HIGH RISK OF CARDIAC DISEASE IN MIDDLE INCOME GROUP AND URBAN PATIENTS

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Abstract

Background: Smoking is an established risk factor for many diseases and is one of the most important public health problems worldwide. Rural areas of the United States have a higher smoking prevalence than urban areas. Chronic stress associated with high income inequality has been hypothesized to increase CVD risk and other adverse health outcomes

Material & Methods: 50 patients were enrolled for this study. Taking Consent and History of patients by a pre planned Performa Manner.

Results: Higher levels of risk of CVD were found in urban and middle income group.

Conclusion: Smoking and Alcohol in middle income group in urban population are major risk for CVD. So need to aware people for the same.

Keywords: CVD, Smoking, Alcohol, Rural, urban.

Introduction:

Most studies on geographical variation in smoking to date have compared neighborhoods' within cities. These studies suggest that the area where people live influences their smoking and other health-related behaviors.[1] Smoking is thought to diffuse in the population like an epidemic, from people with high status to those with low socioeconomic status, with women lagging behind men [2] Among many measures of socioeconomic status, education level was the only socioeconomic measure available for all countries included in the analysis[3] physiological changes due to the chronic stress of increased social dysfunction in unequal communities can raise blood pressures or lead to the adoption of unhealthy coping behaviors (e.g., smoking, unhealthy eating, alcohol consumption), which can impact cardiovascular and other chronic diseases [4,5,6]

In our analyses, we simplified the classifications into a three -levels classification: low, Middle and high income group. Along with obesity and consumption of Alcohol. There are a very few studies in southern part of Rajasthan like this so we have planned this study.

Material and Methods:

This Study was conducted in department of biochemistry, Geetanjali Medical College & Hospital, Udaipur (Rajasthan) in collaboration with department of Medicine and Cardiology after obtaining institutional ethical committee permission. The total sample of 50 patients including cases (AMI). Informed consent was obtained from all subjects for participating in the study.

Results:

Table 1: Study of AMI patients based on economic status

Group	Number	Percentage
Low income (Class I)	08	16%
Middle income (class II)	32	64%
High income (Class III)	10	20%
Total	50	100%

Table 1 show that in our study 16% patients were low income class, 64% middle income class and 20% patients were high income class.

Table 2: Clinical symptoms of the AMI participants

Symptoms	Number	Percentage (%)
Chest pain	43	86.0
Breathlessness	10	20.00
Perspiration	24	48.0
Palpitations	07	14.0
Syncope	1	2.0
Vomiting	4	8.00
Apprehension	3	6.0
Cold extremities	3	6.0
Cough	3	6.0

Table 2 shows that in our study Chest pain associated with perspiration is the most common and dominant feature of, AMI.

Table 3: Risk factor associated with the AMI participants

Risk factor	Number	Percentage
Smoking	32	64.0
Diabetes mellitus	02	3
Hypertension	1	2
Alcoholism	10	22
Family h/o of IHD	2	4
Obesity	3	5

Table 3 out of 50 patients, 32 (64.0%) were smokers, followed by a risk factor in 22 cases and alcoholism 22% was seen in 19 patients (38.0%).

Discussion:

Smoking was more prevalent in urban areas compared to non-urban areas. Smoking prevalence was associated with level of urbanization, with rates being highest in large cities. Urban/ non-urban inequalities were larger among women compared to men. Our results agree with other studies in suggesting that residential area is associated with smoking^[7] Chronic stress associated with high income inequality has been hypothesized to increase CVD risk and other adverse health outcomes^[8]. Additionally, in spite of residential segregation, largely on racial and consequently economic lines, income inequality remains extremely high in South Africa even at sub national levels. Our study shows that 64% patients were from middle income group. Risk for CVD is an important health concern in Southern Rajasthan. There are several indications that the burden of non-communicable diseases is rising. In 2010, circulatory or cardiovascular causes were the second leading

cause of death (after infectious and parasitic illnesses), and, the proportion of deaths due to these causes has increased over time^[9] Alcohol consumption can increase the risk of two types of strokes occurring. Both result in a disrupted blood flow to brain tissue, and can result in a loss of motor (movement) and sensory (touch, temperature sensations) functions. Alcohol increases the risk of ischemic stroke because it can: Cause a clot, formed due to irregular heartbeat and weakened heart muscle, lodging in a blood vessel in the brain. Cause high blood pressure which can result in a foreign body such as plaque to break off, enter the blood stream and lodge in a blood vessel in the brain.

Limitation: A very few number of patients were enrolled for this study

Conclusion:

Patients from middle economic status were at high risk of CVD, due to intake of Alcohol and smoking to relieve Stress.

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