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Mobility Limitations on Health Outcomes Among Older Individuals: A Descriptive Study

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ABSTRACT

Background: The global aging population is on the rise due to increased life expectancy and various influencing factors. As a result, their health outcomes have become a significant concern. This study aims to evaluate mobility limitations and their impact on health outcomes among older adults living in the Choolai community .

Objectives: The primary objectives of this study are to:Assess the level of mobility limitations and health outcomes among older individuals.Examine the correlation between mobility limitations and health outcomes.Identify associations between demographic variables and mobility limitations.

Materials And Methods: A quantitative, descriptive study was conducted using a non-probability convenient sampling technique. A total of 60 older adults were selected from Choolai. Mobility limitations were assessed using the **Elderly Mobility Scale**, and health outcomes were measured using the **RAND 36-Item Short Form Health Survey (SF-36)**.

RESULTS: The majority of older adults had borderline mobility limitations. None of the participants had high health outcome scores, with most falling within the moderate range. A **significant positive correlation** was observed between mobility limitations and health outcomes (**r = 0.37, p = 0.01**), indicating that as mobility scores increased, health outcome scores also improved. Individuals with higher mobility scores exhibited greater independence in daily activities, which in turn led to better health outcomes.

Conclusion: The study concludes that mobility limitations are significantly associated with health outcomes among older adults. Furthermore, the positive correlation between mobility and health outcomes suggests that improved mobility contributes to better overall well-being.

Keywords: Mobility limitations, Health outcomes, Older adults

INTRODUCTION

The natural biological process of aging is marked by slow metabolic changes and a decline in cell regeneration. Globally, human life expectancy has been increasing due to various factors, including genetics, lifestyle, a balanced diet, avoiding smoking, and physical activity.

The ability to move freely , whether by walking ,using assistive technology, or taking transportation in a variety of settings, is referred to as Mobility .Cognitive, psychological, physical, environmental, and socioeconomic elements all have an impact on it, with gender, culture, and past experiences serving as the main determinants. These elements grow more complicated when mobility expands beyond the house.

For aging to be healthy, maintaining mobility is essential. In order to detect early mobility limitations and monitor changes over time, health care practitioners need efficient evaluation tools. Mobility assessments can range from self-reported questionnaires to performance-based measures and GPS tracking. The two main priorities in mobility assessment are:

1. **Early identification of mobility limitations**
2. **Implementation of interventions to prevent or reverse these limitations**

Research has indicated a connection between mobility limitations and extended periods of inactivity. However, these effects can be lessened by minimizing or breaking up times of inactivity. Poor health outcomes have been closely linked to higher degrees of mobility constraints, highlighting the necessity of mobility-enhancing therapies to support healthy aging.

MATERIALS AND METHODS

A descriptive survey to assess mobility limitations and health outcomes among older adults in the Choolai community. A **cross-sectional, quantitative, non-experimental** study design was adopted, with data collection spanning four weeks. The study included individuals aged **60 years and above** who met the inclusion criteria.

DATA COLLECTION

The study was conducted at a primary health center in Choolai, Chennai. A total of **30 older adults** participated, with sample size calculations based on a prior study by **Shirley Musich et al.** Estimating a mobility limitation prevalence of **39.7%**.

ETHICAL CONSIDERATIONS

The study was approved by the **Institutional Ethics Committee (No. IEC-MMC/Approval/44042023)**, the City Health Officer of Greater Chennai Corporation, and the Medical Officer of Choolai Urban Primary Health Centre. Participants were informed about the study's purpose, and written **informed consent** was obtained. Confidentiality was maintained, and participants were given the freedom to withdraw at any time.

DATA COLLECTION PROCEDURE AND STATISTICAL ANALYSIS

Participants were recruited using a **non-probability sampling** technique. Structured interview questionnaires were administered, taking approximately **10–15 minutes** per participant.

The reliability of the assessment tools was tested using **Cronbach's alpha**, yielding a reliability coefficient of **0.82** for mobility limitations and **0.84** for health outcomes, confirming their effectiveness in assessing these variables among older adults.

RESULTS

Demographic Characteristics and Association with Mobility Limitations

The study examined the association between mobility limitations and demographic variables such as **age, education, occupation, family income, religion, family type, marital status, number of children, source of health information, and age at marriage**. Key findings include:

- **Older adults aged 60–63 years and those from nuclear families exhibited higher mobility scores.**
- **Health outcomes were higher among individuals who received health information from the media.**

Correlation Between Mobility Limitations and Health Outcomes

A **significant, positive, fair correlation** was found between mobility limitations and health outcomes (**r = 0.37, p = 0.01**). This indicates that as mobility limitations decrease, health outcomes improve.

DISCUSSION

- **Mobility Limitations**: **30% of older adults** had dependent mobility scores, **46.67% had borderline scores**, and **23.33% were independent**.
- **Health Outcomes**: **30% had low health outcome scores**, **70% had moderate scores**, and **none had high scores**.
- **Correlation Between Mobility and Health Outcomes**: A significant **positive correlation** (**r = 0.37, p = 0.01**) was found, indicating that improved mobility enhances health outcomes.
- **Demographic Influence**: Older adults aged **60–63 years** and those from **nuclear families** had higher mobility scores, while those relying on **media for health information** had better health outcomes.

CONCLUSION

The study revealed a **significant association** between mobility limitations and health outcomes in older adults. A **positive correlation** was observed, suggesting that **better mobility contributes to improved health outcomes**. Implementing **mobility-enhancing interventions** can help older adults maintain independence and overall well-being.

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