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Certain Age Associated Disorders, their Distribution, Pattern and Analysis of Human Beings in the City of Darbhanga.

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ABSTRACT

The aim of the present study was to compare the cognitive performance of older individuals from a population based study, carried out in several locations in Darbhanga, who were identified as having SH, DM and obesity concomitantly, against participants who did not have these conditions. The present plan of work has been aimed to study certain age associated disorders among human beings in relation to aforementioned co-variant. Data emerging out of study may provide a concrete information which in turn, may be of use to caregivers and policymakers as well as implementing welfare programmers for the suffering elderly population. The present work has been proposed in view of the pressing demand to understand their handicaps, asses the nature of severity and disruption pattern of age associated disorders like obesity, diabetes mellitus, urinary incontinence and hypertension. Hope full the study will offer a better and more realistic understanding of the growing problem.

Keywords: *Hypertension, Obesity, Co-variant, Diabetes mellitus.*

INTRODUCTION

India ranks second among the countries of the world in terms of the absolute number of the ageing, next only to China. Population ageing is the process by which the older population grows faster than the total population. It is the most significant emerging demographic phenomenon in the world today. In 1950, the world population aged 60 years and above was 205 million (8.2 per cent of the population) which increased to 606 million (10 per cent of the population) in 2000. Poor knowledge of basic processes in aging interferes with interventions to prevent or delay age-related pathologies, like diabetes, cardiovascular disorders, neurodegenerative disorders, and cancer, which, consequently, impact human independence, general wellbeing, and morbidity. Recently, interest has been focused on stem cells, because their decline impairs tissues homeostasis maintenance, leading to the organism weakening and the age-related diseases.

It appears from the review of literature hypertension is one of the most important causes of the total disease burden in the world. According to large observational studies, hypertension is thus associated with high incidence of cardiovascular disease, such as stroke, ischemic heart disease, and other vascular diseases (Consoli, 1992; Irudaya, 1999; Kahn and Porte, 1988; Inzucchi, 2002 and John, 1998.).

MATERIALS AND METHODS

A critical survey has been done in various locations in Darbhanga, Bihar *viz.*, Laheriasarai, Bahadurpur, Bela Dullah, Donar, GM Road, Kathalbari, Laxmisagar,

Mirzapur, Railway Colony and Sundarpur.

This section provides an overview of the survey sample in terms of socio demographics and health characteristics, including diabetes type. Where relevant the profile of the sample is described according to type of diabetes, age and sex. We used different questions to people in order to gather information regarding to know health status in old age (Table 1). In our study we selected population size 100 -200, to know the real scenario of age related disorders in order to conclude real status of aged people in various locations in Darbhanga.

RESULTS AND DISCUSSION

The 2001 census has shown that the elderly population of India accounted for 77 million. The proportion of elderly persons in the population of India rose from 5.63 per cent in 1961 to 6.58 per cent in 1991 (Irudaya *et al*., 1999) and to 7.5 per cent in 2001. In India, the sex ratio of the aged as well as that of the old-old favours males (Fig1). Reasons for more males in old age may consist of under-reporting of females, especially widows, age exaggeration, low female life expectancy at birth, and excess female mortality among infants, children and adults (WHO, 1978). The observation of more males in old age does not reveal a true picture of elderly persons (Ritz *et al*., 1985). The several analytical and statistical problems indicated above, the preponderance of females in extreme old ages needs to be brought to the attention of planners and policy makers.

Table 1

Baseline characteristics of Group 1 and Above by Sex, Group 2

	Group I (n= 321) Mean ± SD	Group 2 (n=421) Mean ±SD	***P***
Age	72.08 ± 5.59	72.46 ± 5.62	0.287
Education	3.62 ± 3.77	4.56 ± 4.27	0.003
Income	3.73 ± 6.22	4.10 ± 4.50	0.011
MMSE	24.45 ± 3.45	25.18 ± 2.81	0.018

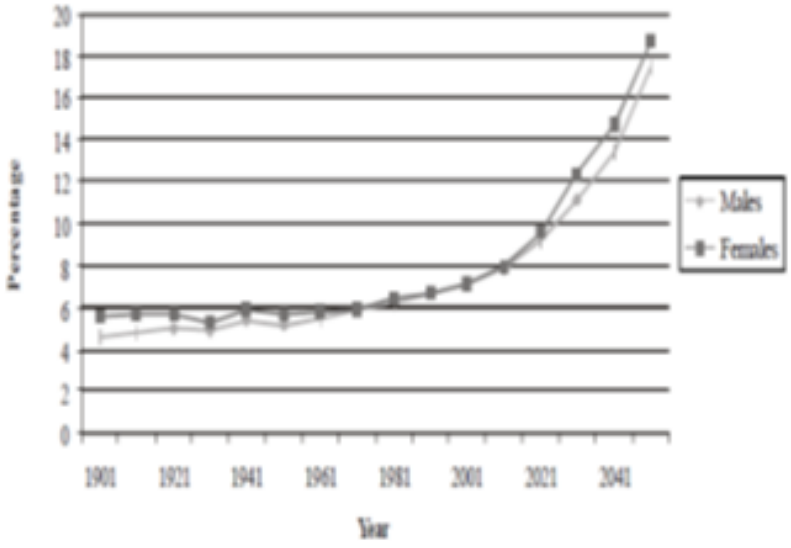

Fig. 1: Percentage of Elderly 60 and 1901-2051

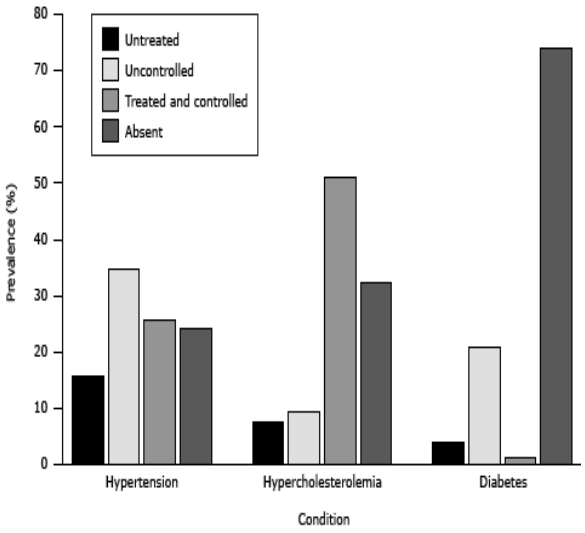

Fig.2. Graph showing prevalence of Age related disorder

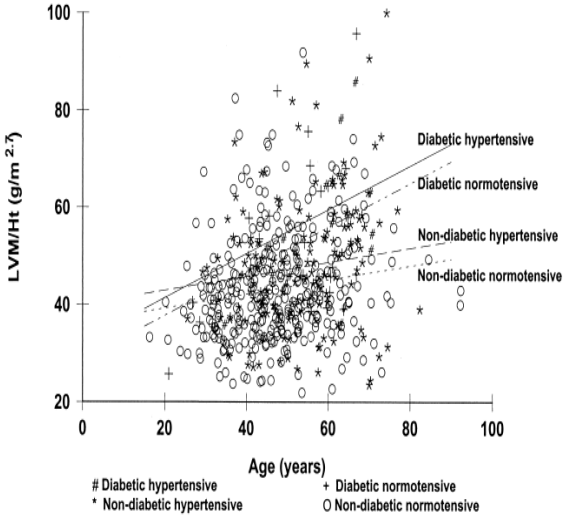

Fig. 3. Interaction of age with diabetes

Diabetes mellitus and hypertension are two of the most common diseases in Westernized, industrialized civilizations, and the frequency of both diseases increases with increasing age (Fig. 2 & Fig. 3). The prevalence of hypertension in diabetic individuals appears to be approximately twofold that in the no diabetic population. Hyperinsulinemia and Hypertension over the past several years increased attention has been given to the possible role of insulin resistance and hyperinsulinemia in linking obesity, diabetes, and hypertension to increased atherosclerotic vascular risk. Obesity appears to be an important factor linking hypertension to impaired carbohydrate metabolism. The relation between obesity and hypertension is often apparent in childhood. Thus, it is clear that obesity and a sedentary lifestyle are likely important contributors to high blood pressure in type II diabetic individuals. The overall results show that every fifth man and woman aged 30-74 years was found to have hypertension, diabetic mellitus, obesity and urinary incontinence confirming this condition to be a major public health issue. Although rates of awareness and treatment have increased during recent decades (Egan *et al*., 1988-2008), still only about half of those treated for hypertension achieve recommended treatment goals (Gu *et al*., 2012; Weinehall *et al*., 2002). Thus, there is a great need for an appropriate insurance scheme for enabling the elderly to meet their medical expenses. Evidently such schemes should be made compulsory for all workers gainfully employed during their economically active years of life.

CONCLUSION

Aging is an inevitable biological phenomenon. The incidence of age related disorders (ARDs) such as cardiovascular diseases, cancer, arthritis, dementia, osteoporosis, diabetes, neurodegenerative diseases increase rapidly with aging. In summary, it is apparent that the hypertension of diabetes mellitus constitutes a fascinating clinical constellation with a complex and multifactorial pathophysiology.

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