUCTION**

In recent years, the importance of understanding the health and safety of workers in industrial settings has gained significant attention, particularly in sectors involving manual labor and exposure to various occupational hazards. Among such industries, cashew processing is a key area of concern, especially in the Kollam district of Kerala, which is known for its large-scale cashew processing factories. Cashew processing, while an essential industry for both local and global markets, involves workers being exposed to numerous physical, chemical, and ergonomic hazards, which can lead to long-term health complications. These risks range from musculoskeletal injuries to respiratory disorders, skin diseases, and even more severe health outcomes due to prolonged exposure to hazardous substances.<sup>[1]</sup>

The cashew industry in Kollam plays a crucial role in the local economy, providing employment to thousands of workers, primarily women. Despite its economic significance, the working conditions in cashew factories have been a subject of concern for researchers, health professionals, and policymakers alike. Factory workers are often subjected to repetitive, high intensity tasks under poor ergonomic conditions, and in some cases, they are exposed to harmful chemicals used in the cleaning and processing of cashew nuts. This combination of strenuous physical labor and chemical exposure may have a significant impact on the health and well being of these workers. While numerous studies have focused on the broader health implications of industrial labor, specific research addressing the perceived health problems and occupational hazards among cashew factory workers remains limited. This gap

highlights the need for an in depth study to assess the health issues faced by these workers and the various occupational hazards they encounter. Understanding their concerns, perceptions, and the real risks they face in their work environment is crucial for developing effective health and safety policies and interventions.<sup>[2]</sup>

### STATEMENT OF THE PROBLEM

A study to assess the health problems and perceived occupational health hazards among cashew factory workers in selected factories of Kollam district.

### OBJECTIVES

1. To assess the health problems among cashew factory workers
2. To assess the perceived occupational health hazards among cashew factory workers.
3. To find the association between the health problems and selected demographic variables
4. To find the association between the perceived occupational hazards and selected demographic variables
5. To find the association between the health problems and perceived occupational health hazards.

### HYPOTHESES

1. There is a significant association between the health problems and selected demographic variables
2. There is a significant association between perceived occupational health hazards and selected demographic variables
3. There is a significant association between health problems and perceived occupational health hazards

### OPERATIONAL DEFINITIONS

1. Health hazards: -In this study health problems are the self-reported health problems experienced by cashew factory workers, including respiratory problems, skin problems, musculoskeletal problems, and other health issues and it will be measured by general health questionnaire and a general health checkup will be also done including anthropometric measurement and vital signs
2. Perceived occupational health hazards: - In this study perceived occupational health hazards are the physical, chemical, biological, or ergonomic hazards present in the work environment of cashew factory workers, including exposure to cashew dust, shell oil, chemicals, and physical demands of the job and it is measured by rating scale.
3. Cashew factory worker: - In this study cashew factory workers refers to the individuals between the age group of 18-60 years who are employed in selected cashew factories of Kollam district and are involved in various stages of cashew processing and also having a work experience of one year and above.

### ASSUMPTIONS

1. The study assumes that cashew factory workers may be aware of their health problems and can accurately report them

2. The study assumes that occupational health problems are common in cashew factory workers

### DELIMITATIONS

1. The study is limited to selected areas of Kollam district, Kerala, India
2. The study is limited to a sample size of 100 cashew factory workers

### RESEARCH APPROACH

The present study aims to assess the health problem and perceived occupational health hazards among selected cashew factory workers. Hence the researcher thought that a quantitative approach would be the best suitable to reach these aims.

### RESEARCH DESIGN

In this study, descriptive research design is used.

### SETTING OF THE STUDY

In the present study, Souparnika export enterprises, Umayanallor is selected as the settings of the study.

### POPULATION

A population is the entire set of individuals or objects having some common characteristics selected for a research study; sometimes referred to as the universe of the research study. In this study, population comprised of cashew factory workers from roasting, shelling, peeling and grading sections.

### SAMPLE AND SAMPLING TECHNIQUES

Sample is a proportion or subset of the population. The sample size was 100 selected cashew factory workers from the roasting, shelling, peeling and grading sections of the industry.

Sampling technique is the process of selecting sample from the target population to represent the entire population.

In this study samples were selected according to purposive sampling.

### CRITERIA FOR SELECTION OF SAMPLE INCLUSION CRITERIA

- Who are willing to participate in the study.
- With working experience of one year and above.
- Between the age group of 18 to 60 years
- Involved in Cashew processing unit including sorting, shelling, grading, peeling and packing
- Who are able to understand Malayalam language

### EXCLUSION CRITERIA

Who have already participated in a similar study within 1 year.

### TOOLS AND TECHNIQUES

Tool or instrument is a device used by the researcher to collect data. The research tool was derived on the basis of related literatures and under the guidance of subject experts.

**Tool 1**

Section A: socio demographic variables

Section B: Questionnaire for assessing health status

**Tool 2**

5 point rating scale to assess the perceived occupational hazards

**DEVELOPMENT OF TOOL**

The following steps were taken for the selection of items and preparation of tool:-

- a) Review of research and research literature was made in the areas related to health problems are occupational health hazards among cashew factory workers.
- b) Formal discussions were held with the nursing and medical experts and their valuable suggestions were utilized for developing tool.
- c) Professional experience of the investigator helped in determining important areas to be included in the tool.

**DESCRIPTION OF TOOL****TOOL: 1****SECTION -A**

Socio demographic variables including age, sex, educational qualification, job role, year of experience, working hours, socio economic status and marital status.

**SECTION -B**

Questionnaire for assessing health status

Section B include questionnaire to assess any long term health problems such as respiratory problems, muscle bone or joint related problems, skin related problems, eye related problems, and ear related problems.

**TOOL- 2**

Five point rating scale related to perceived occupational health hazards including 30 statements. In that 29 statements are positive and 1 statement is negative. The interpretation is based on:

\* >75 : the risk for occurrence of occupational health problems is high

\* = or <75 : at less risk of occurrence of occupational problems

The total score of the tool is 150 and the interpretation was done by taking the mean of the total score that is 75. The analysis and interpretation of the findings is organized under the following sections:

Section A: distribution of demographic variables.

Section B : distribution of health problems among cashew workers

Section C : distribution of perceived occupational health hazards

Section D : association between demographic variables and health problems

Section E : association between demographic variables and perceived occupational health hazards

Section F: association between health problems and perceived occupational health hazards

**Section A: distribution of demographic variables.**

The data showed that

- In the study shows that 1% of subject are in the age group 18-30, 19% are in 31-45, 50% are in the age group 46-59, 30% are in the age group >59.
- In the study shows that 100% of the subjects are females.
- In the study shows that 21% of subjects comes under working section of shelling, 2% comes under packing, 15% comes under working section of grading, 62% comes under working section of peeling.
- In the study shows that 74% of the subjects are having primary educational qualification, 24% are having secondary educational qualification, 2% are having higher secondary educational qualification.
- In the study shows that 59% of subjects belongs to employment duration of >10 years and 2% have 1 year of employment.
- In the study shows that 47% works for >6-9 hours and 8% works for 4-6 hours
- In the study shows that 90% of the subjects belongs to BPL Category and 10% of subjects belongs to APL Category
- In the study shows that 79% of the subjects are married and 2% are single.

**Section B: distribution of health problems among cashew workers**

In the study shows 56% of subjects are having chronic illness, 44% is not having any chronic illness. 30% of subjects having respiratory problems and 70% is not having any respiratory problems, 79% of subjects having musculoskeletal problems and 21% is not having any musculoskeletal problems, 34% of subjects having skin problems and 66% of the subjects are not having skin problems, 60% of 25 subjects having eye problems and 40% is not having any skin problems, 18% of subjects having ear problems and 82% is not having ear problems.

**Section C: distribution of perceived occupational health hazards**

In the study shows 39% of the subjects are having score of or = 75 in rating scale of perceived occupational health hazards.

**Section D: association between demographic variables and health problems**

In the study shows that there was a significant association between age and chronic illness ( $\chi^2=14.918$ ) job section and skin problems ( $\chi^2=10.438$ ) hours of working and skin problems ( $\chi^2=15.776$ )

**Section E: association between demographic variables and perceived occupational health hazards**

In the study shows that there is no significant association between demographic variables and perceived occupational health hazards.

**Section F: association between health problems and perceived occupational health hazards**

In the study shows that there is significant association between eye problems and perceived occupational health hazards (p value =0.03)

**CONCLUSION**

The present study aim to assess the health problems and perceived occupational health hazards among cashew factory workers. The result of the study shows that 56% of subjects are having chronic illness, 30% of them are having respiratory problems, 79% of them are having musculoskeletal problems, 34% of them are having skin problems, 60% of them are having eye problems, and 18% of them are having ear problems and there is risk for the occurrence of occupational health hazards in 61% of the subjects and 39% of the subjects are having less risk for the occurrence of occupational health hazards and There was a significant association between age and chronic illness( $\chi^2 = 14.918$ ) job section and skin problems( $\chi^2 = 10.438$ ) hours of working and skin problems ( $\chi^2 = 15.776$ ).

**ACKNOWLEDGEMENT**

"Bless the lord, oh my soul, and forget none of his benefits"

First of all, we thank the God Almighty for being with us and sustaining as in all hardships, for the blessings in all endeavours to complete the dissertation to our optimal satisfaction. Without his grace this task would not have been possible.

We are thankful to our parent institution N.S Memorial College of Nursing for providing us an opportunity to conduct this study as a part of our seventh semester BSc Nursing curriculum.

We wish to express our sincere thanks to Ms.Shyma S, Assistant professor Department of community health Nursing, N.S Memorial College of Nursing, Palathara, Kollam for her priceless support, scholarly guidance and advice, valuable suggestions and supervisions, needed encouragement and above all for being there throughout the study. We also owe gratitude to Mrs. Alfiya A. H, Lecturer Department of Medical Surgical Nursing N. S. Memorial College of Nursing, Palathara, Kollam for his priceless support, expertise, guidance and advice, valuable suggestion and supervisions laid the foundation stone for the present study.

We extend our earnest gratitude to Prof. Dr. Suresh.K.N, Principal, N.S Memorial College of Nursing, Palathara, Kollam for his valuable suggestions and guidance right from the selection of the research topic.

We extend our gratitude to Mrs.Sabitha, Department of Statistics for her critical comments and valuable suggestions. The investigators express their deepest appreciation with thanks to all the experts who

contributed their valuable suggestions in validating the tool.

The investigators also extend their thanks to all the cashew factory workers who participated in the study. vii viii The Investigators are pleased to acknowledge Prof. Dr. Beroj Steena T Vice Principal, Prof. Dr. Subash Indrakumar C L Professor, Amal James Associate professor, Akhila US Associate professor, Mrs. Shyma S, and all faculty & staff for their immense support and valuable suggestions The investigators are thankful to Mrs. Sasilekha. S, Librarian N.S. Memorial College of Nursing, Palathara, Kollam, for the support and timely help to carry out the study.

Researchers also extend special thanks to all the teaching and nonteaching staff of the institution. The investigators express their gratitude to the Management of N. S Memorial College of Nursing, Palathara, Kollam, for giving us the opportunity to undertake a graduate course in this esteemed institution.

The investigators extend their heartfelt thanks to all their loving friends for their reassurance and constant motivation which energized to finish this work successfully.

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