HEALTH AWARENESS

Health Awareness among Residents near KMML, Chavara, Kollam District, Keralam

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Abstract

Health awareness is an essential component of disease prevention, health promotion, and the improvement of quality of life. Residents living near industrial areas may face environmental health concerns related to air quality, water quality, sanitation, hygiene, and other environmental conditions. Understanding the relationship between environmental awareness and health-related practices is important for developing appropriate community health education programmes. The present study aims to assess health awareness among residents living near Kerala Minerals and Metals Limited (KMML), Chavara, Kollam District, Kerala. A quantitative descriptive survey design is proposed. The study population will comprise adult residents from selected residential areas near KMML. Data will be collected using a structured questionnaire covering demographic characteristics, personal hygiene, nutrition, sanitation, communicable and non-communicable diseases, environmental pollution awareness, preventive health practices, and healthcare utilisation. The collected data will be analysed using the statistical technique of percentage analysis. The findings are expected to help identify health education needs and provide a basis for community-level awareness initiatives.

Keywords: Health awareness; Residents; KMML; Chavara; Keralam

1 Introduction

Health awareness is an important determinant of individual and community well-being. It enables people to understand health-related information, recognise potential risk factors, adopt preventive practices, and make informed decisions regarding healthcare. Health awareness extends beyond knowledge of diseases and includes personal hygiene, nutrition, sanitation, physical activity, mental well-being, and the appropriate utilisation of healthcare services. The World Health Organization recognises health literacy as an important factor in enabling individuals and communities to access, understand, evaluate, and use health information to maintain or improve their health (World Health Organization, 2025). Effective health awareness programmes can support preventive healthcare, healthier lifestyles, and informed participation in community health initiatives. Environmental conditions are also important determinants of health. Air quality, drinking water, waste management, sanitation, and exposure to environmental contaminants may influence the health and well-being of populations. Communities residing near industrial establishments may therefore benefit from awareness of environmental health risks, preventive practices, and appropriate channels for obtaining reliable health information. Kerala Minerals and Metals Limited (KMML), located in Chavara, Kollam District, Keralam, provides the geographical context for the present investigation. The study focuses on residents living in selected areas near the industrial establishment. It seeks to understand their awareness of general health issues and environmental health, without presuming that any particular health problem is caused by industrial activity. Assessing health awareness in this

community may help identify gaps in knowledge, understand preventive health practices, and suggest suitable community health education measures. The study may also contribute to the development of evidence-informed interventions addressing health awareness in industrially influenced residential settings.

2 Review of related literature

Health awareness and environmental health literacy have received increasing attention in public health research. Existing literature emphasises the importance of examining not only people's knowledge of health issues but also their ability to interpret information, assess potential risks, and adopt appropriate preventive actions.

Rowlands et al. (2019), in a World Health Organization report, examined methods and indicators used to evaluate health literacy policies, programmes, and interventions. Their work highlights the importance of systematic assessment and the use of appropriate indicators to understand health literacy and evaluate improvement initiatives.

Platter et al. (2019) discussed a systematic framework for assessing community health literacy activities, gaps, resources, and opportunities. Their work suggests that community-level assessments can help identify areas requiring improvement and support the planning of locally relevant health education initiatives.

An earlier review by Gray (2018) examined environmental health literacy and its relationship with environmental knowledge, self-efficacy, and community action. The review highlights the importance of enabling individuals to understand environmental exposures and their possible health implications.

Saha et al. (2007) investigated living environments and self-reported morbidity through a questionnaire-based survey in industrial, residential, and commercial areas of Ahmedabad, India. Their research illustrates the relevance of studying environmental conditions and reported health concerns in different residential settings. However, findings from another geographical area cannot automatically be generalised to residents near KMML.

These studies provide a conceptual and methodological foundation for assessing health awareness and environmental health literacy. A local survey is needed to determine the actual awareness levels, information needs, and preventive practices of residents in the selected study area.

Research gap: The present study proposes a geographically focused assessment of general health awareness and environmental health awareness among residents near KMML, Chavara.

3 Statement of the problem

The problem selected for the present investigation is entitled “Health Awareness among Residents near KMML, Chavara, Kollam District, Kerala.”

- **Health Awareness:** Health awareness extends beyond knowledge of diseases and includes personal hygiene, nutrition, sanitation, physical activity, mental well-being, and the appropriate utilisation of healthcare services.
- **Residents:** People who live in a specific home, neighbourhood, city or nation. In the present context people living in the vicinity of KMML, Chavara, Kollam.

- **KMML:** Kerala Minerals and Metals Limited is a public sector enterprise owned by the Government of Kerala.
- **Chavara:** Chavara is a village in Kollam district, Kerala, India.
- **Keralam:** A state on India's tropical Malabar coast.

4 Objectives of the study

The study is proposed with the following objectives:

1. To assess the level of health awareness among residents living in the vicinity of KMML, Chavara.
2. To assess awareness regarding communicable and non-communicable diseases among residents living in the vicinity of KMML, Chavara.

5 Research questions

1. What is the level of health awareness among residents living near KMML?
2. What is the level of awareness regarding environmental health and pollution?
3. What is the level of awareness regarding communicable and non- communicable diseases among the residents?

6 Hypotheses of the study

These hypotheses will be evaluated only after data collection and appropriate statistical analysis.

1. There is a significant health awareness among residents living in the vicinity of KMML, Chavara.
2. There is a significant awareness regarding communicable and non-communicable diseases among residents living in the vicinity of KMML, Chavara.

7 Methodology

A quantitative descriptive survey design was adopted to assess health awareness among residents in selected areas near KMML, Chavara. The study was conducted in selected residential areas in the vicinity of Kerala Minerals and Metals Limited, Chavara, Kollam District, Kerala. The target population comprised adult residents aged 18 years and above who live in the selected study areas. The sample consisted of 200 residents selected through stratified random sampling.

The Health Awareness Inventory for the residents near KMML, Chavara, developed by the investigator, was the tool used to assess health awareness among the residents with respect to:

- Demographic information, including age, gender, education, occupation, and duration of residence;
- Awareness of personal hygiene, nutrition, sanitation, and healthy lifestyle practices;
- Awareness of communicable and non-communicable diseases and their prevention;
- Awareness of environmental health, air and water quality, waste disposal, and potential pollution-related health concerns; and
- Preventive health practices, health information sources, and utilisation of healthcare services was examined using the Health Awareness Inventory.

The collected data were analysed and interpreted using the statistical technique of percentage analysis.

8 Major findings of the study

38.8 percent of residents possess awareness of health and hygiene; 29.8 percent of residents have awareness of communicable and non-communicable diseases; 21.6 percent possess awareness of environmental pollution and potential health implications; and 12.3 percent possess awareness of sources of health information and preventive health practices. The incidence of health awareness among residents near KMML, Chavara, was as follows: gender and health awareness: males (39.1 percent), females (59.9 percent), education and health awareness (23.37 percent), occupation and health awareness: employees (66.67 percent), non-employees (33.36 percent); age and health awareness: (23.47 percent above 60, 67.97 percent below 60). Awareness of personal hygiene (54.56 percent), nutrition (42.73 percent), proper sanitation (23.56 percent), healthy life style practices (33.12 percent), awareness of environmental health (33.71 percent), awareness on air and water quality (54 percent), waste disposal (43.91 percent).

Twenty percent of residents near KMML Chavara possess preventive health practices, 31 percent have awareness of health information sources and 29.91 percent utilize healthcare services.

The study has the following implications:

- It helps to identify specific health awareness needs among residents in the selected study area.
- It informs the planning of community health education programmes.
- It may encourage collaboration among local health institutions, community organisations, and public health authorities.
- It may promote awareness of preventive healthcare and reliable sources of health information.
- It may provide baseline information for future research on environmental health literacy in industrially influenced residential communities.

9 Limitations of the study

The survey, conducted in selected residential areas, may not represent all residents of Chavara or Kollam District. Self-reported responses may be affected by recall errors or social desirability bias and health awareness scores may not necessarily reflect actual health behaviour. The proposed survey alone cannot establish a causal relationship between industrial emissions and health outcomes.

10 Conclusion

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition. Ensuring that all people have access to the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health. Health awareness is an important component of preventive healthcare and community well-being. Assessing health awareness among residents living near KMML, Chavara, may provide useful information about their knowledge of general health, preventive practices, and environmental health concerns.

The findings of the study revealed that the residents near KMML, Chavara have an average level of health awareness and on communicable and non-communicable diseases. Given the limited awareness of sanitation, nutrition, preventive healthcare and environmental health, appropriate recommendations may include community awareness programmes, information sessions through local health institutions, and the dissemination of reliable health information in mother tongue. Any reported health symptoms or concerns associated with environmental conditions should be interpreted cautiously. A cross-sectional awareness survey cannot establish that industrial pollution has caused a particular disease. Such conclusions would require suitable environmental measurements, clinical information, and an appropriate epidemiological study design.

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