

Dr. suhas kadam

[Science](#), [Epidemiology](#)



Dr. Suhas Kadam, MPH (SE) 2011HS026 Individual Study Title of the study A study to determine the prevalence of behavioral risk factors for Non-Communicable Diseases (NCD) in Shivaji-Nagar Slum (Mumbai)

Organization — Urban Health Centre (UHC) Nair Hospital Area — Shivaji Nagar, Govandi Background... 1. It has been observed that the burden posed by communicable diseases is still in existence in low socio-economic urban areas. 2. The growing urbanization, poor dietary habits and low awareness regarding the major risk factors are contributing towards rising epidemic of NCDs. 3. Studies conducted across India and other Asian countries report a higher prevalence of coronary artery disease in urban areas as compared with rural areas. 4. There exists a number of risk factors such as high blood pressure, high serum cholesterol, inadequate intake of fruits and vegetables, excess weight, physical inactivity, and alcohol and tobacco use. Leading Causes of NCDs: 1. Unhealthy diet 2. Lack of physical exercise 3. Alcohol use 4. Tobacco use However, NCDs are largely preventable because unhealthy diet, lack of physical exercise, alcohol use and tobacco use are the behavioral risk factors which we can modify by intervention. In India limited studies have focused on assessing the prevalence of behavioral risk factors exclusively in urban slum population. (Anand et al, 2007) Successful intervention in the early age group will result in healthy life year's gain in the reproductive period of life. Therefore there is need to understand the distribution of behavioral risk factors. Objective: To assess the prevalence of various behavioral risk factors of non-communicable diseases in the urban slum population of Shivaji Nagar, Mumbai. To assess the relationship between various socio-economic factors and various NCD risk

factors in the urban slum population of shivaji nagar, Mumbai. Specific objective: To determine the prevalence of i,— Tobacco use i,— Alcohol use i,— fruit and vegetable consumption i,— Physical activity Research Questions... 1. How behavioral risk factors of NCDs are distributed among the population of shivaji nagar slum? 2. What is the relationship exists between various socioeconomic factors and NCD risk factors among the population of shivaji nagar slum? Study design — Cross-sectional, descriptive study using the quantitative approach Universe / frame — The universe is 900 household in the five plots numbered 5, 6, 11, 12, 18 in shivaji nagar. Sample Size — 150 individuals Unit of Analysis- individual above the age of 20 years (M/F both) Sampling Procedure — Simple Random Sampling Data collection tools — Interview Schedule (structured questionnaire) Data collection methods — Survey Design, face to face interview Data analysis — Data analysis is done with the help of Microsoft excel and SPSS version 20.0

Socio-Demographic Profile Responde nt age 21-30 years 31-40 years 41-50 years 51-60 years > 61 years percent 28. 20 28 20 12 11. 30 Sex % Male 64% Female 36% Responde nt education Illiterate Primary education Secondary education Higher Graduate secondary and more Percent 11. 30 8 61. 30 14 4. 70 Responde nt income 6-10000 11-15000 16-20000 > 21000 Percent 47. 30 19. 30 2. 70 4 Responde nt religion Hindu Muslim Jain Christian Sikh and others Percent 40 6 3. 3 0 26. 70 50. 70 Results 1. Tobacco use Type of tobacco Smoke Smokeless Both None Percent 2 40 4 56 MISRI — total 17 individual found who were using MISRI for cleaning their teeth. Sex Number of people using MISRI Male 7 Female 10 2. Alcohol use — Prevalence rate of alcohol use in this community is (16. 67%), and none of

the females reported the use of alcohol. Which is much lower than the other urban or rural setting.

2. Diet — Fruit Intake: Fruit Intake per week Percent of population

1 or 2 days a week	33%
3 or 4 days a week	32%
5 or 6 days a week	6%
Daily	28.7%

ii,— Green Vegetable intake: There is 5% of the population who eats green vegetable 1 or 2 days/week, and 14 % of the population who eats green vegetable 3-4 days a week. Approx 7% of the population eats green vegetable 5-6 days/week, and lastly almost 74% of the population eats green vegetables every day.

ii,— Non-Vegetarian food Type of Diet Percent of people

Non-Vegetarian	86.7% (130)
Vegetarian	13.3% (20)

ii,— Out of the total 130 non-vegetarian people around 10% of people frequently eat beef as their non-vegetarian food which contains more fatty acids, which is not good for their health.

ii,— Oil usage: Type of Oil

Ordinary ground nut oil	60.70%
Sunflower oil	28.70%
Soya-bean oil	0.70%
Mustard oil (rai)	5.30%
Palm oil	3.30%
Other	0.70%

ii,— Percentage 0.70% Ordinary ground-nut oil - contains the highest saturated fatty acid. The high usage of saturated fatty acid cause CVDs and other health problems.

4) Physical activity Time spent doing exercise/jogging/cycling Percent of people out of 150

< or = 10 min	49.30%
11-30 min	38.70%
31-60 min	7.30%
> 60 min	4.70%

Leisure time activity Percent of people out of 150

TV/ Newspaper	24.7%
Rest/ Sleep	24.0%
Walking/ Jogging	48.7%
Household chores	2.7%

Conclusion... 1. The study documents the high prevalence of behavioral risk factors for NCD in this slum. The population residing in this slum is generally poor and thought to be at low risk for NCDs, but the study shows there is high prevalence of behavioral risk factors for NCD. 2. 3. 4. The consumption of inappropriate diet is associated with many NCDs, which is prevalent in this

community. Regular and adequate daily physical activity is an effective means to prevent NCDs. Around 50% of population spent less than 10 minutes of time doing physical activity (exercise/cycling/jogging).

Recommendations... 1. 2. 3. 4. 5. Framing appropriate policies for tobacco and alcohol control
Promotion of good diet and adequate physical activity
Need to strengthen the government health system to address the challenges of NCDs
At the community level, need to create environment that promotes the adoption of healthy behaviors. Community involvement and community empowerment