# STATUS OF MATERNAL AND CHILD HEALTH AND SERVICES UTILIZATION PATTERNS IN THE URBAN SLUMS OF BHOPAL, INDIA

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# ABSTRACT

Introduction: Women in Asia face constraint in obtaining health services but also in expressing reproductive health needs.

Methodology: It was a community based cross sectional study.

Observation: According to antenatal care Government hospital was an important source of antenatal services in both areas. Most of ANC (90%) services utilized by mothers through government hospital and 6% through private hospital. In both areas 86.49% deliveries were conducted at home. Deliveries conducted at govt. hospitals were higher 10% than private hospitals 3.60%. Majority of deliveries were conducted by untrained Dai (63.33%) at home in both the areas. Services received by them during Post natal period at home, majority by health worker 35(46.05%) followed by government hospitals 28(36.84%) and private hospital 13(17.10%). Out of total 790 under five children 278(35.2%) were fully immunized, 381(48.2%) partially and 131(16.4%) had unknown status. Nutritional deficiency Anaemia was more common between 0-1 years of age was (29.9%) followed by vitamin B deficiency (2.1%). 1-5 years of age Vitamin B deficiency was (4.9%), vitamin A (4.6%), vitamin D(1.9%) and vitamin C (0.99%) found in both areas. Malnutrition according to Gomez classification (23.6%) of male children were road to health, (31%) had grade I, (22.1%) grade II, and (23.4%) grade III malnutrition and female children (24.9%) was grade I, (23.2%) grade II, and (22.7%) grade III. Overall prevalence of grade III malnutrition was (22.5%), no significant difference (standard error of proportion=SEP=6.33, P>0.05) was found in both gender.

Conclusion: During pregnancy maximum antenatal mothers utilized antenatal care services through govt. Hospitals; postnatal care was poor in both areas of Bhopal urban slum. Nutritional anaemia was common problem (35.44%) in both areas among under five children.

Key words: Urban slums, Maternal and child health.

### INTRODUCTION

Women in Asia face constraint in obtaining health services but also in expressing reproductive health needs. In India around two third populations come under this group. The utilization of maternal and child health services is poor in all areas that are also shown by our national statistics. Present coverage of full antenatal checkups is 43.8%, institutional deliveries is 34%, deliveries by trained personnel is only 45% and fully immunization coverage 56%, that's lead to high morbidity and mortality among the women and children. The current study was conducted with an objective

to study the status and utilization pattern of Maternal and Child health in slums areas of Bhopal.

# MATERIALS AND METHODS

A cross sectional community based study was conducted in an urban slums of Bhopal city from January 2003 to April 2003, namely Banganga and Bagh Afhrat Afza. We were selected 509 families comprises of 518 mothers and 790 under five children. Equal proportions of families were interviewed with the help of predesigned and pretested proformas after

# The investigation of medical and psychosocial problems of geriatric population in the urban area of Madhya Pradesh in India

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## ABSTRACT

Globally, there are an estimated 605 million people aged 60 years and above. Improvements in health care facilities have brought longevity, which is considered to be one of the greatest achievements of the 20th century. Objectives: To assess the morbidity pattern in geriatric people. Methodology: A community based cross sectional study. Results: Out of 208 aged 91 (43.7%) were males, 117 (56.25%) were females. Maximum number of males and females were from the age group 60 - 64 years. 117 (56.25%) had chronic problems and 15 (7.2%) acute. Musculo skeleton problem was the commonest (63%) complaint both in males and females, followed by cardio vascular problem (44%). Diabetes mellitus was more common in males than females and hypertension was more common in females than males. Chronic bronchitis was the commonest respiratory disorder in males (8.7%). Total 20 (9.6%) had psychological problems (depression), psychological problems more common in males 11 (12%) than females 9 (7.7%) Conclusion: The present study showed that chronic morbidity in elderly was significantly higher (56.3%) than acute (7.2%), most commonly affected system by chronic morbidity was musculo-skeletal followed by cardio vascular (CVS) and gastrointestinal (GIT). Psychological problems were more common in males (12%) than in females (7.7%). Psychological problems were more in lower socio-economic class-(V) than higher Class [1].

Keywords: Geriatric; Morbidity; Psychosocial; Urban

# 1. INTRODUCTION

Ageing is a natural, inevitable biological phenomenon. Community must learn to respect their grand elderly, understand them and treat them with honour, dignity and

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abundant love.

Globally, there are an estimated 605 million people aged 60 years and above1. Improvements in health care facilities have brought longevity, which is considered to be one of the greatest achievements of the 20th century. The ratio of older persons has changed dramatically from approximately one in fourteen in the fifties to about one in four at present. From 1990 to 2025, the elderly population in Asia will rise from 50 percent of world elderly to 58 percent, in Africa and Latin America from 5 - 7 percent, but in Europe the figure will drop from 19 to 12 percent of the worlds elderly [2-4]. The life span has increased in India from 32 years in 1947 to more than 62 years at present. From the morbidity point of view almost 50 percent of the Indian elderly have chronic diseases and 5% suffer from immobility [5]. There are several vulnerable groups and a large disadvantaged group are elderly females, who are one of fastest growing segments and which will increase to become 4 times the current figure, by 2025 [6,7]. The challenge in the 21st century is to delay the onset of disability and ensure optimal quality of life for older people.

A major component of the burden of illness for the elderly derives from prevalent chronic diseases. India in the epidemiological transition is facing a double burden of diseases both communicable and non communicable diseases where nutrition plays an important role. For the substantial impact on this burden, preventive health care strategies specific to the elderly need to be clearly formulated and tested. Current recommendations for periodic health examination and for preventive health care for the elderly include only minimal components for a geriatric preventive health care approach. Hence, this study was taken up with the objective of medical and psychosocial problems of geriatric among the urban area with a view to improve over health care services for them.

# 2. OBJECTIVES

1) To study the morbidity pattern among geriatrics;

# ORIGINAL ARTICLE

# Prevalence of Anemia among rural population living in and around of rural health and training center, Ratua Village of Madhya Pradesh

Sanjay Kumar Gupta, Sanjay S. Agarwal, Rituja Kaushal, Ambuj Jain, Vineet Kumar Gupta, Neeraj Khare

# **ABSTRACT**

Introduction: Nutritional anaemia is a worldwide problem with the highest prevalence in developing countries. It is found especially among women of child-bearing age, young children and during prognancy and lactation. It is estimated to affect nearly two-thirds of pregnant and one-half of non pregnant women in developing countries. Objectives: To study the trend and severity of anaemia among people attending at Ratua RHTC and various socio demographic factors for the same. Materials and Methods: Hospital based cross sectional study. Observation: The trend of anaemia from 2008 to 2011 was in increasing trend, 9%, 15%, 22%, and 27% respectively and in 2012 constant around 26%. Anaemia was more common in famales than males, 18% males and 82% females were reported anaemia of various degrees in the study period. Anaemia was highest among 11-25 years of age 42% followed by years 23% and lowest among 0-10 years of age 8.69%. Anaemia among elderly was quite higher 15.5%. Most of the males had mild anaemia 16% followed by moderate 6.61% and severe 0.77% in contrast most of the females had moderate anaemia 42% followed by mild 31.35% and severe 3%. Trend of anaemia in female patients were in increasing trend from 2008-2009, than little decreases in 2010 and further decreases in 2011 after that again increases in 2012. Conclusion: Anaemia was significantly higher in females in comparison to males in moderate and severe category. Anaemia was highest among 11-25 years of age group.

Key Words: Anemia, general population, health center, rural area

### Introduction

Nutritional anemia is a world-wide problem with the highest prevalence in developing countries. It is found especially among women of child-bearing age, young children and during the pregnancy and lactation. It is estimated to affect nearly two-thirds of pregnant and one-half of non-pregnant women in developing countries.[1] The populations of developed countries are not by any means completely free of anemia and a significant percentage of women of child-bearing age (estimated between 4% and 12%) suffer from anemia.[2] Iron deficiency anemia is a major nutrition problem in India and many other developing countries. In addition, many subjects have iron deficiency without anemia.[3,4] The incidence of anemia is highest among women and young children, varying between 60% and 70%. Recent surveys indicate that in rural India anemia is much more widespread than hitherto believed even among men. [5]

Iron deficiency can arise either due to inadequate intake or poor bioavailability of dietary iron or due to excessive losses of iron from the body. Although most habitual diets contain seemingly adequate amounts of iron, only a small amount (<5%) is absorbed. [6] This poor bioavailability is considered to be a major reason for the widespread iron.

Deficiency.<sup>[4]</sup> Women lose a considerable amount of iron especially during menstruation. Some of the other factors leading to anemia are malaria and hookworm infestations. In addition mothers who have born children at close intervals become anemic due to the additional demands of the rapid pregnancies and the loss of blood in each delivery. In some areas of India, it has been shown that folate deficiency anemia affects 25-50% of pregnant women attending hospital clinics.<sup>[7]</sup> Present evidence suggests that a high prevalence of folate deficiency anemia in pregnancy is a universal phenomenon and is associated unnecessarily with the economically underprivileged.<sup>[8]</sup> Detrimental effects.

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# Original Article

# A STUDY OF MORBIDITY AND MORTALITY PROFILE IN GENERAL POPULATION OF HOSANGABAD DISTRICT (MADHYA PRADESH)

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# ABSTRACT

Objective: The study was conducted to estimate the morbidity and mortality status of general population in the Hoshangabad District.

Methodology: This is a community-based cross-sectional (descriptive) study carried out in the Hosangabad district of Madhya Pradesh covering of 509 families comprises of 2985 population. Sample was selected by multistage sampling technique.

Result - A total of 2985 respondents, 725 (24%) were from Rural areas and 2260 (76%) from Urban areas. Major cause 640 (21%) of morbidity were due to acute illnesses. In acute illnesses most common was Acute Respiratory Infection241 (8.07%) followed by worm infection 84 (2.81%) and gastroenteritis 58(1.94%). Prevalence of ARI was higher in rural areas but gastroenteritis was higher in urban areas. Most common cause of chronic morbidity among studied population was cataract 42 (1.37%) followed by arthritis 24 (0.80%) and chronic amoebiasis 21 (0.70%). Acute morbidity in urban areas was higher in females (20%) than males (15%). Age specific mortality rate for age group 0-1 and 46-60 & above were significantly higher in rural areas than urban areas. Mortality rate were higher in females (9.7/1000) than males (7.2/1000). Most common cause of mortality in rural areas were diarrhoea, vomiting and dehydration (DVD) 7(38%) followed by cardiac diseases 3(17%) and in contrast urban areas were cardiac diseases 3(43%) followed by 1 (14%) DVD.

Keywords - Acute Morbidity, Chronic Morbidity, Mortality, Urban, Rural

# INTRODUCTION

Madhya Pradesh, as its name implies, is located at the geographic centre of India, with Bhopal as the state capital. Till recently, the state was divided into 61 administrative districts grouped into seven geopolitical regions, Hoshangabad is coming in South Western geopolitical regions. In terms of demographic indicators too, Madhya Pradesh performs poorly relative to most other

Research Article

# A Study of Diabetes Prevalence and its Risk Factors in the Medical College Faculty of Bhopal, Madhya Pradesh

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### Abstract

Introduction: The population in India has an increased susceptibility to diabetes meliitus, in India there are 30-33 million diabetic cases, the prevalence of disease in adults was found to be 2.45 in Rural and 4 - 11.6% in urban dwellers,

Objective: To estimate the high risk subjects by using Indian diabetes risk score for detecting undiagnosed diabetes/ risks in Medical faculty,

Methodology: This is a cross-sectional (descriptive) study

Results: 300 respondents were interviewed, of these 234 (78%) were male and 66(22%) were females. According to the physical activity, majority of them 171(57%) belong to mild physical activity category. According to family history 96 (32%) were having history of diabetes in either parents. 24 (8%) of studied persons were known diabetics, according to IDRS scoring 66(22%) in high risk for diabetes, the high body mass index (>30) significantly increase the diabetes risk. Out of total known diabetic cases 15(62.5%) had high Indian diabetes risk score.

Conclusion: This study provides a use of simplified Indian Diabetes Risk Score for identifying undiagnosed high risk for diabetic subjects in India. Simplified diabetes risk score, which has categorized the risk factors based on their severity. Use of the IDRS can make mass screening for undiagnosed diabetes in India more cost effective.

Keywords: Diabetes Mellitus; Medical Faculty, Risk Factors; Indian Diabetes Risk Score.

# Introduction

The International Diabetes Federation (IDF) estimated that currently there are 100 million people with diabetes worldwide representing about 6% of all adults [1]. Although great efforts have been made by developed countries to control infectious diseases, but non-communicable diseases have not received the same attention. Diabetes Mellitus is one of the non-communicable diseases which have become a major global health problem. Asia is one of the regions that has high prevalence of diabetes and it is estimated that 20 % of current global diabetic population resides in South- East Asia Region. Indeed, the number of people with diabetes in India is likely to double in less than 2 decades - from 39.9 million (in 2007) to 69.9 million by 2025 [2,3]. The population in India has an increased susceptibility to diabetes mellitus, in India there are 30-33 million diabetic cases, the prevalence of disease in adults was found to be 2.45 in Rural and 11.6% in urban dwellers [4,5].

# Objective

To estimate the high risk subjects by using Indian diabetes risk score (IDRS) for detecting undiagnosed diabetes/ risks in medical faculty.

# Methodology

This is a cross-sectional (descriptive) study was carried out in the

Peoples college of medical sciences and Research Centre, informed consents were obtained from all participants, information were collected by using a predesigned and pretested protocol to find out the prevalence and the risk of diabetes mellitus in medical faculty by using Indian Diabetes Risk Score (IDRS) (Figure 1). In all subjects, family history of diabetes was obtained and details on physical activities and various parameters were assessed using a validated questionnaire [6]. Waist measurements were measured by using standardized technique [7].

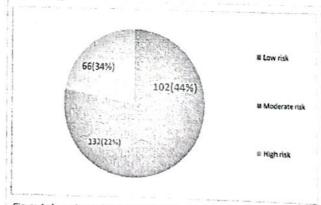


Figure 1: According to Indian Diabetes Risk Score (IDRS)

# An Educational Intervention to Promote Breast Self Examination for Early Diagnosis of Benign/Malignant Breast Disease

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# Abstract

Background: Breast cancer is the second most common malignancy affecting female worldwide. Study was done with the objectives of to educate female for detection of benign/malignant breast disease by breast self examination (BSE).

Objectives: To detect new cases and promote them to teach other females in their contact.

Methodology: This was a community based cross sectional study.

Results: Total 110 women were educated about BSE, according to age majority (40%) was between 15-25 years, in our observations delay of menarche (15-18 years) in women is having more chance to get lump 37.77%, followed by 20% among menopausal women and 23.5% unmarried women. According to age of early marriage (15 years), only 18% were detected lump in contrast age of marriage increases from 15 to 21 years chance of detecting lump increases two times higher 40%. Nulliparous women were detected lump in little higher percentage 33% than one child 23%, in our observation chance of lump decrease with increase parity. Age at birth of first child if is less than 16 years only 7% were detected lump in contrast if delay in birth of first child up to 23 years or more three time more lump was detected 23%. No major percentage deference between those who users of oral contraceptive pills (OCPs) and non-users, both are observed 28% & 26% respectively.25% of females was detected lump in the breast during study. All 28 females were referred to medical college hospital and 2 were confirmed malignancy in biopsy report and operated.