

Lifestyle diseases and effects of the treatment expenditure on family finances

N. Pavani* and **D. Ratnakumari**

Department of Resource Management and Consumer Sciences, College of Home Science, Professor Jayashankar Telangana State Agricultural University, Saifabad, Hyderabad-500004 (Telangana), INDIA

*Corresponding author. E-mail: nunepavani@yahoo.com

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Abstract: Health is among the basic capabilities that give value to human life. Good health is a prerequisite to successful human endeavor and core to financial growth and activity. The lifestyle diseases are associated with the way a person or group of people lives. Irregular food habits, physical inactivity, sedentary lifestyles, tobacco, alcohol, high intake of salts and low intake of fruits and vegetables, causes lifestyle diseases. This study was focused on framing the effects of the lifestyle disease treatment's expenditure on the family finances. A survey of 120 respondents in Hyderabad and Secunderabad cities was conducted. Some of the effects mentioned by the respondents were "Inability to meet daily needs, incapable of meeting specific needs (newspaper, internet connection, etc.), fiddle with the amount spent for entertainment, kill the amount spent for family shopping, trim down the amount spent on educational activities of children, negotiate with children's needs, helpless to save for the future planning of the family, inept to pay insurance policies, obtain loan in order to meet the treatment costs, sell assets to meet the treatment expenditure." Statistical analysis was carried out by using chi-square tests. The study found that 49% of the families were unable to meet daily needs, 54% of them negotiated with children's needs, 65% of them were helpless to save for the family's future. The result showed significant association between family finances and the cost of lifestyle disease treatment expenditures based on income levels.

Keywords: Family finances, Income, Lifestyle diseases, Treatment expenditure

INTRODUCTION

Disease had an unfavorable effect on health, at the same time as the perception of every culture teaches that "HEALTH IS WEALTH" in a more instrumental sense. For folks and families, health brings the facility for personal growth and economic safety in the future. Health is the origin of job efficiency, the capability to learn in school, and the competence to grow intellectually, physically, and psychologically. The significance of health in its own right cannot be overstressed. Good health is a qualification to triumphant individual effort and center to the economic enlargement and action.

The term "disease" is used more broadly to refer to any form that grounds pain, dysfunction, distress, social tribulations, or death to the person afflicted. It sometimes includes injuries, disabilities, disorders, syndromes, infections, isolated symptoms, deviant behaviors, and a typical variation of structure and function, while in other contexts and for other purposes these may be considered distinguishable categories.

An airborne disease caused by pathogens and transmitted through the air. Infectious diseases (also called as transmissible or communicable) results from infection, presence and growth of pathogenic biological agents in an individual host organism. Non-communicable dis-

eases cannot be spread directly from one person to another. Food borne illness or food poisoning is any illness resulting from the consumption of food contaminated with pathogenic bacteria, toxins, viruses or parasites. Chronic diseases are long term therapeutic conditions that are generally progressive (heart disease, diabetes, chronic respiratory problems, Chronic Obstructive Pulmonary Disease (COPD)). Lifestyle diseases (LSDs) are those related with the manner a person or group of people live, and these comprise atherosclerosis, heart disease, and stroke; obesity and diabetes; and diseases associated with smoking and alcohol and drug misuse. They are various diseases which are based on the way people live and perform their occupational habits. It is only in the last decade that most of the people are killed by these lifestyle diseases. Now - a - days at least one member of each family is being victimized to either of the above listed lifestyle diseases (Anonymous, 2017) .

A study done by Devi *et al.* (2014) 'Prevalence of risk factors for Non- Communicable Diseases in urban slums of Hyderabad' suggested that identifying the risk factors has a crucial role in public health as it helps to reduce the time lag between exposure and disease. They found a high prevalence of risk factors for lifestyle diseases. Tobacco use in any form was

seen in 15.4 per cent, alcohol consumption in 19.5 per cent, over weight and obesity in 21.7 per cent. Sedentary habits were seen in 53.6 per cent, irregular intake of fruits and vegetables in 58.8 per cent, high salt intake in 18.5 per cent, 26.8 per cent had a family history of lifestyle diseases in their sample.

Another study by Bloom *et al.* (2014) about 'Economics of non communicable diseases in India' stated that NCDs have accounted for more disability-adjusted life years (DALYs) than communicable diseases, approximately 235 million versus 222 million DALYs, respectively (a DALY represents one lost year of healthy life; economically, it is valued as equal to a country's per-capita gross domestic product).

Mahal *et al.* (2010) reported in their research of 'The Economic Implications of Non- Communicable Diseases' that Indians spent nearly INR 846 billion out of pocket on health care expenses, amounting to 3.3 per cent of India's GDP (gross domestic product: a monetary measure of the market value of all final goods and services produced in a period (quarterly or yearly) of time) for that year. The share of NCDs in out of pocket health expenses incurred by Indian households increased over time, from 31.6 per cent in 1995-96 to 47.3 per cent in 2004. More than one-half of the out of pocket expenses on health care were incurred on purchases of medicines, diagnostic tests and medical appliances.

A population based cross sectional study 'Consequences of hypertension and chronic obstructive pulmonary disease, healthcare-seeking behaviors of patients, and responses of the health system' done by Uddin *et al.* (2014) found that two-thirds of chronic obstructive pulmonary disease patients could not perform daily activities such as bathing, taking food by own hand, wearing dress, performing prayer, cooking, cleaning, gardening and cattle rearing, and one-fourth had restricted movement.

There is clear evidence that lifestyle diseases lead to other disorders like inability to perform some activities/ tasks, foot ulcers/ amputation, blindness, stroke, coronary heart disease, kidney disease, reduced life expectancy, early mortality. Studies found that these lifestyle diseases also lead to increased absenteeism, reduced productivity, disability, which affects the overall growth and development of the society.

All the experts and studies shown that, the lifestyle diseases are having a negative influence on the economic growth of the country. Their recommendations provide increased clarity on the effects of lifestyle diseases on the person's productivity, which in turn affects the nation's financial growth. It can also be observed that increased health expenditures and lower productivity can cause or accentuate household poverty and reduce the amount of resources available for non-health consumption, food-items in particular (Aye *et al.*, 2011).

So, the effect on family finances in terms of lifestyle diseases with reference to Telangana State was chosen to study. Hence the present study focused on collecting information on the effects of treatment expenditure on family finances as the main objective.

MATERIALS AND METHODS

An Exploratory research design was adopted, and the sample was purposively chosen from the twin cities of Hyderabad and Secunderabad. A Structured interview schedule was developed to collect the relevant data. The schedule used for the study comprised of questions related to general information pertaining to the socioeconomic status of the families, health status of family members, family health care costs, and sources of the expenditure used for health care, the effects of treatment expenditure on family finances.

Census of Hyderabad and Secunderabad: The population of Hyderabad (7,674,689) and Secunderabad (217,910) in detail is given in the table. 1 below illustrates the population in terms of male, female, literate and children are given. It also gave the literacy percentage and sex ratio of the cities.

The purposive sampling design was chosen to collect the data. The sample size was limited to 120 families. Criteria for sample collection was based on lifestyle diseases like diabetes, chronic diseases, arteriosclerosis, nephritis, and hypertension being experienced by the respondent and any other family member/s and also the respondents' economic decision making power.

Variables

Income: Income was selected as the most important variable of the study as income is linked with the socio - psychological factors, particularly in societies where social participation depends heavily on individual's income.

Lifestyle disease: The lifestyle disease was considered as the second variable. As the lifestyle of the people depends upon their income, the prevalence of the lifestyle disease can be studied.

Statistical analysis and interpretation: The data were coded, consolidated and tabulated in appropriate tables and presented in frequencies and percentages. Classification of the tables was done based on income. Statistical analysis was carried out to find out the relationship and associations between the variables.

Interpretation of the data was done using statistical 'chi-square' for testing the hypothesis. The hypothesis was tested between the income categories with regards to the family finances and treatment expenditure of lifestyle diseases.

Null Hypothesis: Income and effect on family finances are independent.

Alternate Hypothesis: Income and effect on family finances are not independent.

The respondents' (120) were 42% females and 58% males. The family size of the respondents, as per the

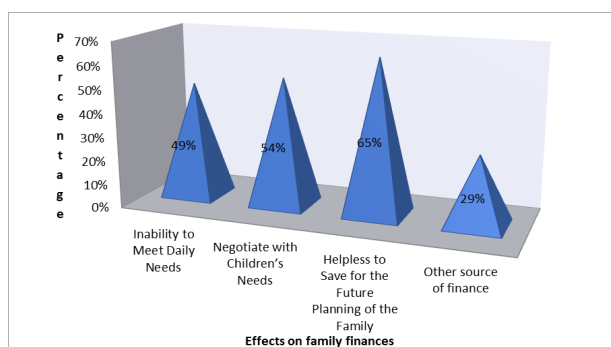


Fig. 1. Effects of treatment expenditure on family finances.

data gathered- 43% families were small/ nuclear families with 4 members, 55% were medium sized families with 4 to 6 members, and other 2% were large families with more than 6 members in the family.

Age of the respondents was categorized under 20- 40, 40- 60 and above 60 years. Around 37% were between the age gap of 20- 40 years, 55% were between 40- 60 years while other 8% were above 60 years of age. The most of the respondents were literate, i.e., 67% of them are graduates, and 27% stopped with their secondary education and other 6% were illiterate. Around 20% of the respondents are into business, 73% of them are private employees, while other 7% are government employees.

The data collected shows that 35% of the total respondents had a monthly income of less than Rs.13, 500 per month. About 18% were under Rs.13, 501 – 18,000, 12% in Rs.18, 001 – 38,000 income categories, 15% were in Rs.38, 001-50,000, while 20% had more than Rs.50, 000 as income per month. This distribution of the sample is based only on the income of the respondent as suggested by Kuppuswamy's socio-economic status scale (SES) (2014). In the current study, first two categories are referred as low income group; the third category is considered as medium income group and the last two categories as high income groups.

RESULTS AND DISCUSSION

The present study found that more than 60% of the respondents mentioned that their family finances got affected by treatment expenditure for lifestyle diseases, in which 39% are from low income group, 8% are from medium income group and 13% belongs to high income group. Some of the effects of treatment ex-

penditure on family finances mentioned by the respondents' are illustrated in the figure 1 which are discussed below:

Inability to meet daily needs: Daily needs of the family include getting the newspaper, having an internet connection, etc. The entertainment/ recreation aspect includes going out for picnic/ holidays, movies, buying branded clothes in the malls. The study revealed that 49% of the respondent families were incapable of meeting daily needs and specific needs (newspaper, internet connection, etc.). Some of the families fiddle with the amount spent for entertainment and kill the amount spent for family shopping to facilitate treatment expenditures for lifestyle diseases.

Negotiate with children's needs: A child needs include children's education, *special* classes or dance/ singing classes or even sports like extracurricular activities. The amounts spend for these children needs have to be adjusted to meet the treatment expenses. This may also include children's future needs like saving for their further education or future settlements, etc. About 54% of families negotiate with children's needs and trim down the amount spent on educational activities of children.

Helpless to save for the future planning of the family: The future planning may include building a home, plan to get a girl child marry, saving some amount for their after retirement. Over 65% of the respondent families were helpless to save for the future planning of the family and being inept to pay insurance policies so as to meet the treatment expenditure.

Another source of finance: This includes owing money from friends or colleagues or financiers as debt, obtaining a loan, and selling off assets. Around 29% of the families fell into debts by obtaining a loan and owing money from others. Even few of the families sell their assets to meet the treatment expenditure of lifestyle diseases.

The statistical result through chi- square tests showed that the respondents' treatment expenditures of lifestyle disease are significantly associated with the effect on family finances. Hence, the hypothesis that income and the effect on family finances are not independent is proved to suggest that as income decreases, the effect on family finances increases. Thus, it was observed that the higher the treatment expenses, the higher the effect on family finances.

Table 1. Population censuses of Hyderabad and Secundrabad.

	Hyderabad			Secundrabad		
	Total	Male	Female	Total	Male	Female
Population	7,674,689	3,927,029	3,747,660	217,910	113,577	104,333
Literates	5,606,164	3,007,981	2,598,183	166,155	90,948	75,207
Children (0-6)	912,231	474,357	437,874	22,585	11,669	10,916
Average Literacy (%)	82.90 %	87.12 %	78.50 %	85.07 %	89.25 %	80.51 %
Sex ratio	954			919		
Child Sex ratio	923			935		

The population- based cross sectional survey done in Bangladesh by Uddin *et al.* (2014) exposed that the respondents had a disproportionate effect on family finances due to their treatment expenses. The most common option families adopted to cope with financial crises was borrowing money from relatives or friends, followed by reducing expenditure on food and spending or reducing savings.

Szmedra and Sharma (2007) studied "Small island states in crisis: The economic impact of lifestyle diseases in the South Pacific" (Nauru and Fiji) reported that the losses could and often do result in the impoverishment of families, of Pacific region restricting the ability to support children's education, and ultimately resulting in a cycle of poverty that is difficult to break. They also reported that hours and days lost from work due to illness, either being too ill to work or the time is taken in seeking treatment for the effects of their disease diminishes their ability to contribute to the financial support of their families and communities. These impacts have serious consequences on the ability of the family to support itself at some socially acceptable level.

The study found that there income has no effect on the prevalence or existence of lifestyle disease. As per the results, not only high income groups but also low and middle income groups are bearing from the lifestyle diseases. The high income groups are going through due to their luxurious lifestyles whereas the low and middle income groups are experiencing due to their inept lifestyles. However, the study proved that everyone is equal to the ogle of lifestyle diseases.

Conclusion

The study found that more than 60% of the respondent's family finances got affected by the treatment expenditure. The observed effects in the study were 49% of the families were unable to meet daily needs. 54% of them negotiated with children's needs, 65% of them were helpless to save for the family's future. Some of them, i.e., 29% of the respondent families

owed money from friends or colleagues or financiers as debt, obtaining loan, and selling off assets as other source of finance to meet the treatment expenses. Action is also required in educating people to make some minor changes in their lifestyles to avoid these lifestyle diseases as they are preventable. It is in the hands of the people to be free of these diseases and save on the expenditures associated with lifestyle diseases and invest that more meaningfully for the benefit of the family's welfare.

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