



## PREVALENCE OF NCDs AND ITS CORRELATES AMONG YOUNG POPULATION OF JHANSI, UTTAR PRADESH: A CROSS-SECTIONAL COMMUNITY-BASED STUDY

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**ABSTRACT** **Background-** Non-communicable diseases (NCDs), also known as chronic diseases include cardiovascular diseases, diabetes, stroke, most forms of cancers and injuries. Changes in lifestyles, behavioral patterns, demographic profile, socio-cultural and technological advancements are leading to sharp increases in the prevalence of NCDs among young population. **Objectives-** To assess the burden of non communicable diseases and their correlation with various factors present among young population of Jhansi, Uttar Pradesh. **Methods-** Surveys were collected from a total of 770 participants chosen by simple random sampling. Semi-structured schedule was used to collect information and STEP-wise Approach to surveillance (STEPS) by World Health Organization was followed. Data analysis was done by using Epi-info software 7.2.1.1. **Results-** Amongst total 770 respondents, 462 (60%) males and 308 (40%) females. Out of total 431(55.97%) had presence of one of the non communicable diseases (CVS, Diabetes, Hypertension and Cancer) in their parents. The main risk factors were lack of physical activity, eating unhealthy diet and lifestyle changes. **Conclusion-** The young population needs to motivate and government has to implement Health promotive services about the lifestyle, behavioral changes changes and dietary modifications for good health. Make recommendations for the improvement of health services of young population.

**KEYWORDS :** NCDs, physical activity, lifestyle changes, behavioral changes

### Background:

Non-communicable diseases NCDs also known as chronic diseases include cardiovascular diseases, diabetes, stroke, most forms of cancers and injuries. Such diseases mainly result from lifestyle related factors and one of them is lack of physical activity. Changes in lifestyles, behavioral patterns, demographic profile, socio-cultural and technological advancements are leading to sharp increases in the prevalence of NCD among young population. Physical inactivity, a leading cause of death globally, was responsible for 9% of premature mortality resulting in more than 5.3 million out of the 57 million deaths. [1] The World Health Organization recommend that people engage in at least 150 minutes per week of moderate physical activity, lower levels of activity being close correlates of obesity and non-communicable diseases [2,3]. This study looks at the burden of non communicable diseases and their correlation with various factors present among young population of Jhansi as a way of better understanding, and hopefully addressing, the rapid increases in non-communicable diseases that are currently plaguing the country.

### Objectives:

This study aimed to assess the burden of non communicable diseases and their correlation with various factors present among young population of Jhansi, Uttar Pradesh.

### Method:

Data was collected from three blocks: Badagaon, Moth, and Chirgoan. Data collection occurred from September 2017-November 2017. Participants were explained about the purpose of study and written consent was obtained. Semi-structured schedule was used to collect information and was validated by pilot study. Schedules were distributed to groups of 3-5 participants at a time to ensure proper supervision of the data collection process. A central investigator was present at all times during data collection. Ethics approval was obtained Medical Ethics committee of Medical College, Jhansi. STEP-wise Approach to surveillance (STEPS) by World Health Organization was used. All research assistants were trained in proper techniques for recruiting participants, administration of questionnaires and screening of data. Surveys were collected from a total of 770 participants chosen by simple random sampling. Data analysis was done by using Epi-info software 7.2.1.1.

### Results:

Surveys were collected from a total of 770 participants. Amongst total 770 respondents, 462 (60%) males and 308 (40%) females. [Table 1]

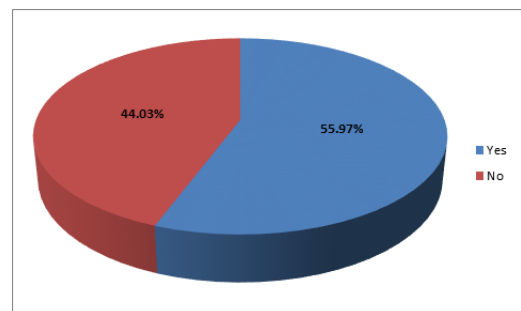
Out of total, 431(55.97%) had presence of one of the non

communicable diseases (CVS, Diabetes, Hypertension and Cancer) in their parents. The main risk factors were lack of physical activity, eating unhealthy diet and lifestyle changes. [Figure 1]

**Table 1: Descriptive Statistics of Participants (N = 770)**

Variable		Frequency	Percentage
<b>Gender</b>	Male	462	60%
	Female	308	40%
<b>Marital Status</b>	Single	490	63.6%
	Married	249	32.3%
	Others	29	3.8%
<b>Occupation</b>	Student	185	24.0%
	Professional	280	36.4%
	Others	305	49.6%
<b>Education</b>	Primary School	45	5.8%
	High school	386	50.1%
	Intermediate	137	17.8%
	University & above	185	24.0%
	Illiterate	11	1.4%

**Figure 1: Distribution of young population according to family history of NCDs**



### Discussion:

This study is one of the first to document the baseline characteristics and prevalence of risk factors for Non-communicable diseases (NCDs) among young population of Jhansi, Uttar Pradesh. Results also show that surveillance of NCDs is feasible in health care settings in a developing country and sets the stage for the STEPS survey recommended by the World Health Organization [4]. The participants interviewed were predominantly male; this gender-bias in

interviewing nature could be due to differential thinking of use in healthcare. Previous studies have shown that females are better health seekers than males [5]. Adult onset (Type 2) diabetes is primarily linked to lifestyle rather than genetic predisposition [6]. The emerging NCD epidemic we see could be due to an increase in intake of high-calorie diets, smoking, alcohol use and sedentary lifestyles secondary to the high economic development, increasing urbanization, marketing and industrialization in Sub-Saharan Africa [7]. Gender-specific differences in risk factors highlight the importance of risk factor surveillance and the need for targeted interventions. The main risk factors were lack of physical activity, eating unhealthy diet and lifestyle changes. These were predominantly higher among males. Lifestyle modification of personal habits may therefore be valuable in mitigating the impact of NCDs especially among men.

#### **Conclusion:**

The young population needs to motivate and government has to implement promotive health about the lifestyle changes and dietary modifications for good health. This suggests the need to design prevention interventions that target the lifestyle modification in this setting. There is need to further strengthen surveillance for risk factors of NCDs and make recommendations for the improvement of health promotive services of young population.

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