RISK FACTORS OF ISCHEMIC HEART DISEASES IN PESHAWAR

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ABSTRACT

Objective: To highlight various predictive, relative and contributory risk factors in the causation of ischemic heart diseases.

Material and Methods: A retrospective study was conducted in which about 150 diagnosed cases were studied in rural population at Budhney, Peshawar between April 1997 and July 1998. The patients were interviewed for specific period, filling the questionnaires prepared for this purpose. The questions included in the proforma were mostly about the educational status, economical background, personal and environmental life style, frequency of consumption of vital foods, fresh fruits and vegetables, family history of ischemic heart diseases, exercise entertainments, social set up and tense and serious moods

Results: The survey comprised of about 78 males and 72 females respondents. 36% of the respondents were between the age of 30 – 40 years. 63% of the total cases were above the age of 40 years. 65% males and 72% females were totally illiterate and hence devoid of all knowledge of preventive aspect of cardiovascular disorder. 84% of the respondents belonged to upper social class and that is why most of them had to pay for their life style in the form of crippled manpower and economical loss. A positive history of hypertension and chronic smoking was noted in 13% and 4% cases respectively. The investigative profile revealed a raised blood cholesterol level and fasting sugar level in 10% and 5% of the respondents respectively.

Conclusion: The survey unveiled a chain of multifactor causation, which is not usually taken into account in our cultural setup like excessive consumption of fatty food, Type A personality, sedentary life style, lack of regular exercise and competitive stressful and ambitious life conditions..

Key words: IHD, Risk Factors, Cardiovascular disorders.

INTRODUCTION

Ischemic heart disease (coronary heart disease) is the most common form of heart disease and the single most important cause of premature deaths in developed world[1]. In UK one in four men and one in five women die from this disease; an estimated 300,000 people have a myocardial infract each year and approximately 1 – 7 millions people have angina [2]. The death rate from coronary heart disease in the UK is among the highest in the world. A survey showed that more than 150,000 people died from coronary heart disease in UK in 1995. Recent research article published in the journal of medical science by American Association of Cardiology, highlights that the incidence is increasing in Eastern Europe and some other developing countries [1]. They regarded IHD, the commonest cause of death in industrialized society. Most of the eminent cardiologist in the world are of the opinion that a multi-dimensional community oriented approach can be made to minimize the magnitude of the grievous public health problem all over the world [3]. Diseases of the coronary arteries are almost always due to atheroma and its complications particularly thromboses. However, occasionally the coronary arteries are involved (e.g. anomalous origin, fistula or malformation anomalies coronary vessel), aortictis polyarteritis and other connective tissue disorders[4].

MATERIAL AND METHODS

The present study was conducted in rural population at Budhney Peshawar, between April 1997 and July 1998. The study was carried out in collaboration with Pakistan Medical Research Council (PMRC), Khyber Medical College, Peshawar. 150 cases comprising of 78 males and 72 females were randomly selected by draw. The patients were interviewed for specific period, filling the questionnaires prepared for this purpose. The questions included in the proforma were mostly about the educational status, economical background, personal and environmental life style, frequency of consumption of vital foods, fresh fruits and vegetables, family history of ischemic heart diseases, exercise entertainments, social set up and tense and serious moods. For implication of this small-scaled survey for community oriented approaches to various strategies Afghan Refugees were excluded form the study.

RESULTS

In the random sample of 150 cases the following results were obtained. Out of 150 cases 78 were males and 72 were females comprising a percentage of 52 and 48 respectively. 36% of the respondents were at the age of 30-40 years while the age above 40 years comprised about 63% of the total cases studied in the survey. 65% of males and 72% of the females were illiterate. Standard education among the respondents was middle and comprised about 9% of males and 6 % of females. 84% of the

FAMILY HISTORY OF IHD AMONGST 150 RESPONDENTS

Family History of IHD	Positive	Negative
Respondents	41 %	59 %

TABLE–1

RISK FACTORS FOR IHD AMONGST TOTAL 150 SUBJECTS

Risk Factors	Positive	Negative
Hypertension	13 %	87 %
Raised Blood Cholesterol	10%	90 %
Raised Blood Glucose	5 %	95 %
Chronic Smoking	4 %	96 %

TABLE–2

respondents belonged to upper social class. 41% of all cases had a positive family history of ischemic heart disease while 13% of the patients gave a positive history of hypertension. Out 150 cases six respondents were chronic smokers of tobacco comprising a percentage of 4. When inquiry was made about the blood cholesterol level, only 10% of the respondents have a raised blood cholesterol level (>200-mg%). While checking the routine investigation profile of the respondents, it was noticed that 5% of the respondents had a raised fasting blood sugar level, 89% of the cases had a normal ECG pattern, while 1.3% had inferior infraction, 2.6% had interior infraction, 1.3 % had posterior infraction, 1.3 % had Right Bundle Branch Block (RBBB) and 2.6 % had non-specific ST segment and T wave changes.

ECG PATTERNS IN 150 CASES OF IHD

Normal	89 %
Inferior Infarction	1.3 %
Anterior Infarction	2.6 %
Posterior Infarction	1.3 %
Right Bundle Branch Block	1.3 %
ST segment changes	2.6 %

TABLE-3

DISCUSSION

Ischemic heart disease (IHD) also called coronary heart disease is the generic designation for a group of closely related syndromes that result from imbalance between the cardiac need for oxygenated blood and its supply. Although ischemia also implies to reduced nutrients and inadequate removal of metabolites, the critical factors is the insufficiency oxygen[5]. The clinical diagnosis of chronic ischemic heart disease (CIHD) is made largely by exclusion of causes for cardiac failure in an elderly patient to may have other stigmata of IHD, such as history of angina, conduction disturbances or infarction. A major item is the differential diagnosis for dilated cardiomyopathy[3,6,7]. Generally in CHID the congestive failure progresses slowly over the course of many years and it may eventually be fatal when most patients die of serious cardiac arrhythmia or infarction.

The survey has brought to light some important facts about various risk factors involved directly or indirectly in the causation of IHD. The relevance of the study is not merely in the limited context but has the capability of practical implication for the zones that are at the threshold of overall developmental transition [8-12]. The increasing recognition of the primary health care approach to IHD resulted in comprehensive community oriented programmes , for the prevention of IHD. Broadly, these measures are aimed at changing the life style of mass and modifying or attacking the risk factors responsible for the persistence of IHD in the community, like female gender, increasing age, positive family history of IHD, hypertension, hypercholestroemia, diabetes mellitus, obesity, homeostatic factors. Alcohol intake, physical activity and mental stress[13-15]. Community oriented approach like health education is a pivotal long-term perspective in order to create community to accept the importance of health education programmes and to secure active community participation [1,2]. The dietary factors like diets deficient in fresh fruits, vegetables and poly unsaturated fatally acids are associated with an increased risk of ischemic heart diseases[4,16-21].

CONCLUSIONS

Although the present study was conducted on a relatively small sample yet its implication for various epidemiological practices seems quite reasonable. The literacy rate was very poor among the respondents

and most of them were unable to appreciate even simple methods of weight reduction, routine exercise and avoidance of mental stress and strains. Most of the respondents were from well-to-do class and the disease incidence was less prevalent in poor class than well to do. The barometers of social well being like ignorance, dietary education, tendency of consumption of vital foods, type A personality and stressful competitive ambitious life conditions were the mainstay in the causation of ischemic heart diseases, for which we have to pay for millions every year and hence useless manpower and crippled society.

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