

## Assessment of nutrition, diet and disease profile of elderly males residing in rural Vadodra, India

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Accepted : November, 2008

### ABSTRACT

A total of 130 elderly male subjects were selected from the villages of Padra taluka of Vadodara. They were classified into Low-income group (LIG) and Middle-income group (MIG) and further into two age groups as younger elderly (60-74yrs) and older elderly (75+yrs). Data on SES and lifestyle pattern were collected using the pre-tested semi structured questionnaire. Nutritional status was assessed using anthropometric measurement and clinical parameters like hemoglobin, blood glucose and blood pressure measurements. Dietary intake was assessed by 24hr dietary recall and food frequency questionnaire. Disease profile was assessed by using exhaustive checklist for major and minor illnesses. Mental health status was assessed by using Geriatric Depression Inventory Scale (GDI), Mini Mental State Examination (MMSE) and Cognitive Impairment Test (CIT) scores. Socio-economic data showed that 78% were married and majority of the subjects were Hindu. In LIG 42% of subjects were illiterate and in MIG 92% of subjects were literate at different levels. Energy and protein intake was found markedly different when compared with economic status and age groups. It can also be inferred that half of elderly males could meet energy intake between 51-75% of RDA in LIG whereas in MIG three fourth of elderly males had energy intake between 76 - 100% of RDA. In case of protein more than half of the subjects from LIG could meet 26-50% of RDA whereas in MIG majority of subjects could meet 51-75% of RDA. Major illnesses showed higher prevalence of oral problems (81.7%) followed by locomotor problems, GIT problems and respiratory problems. Subjects of LIG and older elderly had more health problems than that of MIG and younger elderly. According to GDI, 70.7% of subjects were found under different degrees of depression. Almost 3/4<sup>th</sup> number of subjects fell under different of depressed performance and abnormal category according to MMSE and CIT, respectively. Majority of subjects belonging to LIG and 75+ years of age group showed poor mental health status as compared to subjects of MIG and younger elderly.

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**Key words :** Rural ageing, Elderly men, Nutritional status, Food frequency, Mental health.

Living longer is one of the most significant demographic phenomena in recent history. Healthy long lives are a goal to which more and more can realistically aspire. Studies in various parts of the world on geriatric population have thrown light on various aspects of healthy ageing and longevity. The number of elderly above 80 years of age is expected to increase to 11 million in 2021. In the developed world, the very old (80+ years) is the fastest growing group (WHO, 2007). Though there are many factors shown to affect the quality of life of elderly in urban local population. Lifestyle, illiteracy, poor hygiene and sanitation seem to have greater impact on health of the elderly in rural setting. Since sizeable proportion of our elderly population live in rural areas, it was thought worthwhile to explore their nutrition, diet, disease and mental health profile. There are very clear differences in the life style of rural population versus urban population. These differences have influence on health and nutrition profile of rural and urban elderly. Total elderly population in rural Gujarat is 23 lacs and in urban 11 lacs and same scenario can be seen in Vadodara district, in rural total

elderly population is 1.4 lacs and in urban 1 lac (PRC data, 2001). Rural elders had significantly poor health status than urban elders. Higher prevalence of major and minor illness are observed in rural elders than urban elders (Census, 2001, Ganguli *et al.*, 1991, Joshi *et al.*, 2003; Manious and Khors, 2003; Purty *et al.*, 2005; Rajkumar *et al.*, 1998; Shah and Sundaram, 2004). Considering these facts and dearth of information on rural local elderly population, study was planed with the objectives to collect information on socio-demographic profile, lifestyle pattern, assessment of nutritional status, diet, disease and mental health status of elderly males belonging to different economic status and age groups.

### METHODOLOGY.

#### *Location of study area:*

In present study, some selected villages based on proximity to Vadodara free from urban influence and not under VUDA (Vadodara Urban Development Association) were selected (Kalali, Talsat, Bil, Bhayali, Samiyala and Laxmipura). Within the village, purposive