Review Article

A Study to Assess the Prevalence of Anemia, Diabetes Mellitus and Hypertension among Elderly People Selected in Rural Areas of Greater Noida District Uttar Pradesh Narrative Review

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ABSTRACT

Introduction: The rapid increase in the aged population has resulted in a growing number of cases of chronic diseases anaemia, diabetes mellitus and hypertension are the disease conditions which is influenced by psychological, biological, socio-cultural and economic factors. This increase is an important demographic change that low- and middle-income countries have to face and poses a new challenge to health services. This study describes the prevalence of anemia, hypertension and diabetes and the overall health status in pre-elderly and elderly.AIM: The aim of this narrative review is to assess the elderly people above 60 years of age. The finding of the study will help the health professional to identify the baseline data of anemia, diabetes mellitus and hypertension through various tests i.e. hemoglobin test, blood sugar test and blood pressure examination.

Methodology: Intervention-Assessment of anemia, diabetes mellitus and hypertension. Types of studies-Non- experimental, descriptive research design. Types of participants- Elderly people above 60 years of aged male and female. Setting-The study will be conducted in selected rural area of G. Noida that is PanchayettanRauni, Ghangola, Kullipura. Outcome- This narrative review result has appeared that after assessing the prevalence of anemia, diabetes mellitus and hypertension findings might aid public health care managers in the targeting of strategies to promote better health in the aging population.

KEY WORDS: Prevalence of Anemia, Diabetes Mellitus, Hypertension, Elderly People.

INTRODUCTION

Anemia makes several physical, physiological, and behavioural changes in all the people especially among elderly people. The physical changes such as tiredness, pallor in, nail beds, palm and conjunctiva. Physiological changes such as tachycardia, feeling of palpitation, bounding pulse, low blood pressure and low immunity. And behavioural changes such as tiredness, lethargic, lack of concentration and irritability, 23% (164 million) elderly are affected with anemia and 51% of Indian women aged 15-49 anemic(Global anemia prevalence)

Diabetes mellitus (DM) is a chronic metabolic disease characterized by hyperglycemia and high glaciated hemoglobin with or without glycosuria. Glucose metabolism disorder (GMD) results from a defect in insulin secretion by the pancreas, insulin action on the target tissues (or insulin resistance), or both. Chronic hyperglycemia leads to damage and failure of various organs, especially the heart, blood vessels, eyes, kidneys, and nerves.

Those macro and micro angiopathies, which can be observed even in newly diagnosed patients [are due to GMD long-term duration. DM prevalence, in general, is growing worldwide, and is becoming an epidemic and endemic problem with the social and economic burden. However, its prevalence and its co-morbidities and mortality are higher in elderly than in young people. According to Caspersen et al. diagnosed and/or undiagnosed DM affects 10.9 million US adults aged 65 years and older, and this number is projected to reach 26.7 million by 2050, which means 55% of all diabetes cases. For the same authors, almost 8 from 10 old people have some form of dysglycemia according to different tests. This allows epidemiologists to classify DM with its complications as the most alarming health problem of the current century in middle age people and elderly. (FaridaChentli, Said Azzoug, and Souad Mahgoun).

Hypertension in the elderly patients represents a management dilemma to cardiovascular (CV) specialists and other practitioners. Furthermore, with the wide adoption of multiple drug strategies targeting subgroups of hypertensive patients with specific risk conditions to lower blood pressure (BP) beyond traditional goals, difficult questions arise about how aggressive elderly patients should be treated. "Is hypertension in the elderly an emergency state or not?", "Does the BP control lower the risks associated with cardiovascular disease and death in the geriatric population?'', "What are the general principles of hypertension management in this population?'' The purpose of the following article is to answer those questions through a review of pathophysiology of aging, clinical assessment and diagnosis of hypertension and finally recommendations for its management. (NikolaosLionakis, Dimitrious Mendrinos)
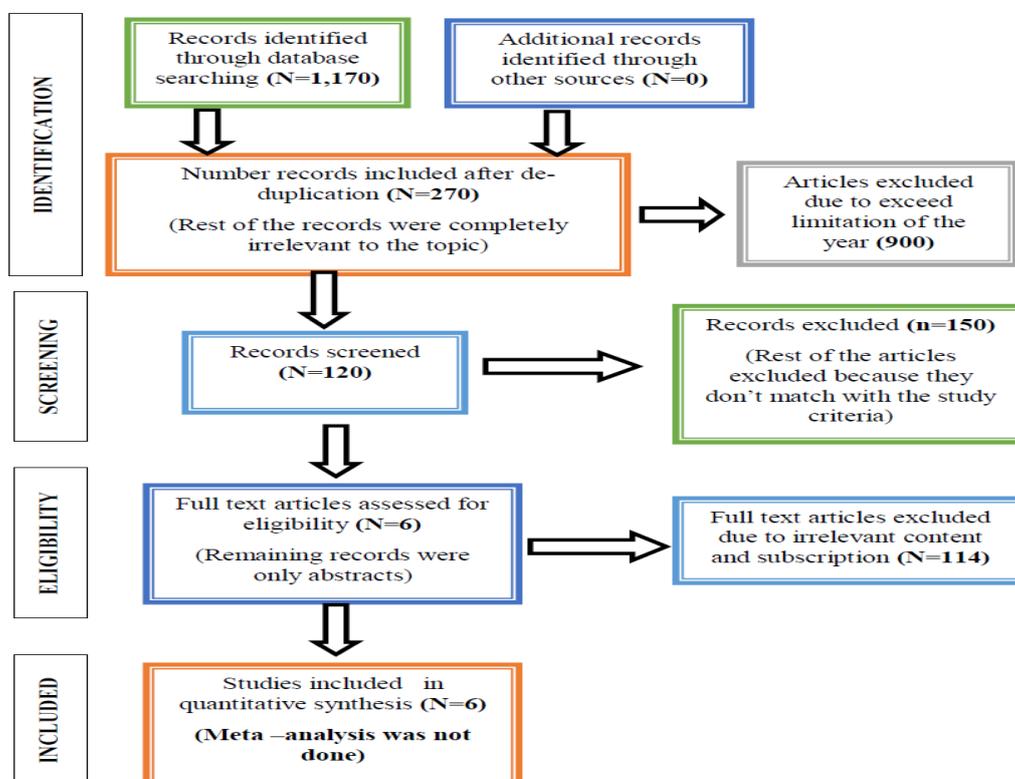
METERIALS AND METHODS

Figure 2: Prisma flow diagram of narrative review

FINDINGS

The systematic search was conducted by formulating the terms separately and in integration with all synonyms, also according to the database. Likewise, a manual Google scholar search was undertaken using the keywords and search synonyms from already articles. An addition of 6 articles was found in the database. Initial search recovers 1170 articles over which 270 articles were selected manually.150 articles were rejected as a result of replication in the database. Replication was removed and reviewed 120 articles for acceptability.114 more studies were rejected because of unreachable of the full text. Hence 6 articles were screened which includes quantitative study.

DISCUSSION

This study focused on a description of the prevalence of diseases related to elderly individuals and their quality of life. Although there were no social and demographic differences, the study was performed in rural areas of Greater Noida. Subjects from Eldorado also presented a significantly higher prevalence of diabetes was much higher in the Eldorado health care clinic. The literature shows that the incidence of depression and impaired cognitive function increases in elderly individuals with diabetes. Descriptive study conducted by São Paulo, Jacqueline Lacerda, Matheus Rodrigue,et.al.2013 of the prevalence of anemia, hypertension, diabetes and quality of life in a randomly selected population of elderly. Study was conducted with 373 participants, with clinical data being collected between November 2012 and April 2013. All elderly male and female individuals (60years or older) of the two clinics were invited to participate in the study. A simple random sampling method was used. Results, prevalence of anemia was approximately 11% and hypertension was 70% and 81% in Eldorado and Piraporinha, respectively. The frequency of diabetes was 52% in Eldorado and 30% in Piraporinha. The subjects of both health care clinics reported having difficulties in some of their daily physical and instrumental activities, with physical symptoms and emotional disorders.

CONCLUSION

Conclusion was anemia, hypertension and diabetes are prevalent in the studied population, and patients showed degrees of dependency and impaired health status. Therefore, findings should be informed, suggest needed healthy life patterns, if needed referral as hospital policy and implemented as routine care for all elderly male and female above 60years of age.

Ethical Clearance:

- Principal, School of Nursing Science and Research, Sharda University.
- University Ethical Committee, Sharda University.
- Permission was obtained from the Greater Noida Development Authority to collect the data from the elderly people from rural areas.

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