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**A STUDY ON PREVENTIVE HEALTH CARE PRACTICES AMONG
MIDDLE AGED PEOPLE WITH RESPECT TO UDAGAMANDALAM**

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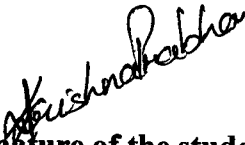
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BONAFIDE CERTIFICATE

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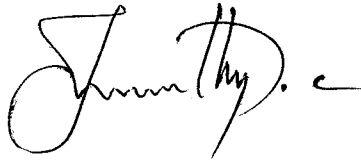


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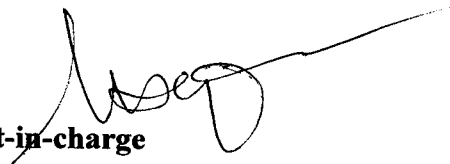


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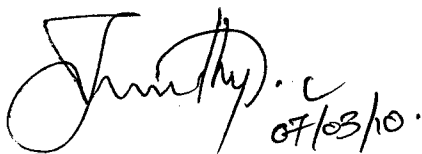
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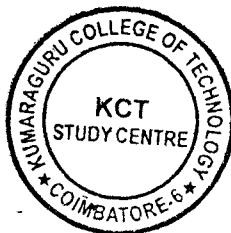


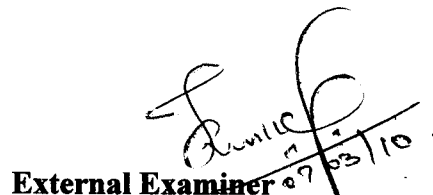
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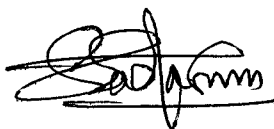
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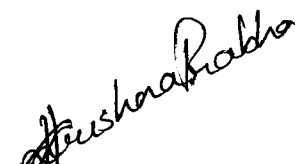
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ABSTRACT

Many countries now have ageing populations and are facing an increased prevalence of age related diseases and escalating healthcare costs. However, if ageing is combined with extended years of healthy life, it could also produce unprecedented social, economic, and health dividends. In recent decades, scientists have shown that the underlying biological processes of ageing, which give rise to most diseases and other age related health problems, can be delayed. We argue that a concerted effort to slow ageing would provide a broad strategy for primary prevention that would greatly enhance and accelerate improvements in health at all ages.

Life expectancy at birth rose by a remarkable 30 years in developed countries during the 20th century, initially because of reductions in infant, child, and maternal mortality and then because of declining mortality in middle and old age.

Although increasing disability is a common concomitant of old age, several interventions in middle age may prevent or delay disabling diseases. By carefully weighing existing disease burden, the state of our knowledge about prevention of diseases is determined. The awareness about the age related disease among middle aged men has developed a reasonable preventive program in consultation with the family physicians or through the mass media. As we gain new knowledge about genetic and other risk factors, we may be able to more accurately and effectively study preventive health care services practiced by middle aged people of middle income group which helps to maximize benefits and minimize harms in their old age.


Dr. K. Krishna Prabha

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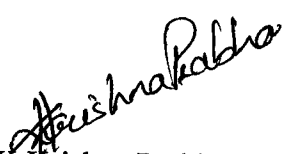

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CHAPTER 1

INTRODUCTION

1.1 RESEARCH BACKGROUND

Due to public health successes, populations are ageing and increasingly, people are living with one or more chronic conditions for decades. This places new, long-term demands on health care systems. Not only are chronic conditions projected to be the leading cause of disability throughout the world by the year 2020; if not successfully prevented and managed, they will become the most expensive problems faced by our health care systems. People with diabetes, for example, generate health care costs that are two to three times those without the condition, and the costs of lost production due to diabetes are estimated to be five times the direct health care costs. In this respect, chronic conditions pose a threat to all countries from a health and economic standpoint.

Many costly and disabling conditions - cardiovascular diseases, cancer, diabetes and chronic respiratory diseases - are linked by common preventable risk factors. Tobacco use, prolonged, unhealthy nutrition, physical inactivity, and excessive alcohol use are major causes and risk factors for these conditions. Trends in tobacco use will increase in the foreseeable future especially in developing countries. The ongoing nutritional transition expressed through increased consumption of high fat and high salt food products will contribute to the rising burden of heart disease, stroke, obesity and diabetes. Changes in activity patterns as a consequence of the rise of motorised transport, sedentary leisure time activities such as television watching will lead to physical inactivity in all but the poorest populations. Many diseases can be prevented, yet health care systems do not make the best use of their available resources to support this process. All too often, health care workers fail to seize patient interactions as opportunities to inform patients about health promotion and disease prevention strategies.

1.1.1 CURRENT SYSTEMS OF HEALTH CARE

Many diseases can be prevented, yet health care systems do not make the best use of their available resources to support this process. Most current health care systems are based on responding to acute problems, urgent needs of patients, and pressing concerns. Testing, diagnosing, relieving symptoms, and expecting a cure are hallmarks of contemporary health care. While these functions are appropriate for acute and episodic health problems, a notable disparity occurs when applying this model of care to the prevention and management of chronic conditions. Preventive health care is inherently different from health care for acute problems, and in this regard, current health care systems worldwide fall remarkably short.

1.1.2 INDIA: INTEGRATING NON-COMMUNICABLE DISEASE PREVENTION AND MANAGEMENT

Cardiovascular and cerebro-vascular diseases, diabetes, and cancer are emerging as major public health problems in India. Apart from a rising proportion of older adults, population exposure to risks associated with certain chronic conditions is increasing. Obesity is increasing, physical activity is declining, and tobacco use is a substantial problem in the country.

Although it is commonly believed that non-communicable diseases (NCDs) are more prevalent in higher income groups, data from India's 1995-1996 national survey showed that tobacco intake and alcohol misuse are higher in the poorest 20% of the income quintile. As a result, the government of India is anticipating that the prevalence of tobacco-related conditions will increase in lower socio-economic groups in the coming years.

1.2 PROBLEM IDENTIFIED

Given that many conditions are preventable, every health care interaction should include prevention support. When patients are systematically provided with information and skills to reduce health risks, they are more likely to reduce substance use, to stop using tobacco products, to practice safe sex, to eat healthy foods, and to engage in physical activity. These risk reducing behaviours can dramatically reduce the long-term burden and health care demands of chronic conditions. To promote prevention in health care, awareness raising is crucial to promote a change in thinking and to stimulate the commitment and action of patients and families, health care teams, communities, and policy-makers.

A collaborative management approach at the primary health care level with patients, their families and other health care actors is a must to effectively prevent many major contributors to the burden of disease.

1.3 NEED FOR STUDY

- a. To help the Primary health centres at Udagamandalam in identifying the level of awareness on preventive health care practices among middle aged people.
- b. To identify the hurdles that the middle aged people face in adopting to the healthy life style practices.
- c. Equip the middle aged people with needed information, motivation, and skills in prevention and self-management through Primary Health Centres
- d. Support a paradigm shift towards integrated, preventive health care practices with respect to Udagamandalam
- e. Make prevention an element of every health care interaction

1.4 OBJECTIVES OF THE STUDY

- a. To identify the level of awareness on preventive health care practices among middle aged people
- b. To identify the hurdles faced by middle aged people to practice preventive health care practices
- c. To study the level of interest in practicing healthy lifestyle strategies by middle aged people.
- d. To relate the findings of research and to implement methodologies at primary health care centres at Udagamandalam.

1.5 SCOPE OF THE STUDY

- a. The study on preventive health care practices among middle aged people provides an attempt to know the level of awareness on preventive lifestyle practices prevailing.
- b. From the opinion of the subjects, the study would provide an attempt to know the hurdles they face in practicing the healthy life style practices
- c. This study supports a paradigm shift towards integrated, preventive health care practices through primary health care centres with respect to Udagamandalam
- d. This study will also assist to co-operate the middle aged people with the health providers to lead a disease free life.

1.6 SCENARIO ON INDIAN HEALTHCARE SYSTEMS

1.6.1 EXPENDITURE ON HEALTH CARE

In the mid-1990s, health spending amounted to 6% of GDP, one of the highest levels among developing nations. The established per capita spending is around Rs 320 per year with the major input from private households (75%). State governments contribute 15.2%, the central government 5.2%, third-party insurance and employers 3.3%, and municipal government and foreign donors about 1.3, according to a 1995 World Bank study. Of these proportions, 58.7% goes toward primary health care (curative, preventive, and promotive)

and 38.8% is spent on secondary and tertiary inpatient care. The rest goes for non service costs.

The fifth and sixth five-year plans (FY 1974-78 and FY 1980-84, respectively) included programs to assist delivery of preventive medicine and improve the health status of the rural population. Supplemental nutrition programs and increasing the supply of safe drinking water were high priorities. The sixth plan aimed at training more community health workers and increasing efforts to control communicable diseases. There were also efforts to improve regional imbalances in the distribution of health care resources.

The Seventh Five-Year Plan (FY 1985-89) budgeted Rs 33.9 billion for health, an amount roughly double the outlay of the sixth plan. Health spending as a portion of total plan outlays, however, had declined over the years since the first plan in 1951, from a high of 3.3% of the total plan spending in FY 1951-55 to 1.9% of the total for the seventh plan. Mid-way through the Eighth Five-Year Plan (FY 1992-96), however, health and family welfare was budgeted at Rs 20 billion, or 4.3% of the total plan spending for FY 1994, with an additional Rs 3.6 billion in the non plan budget.

1.6.2 PRIMARY SERVICES

Health care facilities and personnel increased substantially between the early 1950s and early 1980s, but because of fast population growth, the number of licensed medical practitioners per 10,000 individuals had fallen by the late 1980s to three per 10,000 from the 1981 level of four per 10,000. In 1991 there were approximately ten hospital beds per 10,000 individuals. However for comparison, the in China for comparison there are 1.4 doctors per 1000 people.

Primary health centers are the cornerstone of the rural health care system. By 1991, India had about 22,400 primary health centers, 11,200 hospitals, and 27,400 clinics. These facilities are part of a tiered health care system that funnels more difficult cases into urban hospitals while attempting to provide routine medical care to the vast majority in the countryside. Primary health centers and sub centers rely on trained paramedics to meet

most of their needs. The main problems affecting the success of primary health centers are the predominance of clinical and curative concerns over the intended emphasis on preventive work and the reluctance of staff to work in rural areas. In addition, the integration of health services with family planning programs often causes the local population to perceive the primary health centers as hostile to their traditional preference for large families. Therefore, primary health centers often play an adversarial role in local efforts to implement national health policies.

According to data provided in 1989 by the Ministry of Health and Family Welfare, the total number of civilian hospitals for all states and union territories combined was 10,157. In 1991 there was a total of 811,000 hospital and health care facilities beds. The geographical distribution of hospitals varied according to local socio-economic conditions. In India's most populous state, Uttar Pradesh, with a 1991 population of more than 139 million, there were 735 hospitals as of 1990. In Kerala, with a 1991 population of 29 million occupying an area only one-seventh the size of Uttar Pradesh, there were 2,053 hospitals.

Lifestyle choices play a major role in our physical, mental and emotional health. Poor lifestyle choices will lead to an increased risk of cardiovascular disease, cancer, diabetes, obesity and a suite of other health issues.

Decision processing becomes sluggish as poor health leads to a more sedentary lifestyle. Which will then lead to reduced blood flow to the brain, thus affecting your entire body.

Performance at work, school and in the home becomes mediocre as health issues begin to consume time and finances. Self-esteem and confidence suffer, and affect even otherwise healthy relationships.

Despite the consequences of not living healthy, the number of middle aged adults in America who are obese has risen from 28% to 36% over the last 18 years, according to a recent study in the American Journal of Medicine. The study compared five lifestyle factors of a group of 7,340 middle-aged (40-74 year old) adults from 1988-1994 to a group of 7,811 middle-aged adults from 2001-2006.

1.7 5 HEALTHY LIFESTYLE HABITS

- Physical activity at least 12 times per month
- Consumption of 5 servings of fruits and vegetables daily
- Maintenance of a healthy weight (BMI between 18.5 and 29.9)
- Moderate alcohol use, if any at all
- Not smoking

What the researchers from Department of Family Medicine, Medical University of South Carolina, Charleston found was that there was a 10% drop from the 1998-1994 to the 2001-2006 group in the number of middle-aged persons who undertook physical activity 12 or more times per month, and an 8% increase in obesity for the same group.

Despite the fact that tobacco use increases cancer risk, the percent of the population that smokes did not change in the seven year interval between the groups. Even while “health kicks” are on the rise, the number of people consuming five or more servings of fruits and vegetables per day has dropped from 42% to 26%.

Reasons for Unhealthy Lifestyle

Why don't people adhere to the five healthy principles that could save their lives?

Many of them simply can't, not because they are financially or physically unable, but more because they are carrying the burden of depression related to their declining health, obesity, stress, dependency on different substances, or lifestyle.

It is stressful to feel like life is moving too fast, so people turn to convenience foods that are packed with sodium, sugar and preservatives, and they make excuses about not having enough time to exercise, and then they drink alcohol to relax.

This too-fast lifestyle is contributing to an unhealthy society, one in which people simply don't sleep enough. Lack of sleep can contribute to a number of health problems, including

depression and obesity. Depression often leads to inactivity and can lead to drug or alcohol abuse. A healthy lifestyle leads to mental well-being, even later in life.

Other reasons for the decline in the number of people following a healthy lifestyle are because they feel they just can't afford it. For example, individuals with lower levels of education (therefore lower paying jobs) have a higher body mass index (BMI) than individuals of higher socioeconomic means. This might be because they are forced to work longer hours for lower pay, or hold more than one job, and therefore don't have the time or energy to exercise on a regular basis. These same rushed individuals are more likely to depend on fast food or other shortcuts that are detrimental to health.

CHAPTER 2

2.1 REVIEW OF LITERATURE

This section deals with review of literature collected from various sources

2.1.1. *Susan A. Fontana (1997)* found that nearly 46% of patients reported the presence of at least one major chronic disease. This emphasizes how vital it is that we consider preventive services when patients more than 50 years of age visit for chronic illness management. For men and women alike, the two most frequently reported preventive activities reported involved counseling: asking about smoking status and discussing need for a regular checkup. We found the highest proportions (75% or more reporting) for receipt of female cancer screening procedures and the lowest proportions (37% to 63% reporting) for receipt of colorectal cancer screening, especially for sigmoidoscopy in women. The number of health maintenance visits by gender was not significantly different for those who did or did not report diabetes, hypertension, or heart disease. Patients with heart disease reported fewer other prevention visits than did those with no heart problems. Therefore, age-appropriate screening guidelines must be emphasized, especially for people with heart disease or diabetes. Policies supporting prevention's integration with other services must be put in place. As the shift to a managed care environment intensifies, provider obligations will need to increase; prevention efforts will need to focus on persons who do not regularly come in for care. Finally, the emerging fiscal structures for primary care delivery will demand more efforts by patients to obtain—and providers to deliver—prevention services. proactive July 1997, Vol. 87, No. 7 American Journal of Public Health 1195

2.1.2 Rama K. Jayanti, Alvin C. Burns (1998) describes conceptual model of preventive health care behaviors was proposed and tested.

2.1.1 *Susan A. Fontana (1997)* , proactive July 1997, Vol. 87, No. 7 *American Journal of Public Health* 1195

2.1.2 Rama K. Jayanti, Alvin C. Burns (1998)



The results show that preventive health care behaviors are influenced by the value that people perceive in engaging in prevention. This relationship is central to the Health Belief Model (Janz and Becker 1984), and the present research is thus consistent with prior research. The expanded nature of the present research is evident in other significant findings. For instance, perceived health value is influenced by response efficacy. This finding helps to clarify the benefits-to-costs notion implicit in the health value construct. Response efficacy, or the individual's belief that a preventive health care action will decrease the health risk, is fashioned by two constructs, namely, health motivation and specific health knowledge. Apparently, the combination of a strong desire to be healthy and a knowledge base of how various preventive health care actions mitigate health dangers bolsters an individual's beliefs that these actions will be beneficial. At the same time, a generalized health consciousness, manifest as a healthy lifestyle and complemented with the motivation to be healthy, perpetuates preventive health care behaviors. The research has revealed the influence of self-efficacy on preventive behaviors. The motivation to be healthy strengthens self-efficacy, and self-efficacy has a significant bearing on the degree of enactment of preventive health care behaviors that is separate from the perceived health value. The effects of health motivation are in general agreement with the literature (Burns 1992; Fletcher et al. 1989; Moorman and Matulich 1993). Our finding that health knowledge fails to affect preventive behaviors is not consistent with the extant literature.

Indian Council for Research on International Economic Relations (ICRIER) on 'Impact of Preventive Healthcare on Indian Industry and Economy' across 15 states, 12 percent of blue-collar workers are at high risk of getting a debilitating disease compared to four percent of the medium and senior-level employees. The study also reveals that nearly 71 percent of the employees and 82 percent of CEOs were overweight. In addition, 48 percent of the employees and 69 percent of CEOs were physically unfit. The ICRIER survey shows almost a quarter of the firms lose approximately 50 man-days in a year due to sickness. Another 34 percent lose 10-50 man-days.

To mitigate the cost, two-thirds of respondents have introduced preventive healthcare. However, less than one third make a provision for the whole range of preventive healthcare measures.

2.1.4 Certified in Internal Medicine and Age Management by the Cenegenics Medical Institute, Dr. Claudia Villate-Cortese's goal is to help patients improve their quality of life and the way they feel. Age Management, a complement to traditional medicine, focuses on preventing the development of diseases in patients between the ages of 30 and 80. While traditional medicine focuses on a patient's treatment and cure, the Age Management program mainly emphasizes preventive medicine. "We look at those parts of a patient's body that have lost proper function through the years," said Villate. "The Age Management program is composed of neuron-endocrine control, hormone control and a medical nutrition and exercise program. "The patient who approaches preventive medicine is expecting to improve his or her quality of life, lose weight and prevent diseases," added Dr. Villate. God decides how long a person will live, but longevity of life has nothing to do with the quality of the same,"

2.1.5 William Rakowski ,Mara Julius, (1987) A sample of 172 community-resident older adults (aged 64-96) were interviewed to investigate correlates of their preventively oriented, health-related practices. Four health practice groupings were used: Information-Seeking, Regular Health Routines, Medical and Self-Examination, and Risk Avoidance. Results indicated modest associations among individual behaviors and among the four health practice groups. Gender (i.e., women) and a supportive family environment were among the consistent predictors of good health practices, although each of the four behavior groups tended to have its own set of major predictors.

2.1.3 *Dr. Claudia Villate-Cortese's, Internal Medicine and Age Management by the Cenegenics Medical Institute*

2.1.4 *William Rakowski ,Mara Julius, (1987)*

2.1.6 Gayle J. Acton ,Porntip Malathum, (2000) Health-promoting self-care behavior emphasizing positive lifestyle practices may improve the health and quality of life of adults. One variable that may influence health-related decisions is the status of basic needs as described by Maslow. The purpose of this study was to investigate the relationships among basic need satisfaction, health-promoting self-care behavior, and selected demographic variables in a sample of community-dwelling adults. A convenience sample of 84 community-dwelling adults was recruited to complete the Basic Need Satisfaction Inventory, the Health-Promoting Lifestyle Profile II, and demographic information. Results of the study indicated that self-actualization, physical, and love/belonging need satisfaction accounted for 64% of the variance in health-promoting self-care behavior. The findings of this study are consistent with Maslow's theory of human motivation and suggest that persons who are more fulfilled and content with themselves and their lives, have physical need satisfaction, and have positive connections with others may be able to make better decisions regarding positive health-promoting self-care behaviors.

2.1.7 S. V. Kasl and S. Cobb identified three types of health behavior: preventive health behavior, illness behavior, and sick-role behavior. Preventive health behavior is "any activity undertaken by an individual who believes himself to be healthy for the purpose of preventing or detecting illness in an asymptomatic state" (Kasl and Cobb 1966, p.246). Illness behavior and sick-role behavior, on the other hand, are concepts that encompass behaviors that occur in response to specific symptoms or illness. These behaviors are aimed at minimizing the effects of illness. Preventive health behavior generally follows from a belief that such behavior will benefit health. An obvious example is quitting smoking to reduce the chances of early morbidity and mortality. It does not follow, of course, that all beliefs on which preventive behaviors are based are well founded, nor that the resulting behaviors will have the desired outcomes. Many preventive behaviors have never been demonstrated to be effective, such as megadoses of vitamin C to prevent the common cold.

2.1.6 Gayle J. Acton ,Porntip Malathum, (2000)

2.1.7 S. V. Kasl and S. Cobb (Kasl and Cobb 1966, p.246).

2.1.8 Journal of the National Medical Association, Mar 2009 by Richards, Chanelle R, Tucker, Carolyn M, Brozyna, Angelica, Ferdinand, Lisa A, Shapiro, Michael A Existing research suggests that insurance status, income, source of care, race/ethnicity, and perceptions of health care environments influence health care utilization and preventative health care behaviors among youth.^{1,2} Preventative health care behaviors are actions geared toward decreasing one's probability of encountering illness and disease. These behaviors are broad in scope and include getting adequate sleep, managing stress, avoiding risky/unhealthy behaviors (eg, smoking, substance use, and engaging in unprotected sex), eating healthy foods, exercising, and routinely seeing a physician for a health checkup. ³ Promotion of preventative health care behaviors among adolescents is especially important because of the substantial growth and development that occurs during adolescence.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 TYPE OF PROJECT

The project research design adopted for this study is Descriptive Research. Descriptive method was adopted because it deals with the description of the state of affairs as it exists at present. The facts and information collected are analyzed to make a critical evaluation of the material

3.2 TARGET RESPONDENTS

Middle Aged people (40 -60 yrs) residents of Udagamandalam , who have registered themselves in Primary Health Centres of their nearest locality within last 1 year.

3.3 CONSTRAINTS AND LIMITATIONS

- a. The analysis and interpretation is applicable only to middle aged people
- b. The sample size is restricted to 150 subjects.
- c. Health knowledge and response efficacy may be sensitive to measurement artifacts.

3.4 SAMPLING METHOD

- *Stratified random sampling*: the probability of being selected is “known and equal” for all members of the population and the stratification is based on the primary variable (Middle aged) under study
- The sample size is 150 (middle aged people residents of Udagamandalam)
- Population Data

Udagamandalam taluk is a taluk of Nilgiri district of the Indian state of Tamilnadu. The headquarters of the taluk is the town of Udagamandalam.

- Total No. Of Primary Health Centres in Udagamandalam town : 10 Nos
- Total no. Of Middle aged people registered in PHC in one month is 150

3.5 METHOD AND SOURCE OF DATA COLLECTION

Primary data was collected through survey and personal interview to gain information on the awareness on the preventive health care practices among the middle aged with respect to udagamandalam.

Secondary data was collected from the Medical records and Registers of the primary health centres , who have registered themselves within one year and various published books, journals, websites and online publications.

3.6 TOOLS FOR ANALYSIS

Data has been analyzed using SPSS and tools like percentage analysis, Chi-Square analysis and correlation has been used.

3.6.1 Percentage Analysis:

Percentage refers to a special kind of ratio in making comparison between two or more data and to describe relationships. Percentage analysis is the method to represent raw streams of data as a percentage (a part in 100 - percent) for better understanding of collected data.

$$\text{Percentage of Respondents} = \frac{\text{Number of Respondents}}{\text{Total Respondents}} \times 100$$

3.6.2 Chi- square analysis

Chi Square analysis is used to compare two or more frequencies to investigate the probability that their values depart from what would be expected by chance alone. The chi-square test is to test the null hypothesis that the frequency distribution of certain events observed in a sample is consistent with a particular theoretical distribution. It allows us to test for deviations of observed frequencies from expected frequencies. When the observed number of events deviates significantly from the expected count, then it is unlikely that the null-hypothesis is true, and it is likely that there is row-column association.

Null Hypothesis (H_0)

The hypothesis, or assumption, about a population parameter we wish to test, usually an assumption of the status quo.

Alternative Hypothesis (H_1)

The conclusion we accept when the data fail to support the null hypothesis.

Expected Deliverables

- Adoption to healthy life style changes by middle aged people to live a disease free life.
- Make prevention an element of every health care interaction at the primary health centres.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the data analysis and interpretation of the data collected through questionnaire and demographic data of the respondent.

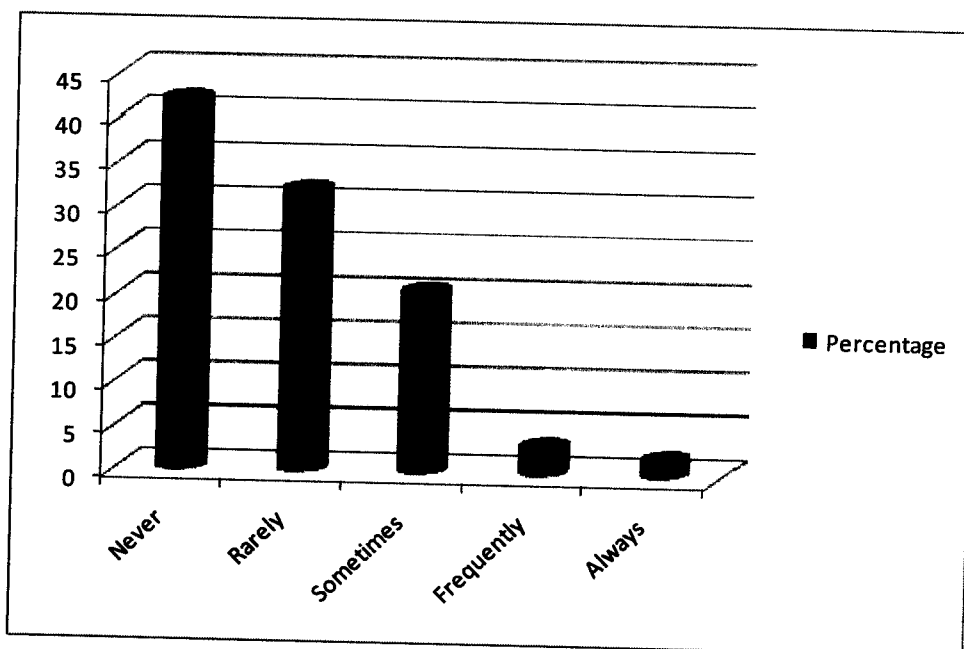
4.1. General information about the respondent

Table 4.1.1 Frequency of attending clinic or emergency room in the past 6 months by the respondent

S.No	Emergency	Frequency	Percent
1	Never	63	42.0
2	Rarely	48	32.0
3	Sometimes	31	20.7
4	Frequently	5	3.3
5	Always	3	2.0
	Total	150	100.0

The above table shows the frequency of having any illness, injury or any condition that needed care right away in a clinic or emergency room. It was found that 42% of the respondents never had any emergency, 32% of the respondent rarely had emergency, 20.7% of the respondents had emergency sometimes, 3.3% of the respondents had frequent emergency 2% were in emergency condition always

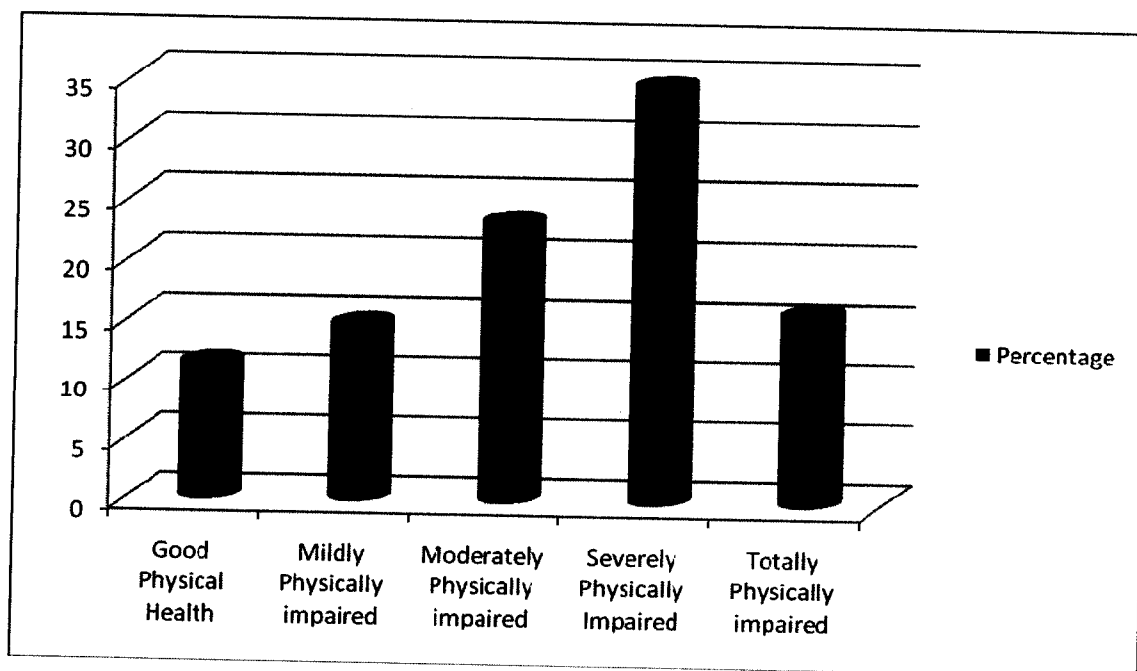
Figure 4.1.1 Frequency of attending clinic or emergency room in the past 6 months by the respondent



Interpretation : From this table and figure , we can interpret that majority of the middle aged people are not subjected to any emergency and the frequency of emergency Vs the number of respondents is inversely proportionate. This shows that majority of the middle aged people can practice the preventive health care practices while others practice curative and palliative treatment.

Table 4.1.2 Respondents Self evaluation of overall health

	Self evaluation	Frequency	Percent
1	Good Physical Health	80	53.3
2	Mildly Physically impaired	49	32.7
3	Moderately Physically impaired	16	10.7
4	Severely Physically impaired	5	3.3
5	Totally Physically Impaired	0	0
	Total	150	100.0

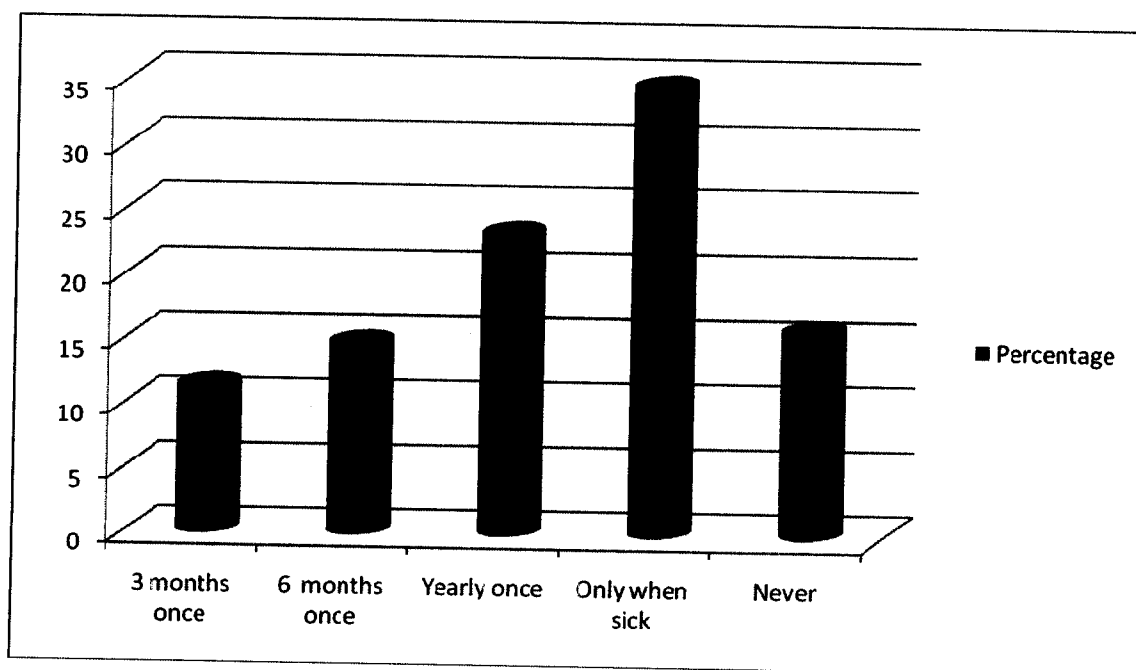
Figure 4.1.2 Respondents Self evaluation of overall health

The above table and figure explains how the respondents self-evaluate their overall health status. It was found that 53.3% believe to be in good physical health, 32.7% to be mildly physically impaired, 10.7% to be moderately physically impaired, 3.3% to be severely physically impaired and 0% to be totally physically impaired.

Interpretation : From the above table we can interpret that many of the respondents evaluate themselves to be in good physical health which can be maintained even in old age by making them adopt to the preventive health care practices. Though they feel that they are in good physical health there may be so many signs and symptoms of chronic diseases which remains dormant. People who believe that they are mildly or moderately physically impaired may also practice healthy life style to avoid complications and associated diseases.

Table 4. 1.3 Frequency of undergoing routine health check-up by the Respondent

S.No	Health check up	Frequency	Percent
1	3 months once	17	11.3
2	6 months once	22	14.7
3	Yearly once	35	23.3
4	Only when sick	52	34.7
5	Never	24	16.0
	Total	150	100.0

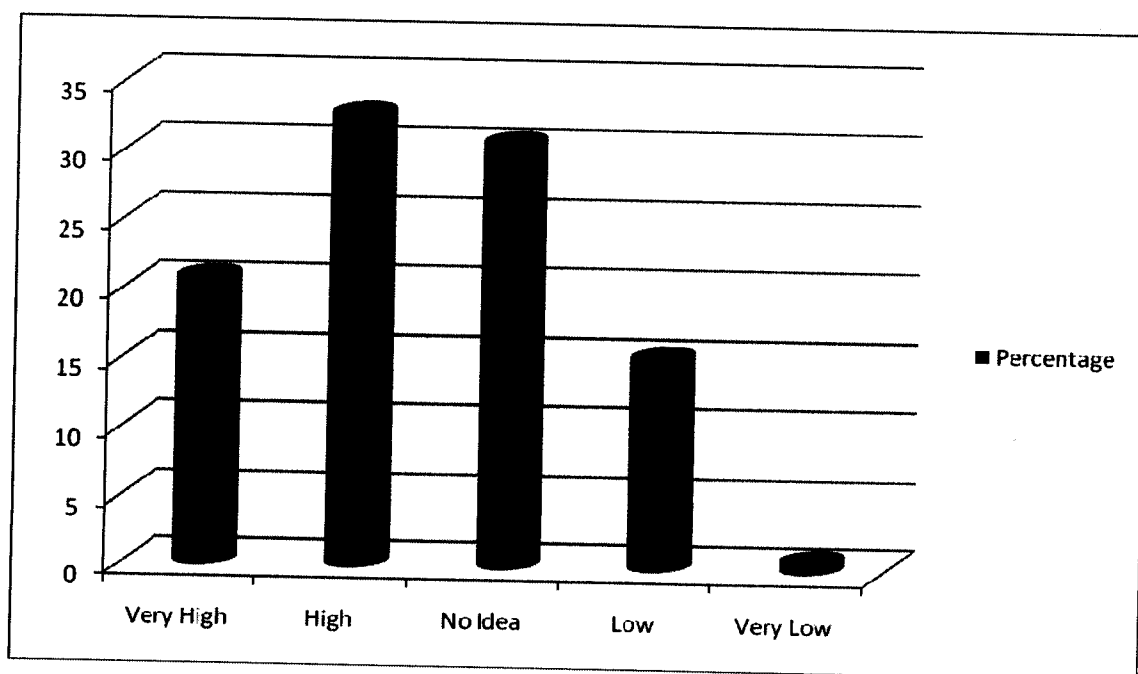
Figure 4.1.3 Frequency of undergoing routine health check-up by the Respondent

The above table illustrates how often the respondents undergo routine health check-up. It was found that 34.7% undergo health check up only when sick, 23.3% undergo health check up yearly once, 16% of the respondents never undergo health check up, 14.7% undergo health check up 6 months once and 11.3% of the respondents undergo health check up every quarterly once.

Interpretation : From the above table we can interpret that majority of the respondents undergo health check up only when sick illustrating that the awareness on preventive health care practices is less and so the middle aged group should be motivated to practice healthy life style practices which includes routine health check –up.

Table 4.1.4 Respondents level of awareness about Preventive Health care practices

S.No	Awareness	Frequency	Percent
1	Very High	31	20.7
2	High	49	32.7
3	No Idea	46	30.7
4	Low	23	15.3
5	Very Low	1	.7
	TOTAL	150	100.0

Figure 4.1.4 Respondents level of awareness about Preventive Health care practices

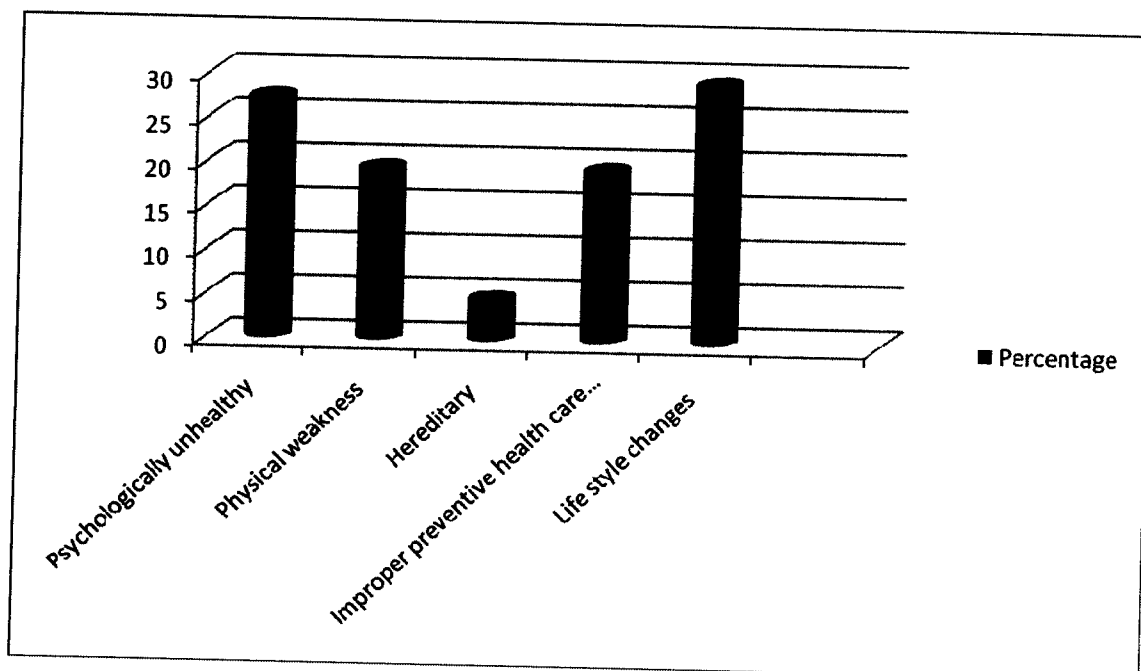
The above table explains the Respondent's level of awareness about Preventive Health care practices. It was found that 32.7 % believe themselves to have high awareness, 30.7% have no idea, 20.7% of the respondents have very high awareness, 15.3% of the respondents have low awareness and 0.7 % have very low awareness on the preventive health care practices.

Interpretation: From the above table we can infer that many of the respondents believe to have high level of awareness on preventive health care practices and almost equal number of respondents believe that they have no idea about the preventive health care practices. This table when compared to table 1.3 it gives a clear explanation that in spite of being aware of the preventive health care practices they really do not practice it due to various factors , which need to be identified and prevailed over.

Table 4.1.5 Respondents view on factor responsible to cause diseases.

S.No	Cause for disease	Frequency	Percent
1	Psychologically unhealthy	41	27.3
2	Physical weakness	29	19.3
3	Hereditary	7	4.7
4	Improper preventive health care practices	29	19.3
5	Life style changes	44	29.3
	Total	150	100.0

Figure 4.1.5 Respondents view on factor responsible to cause diseases.



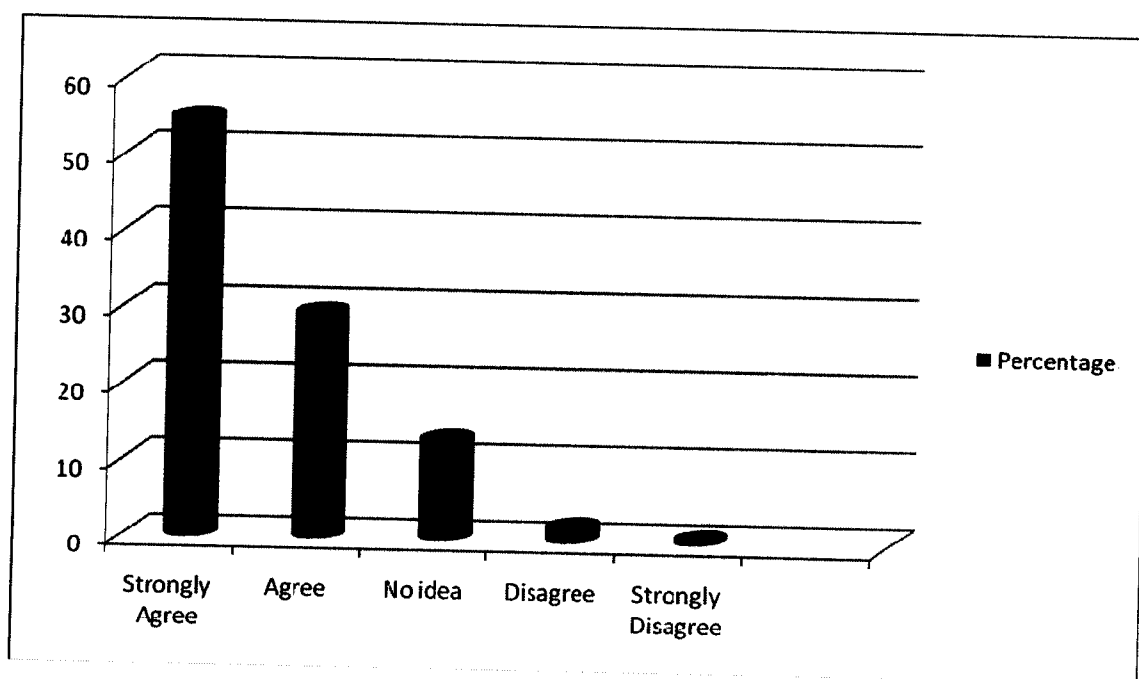
The above table and figure gives the respondents view on the factor responsible to cause disease. It was found that majority(29.3 %) of the respondents agree that life style changes are that major causative agents for any disease, 27.3% of the respondents believe that psychological mind set up is the cause of diseases 19.3 % of the respondents state that Improper preventive health care practices and physical weakness is the major cause of disease and 4.7% respondents believe that it is because of hereditary.

Interpretation: From the above table we can infer that many agree that life style changes are necessary for healthy living which when practiced can overcome many chronic diseases. This shows that by mending the middle aged to people to practice preventive lifestyle practices, they can lead a disease free life in their old age, but the only drawback is that just believing is not sufficient but a continuous practice becomes necessary.

Table.4.1.6 Respondents opinion on adapting oneself to healthy lifestyle practices.

S.No	Adapting to healthy life style	Frequency	Percent
1	Strongly Agree	82	54.7
2	Agree	44	29.3
3	No idea	20	13.3
4	Disagree	3	2.0
5	Strongly Disagree	1	.7
	Total	150	100.0

Figure.4.1.6 Respondents opinion on adapting oneself to healthy lifestyle practices.



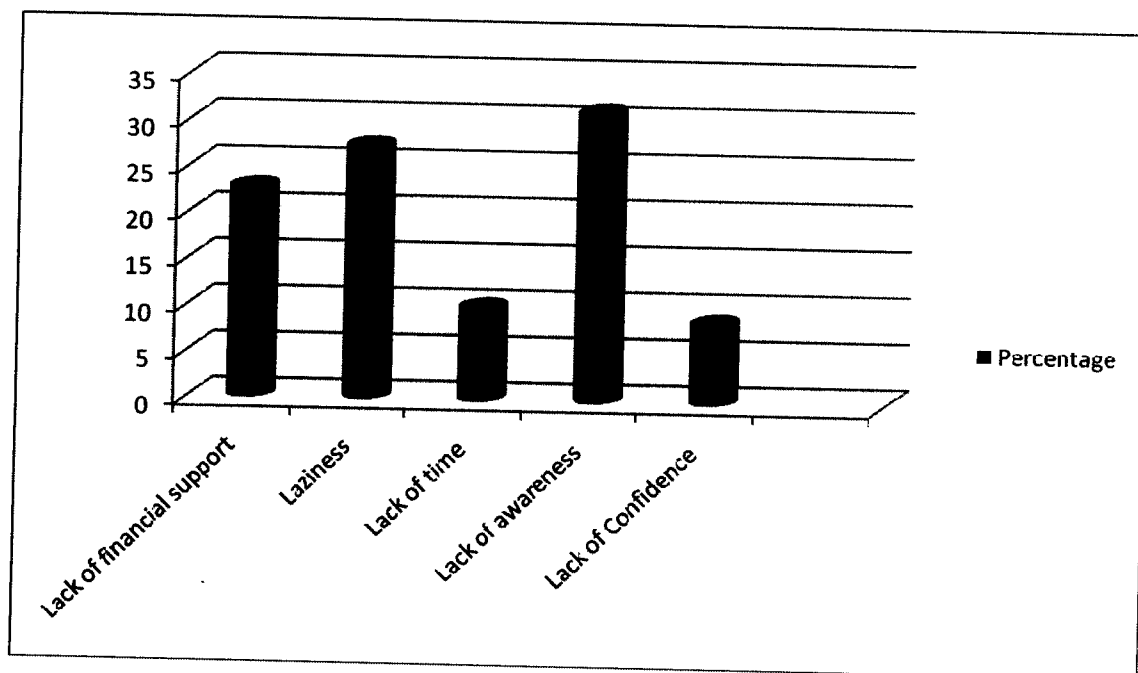
The above table and Figure gives the respondents opinion about adapting oneself to healthy life style practices. It was found that majority (54.7%) of the respondents strongly agree that adapting to healthy life style is necessary , 29.3 % agree, 13.3% have no idea about the life style changes, 2% disagree and 0.7 % strongly disagree.

Interpretation: The above table explains that many of the respondents have an urge to practice healthy life style practices , but may not practically apply to their day – to day life due to various reasons. The reasons of inability to adopt to the healthy life style has to be sorted out and they have to be motivated to lead a disease free life.

Table 4.1.7 Respondents idea on the hurdle to practice preventive health care practices

S.No	Hurdle	Frequency	Percent
1	Lack of financial support	34	22.7
2	Laziness	41	27.3
3	Lack of time	15	10.0
4	Lack of awareness	47	31.3
5	Lack of Confidence	13	8.7
	Total	150	100.00

Figure 4.1.7 Respondents idea on the hurdle to practice preventive health care practices



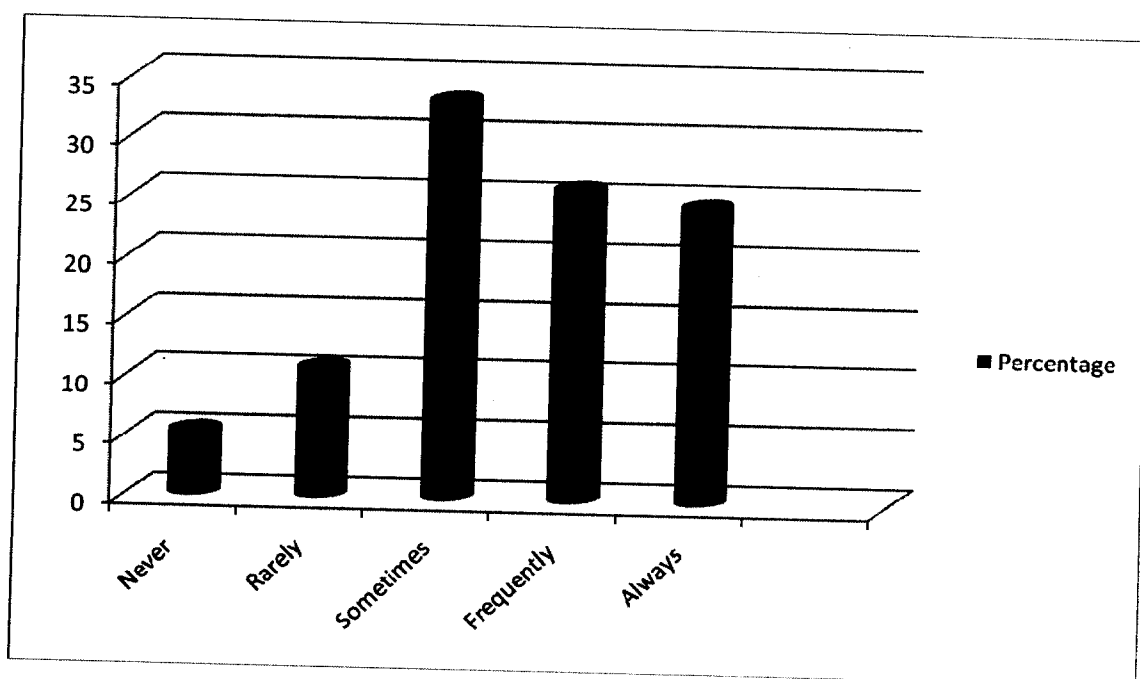
The above table and figure gives an idea about the respondents view on the hurdle to practice preventive health care practices. It was found that many (31.3) of the respondents say the major hurdle is lack of awareness, 27.3% of them found to be laziness, 22.7% feel it is due to lack of financial support, 10% feel that it is due to lack of time and 8.7 % feel that it is due to lack of confidence.

Interpretation : From the above table, it can be inferred that lack of awareness is the major hurdle to practice the preventive health care practices. When compared to the previous table it shows that the respondents realize that preventive health care practices is necessary but unable to practice due to lack of knowledge. This gives a clear picture that the awareness and the methodologies to practice a healthy life style need to be stressed and workshops and awareness programs play a major role.

Table.4. 1.8 Respondents view on prevention of life threatening diseases by preventive health care practices

S.No	Prevention	Frequency	Percent
1	Never	8	5.3
2	Rarely	16	10.7
3	Sometimes	50	33.3
4	Frequently	39	26.0
5	Always	37	24.7
	Total	150	100.0

Table.4. 1.8 Respondents view on prevention of life threatening diseases by preventive health care practices



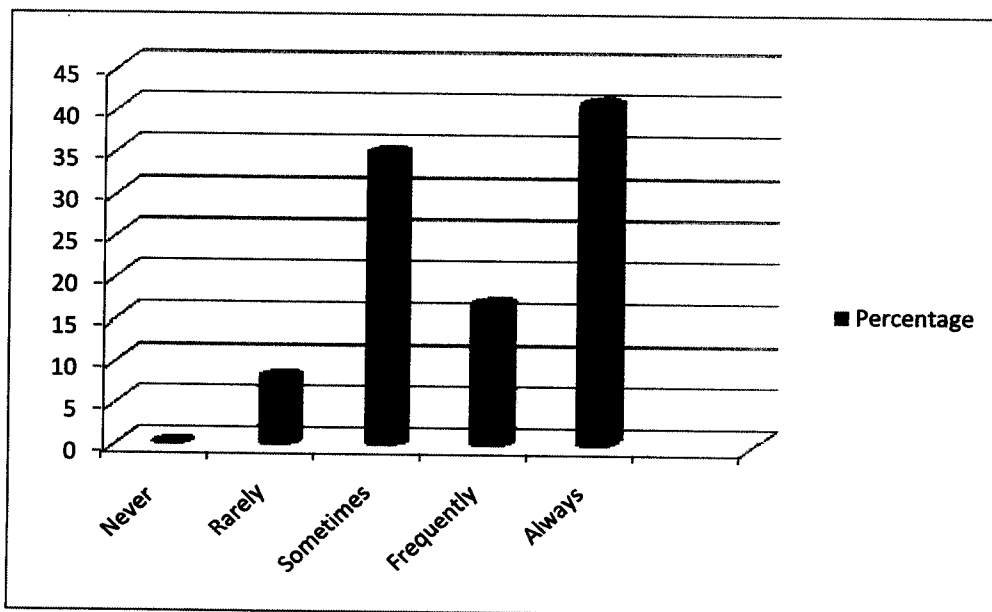
The above table gives the respondents view on prevention of life threatening diseases by preventive health care practices. It was found that 33.3% of the respondents view that the life threatening diseases can be prevented sometimes and almost equal number of respondents have agreed that it can be frequently (26%) and always (24.7%) be prevented. Minority of the respondents have a view that it can rarely (10.7%) and never(5.3%) can be prevented.

Interpretation: This shows that the respondents are confident enough to practice healthy life style practices. This infers that majority of them are aware on the life threatening diseases (Cancer, Aids, Cardiovascular disorders and Communicable diseases) and they have to be pushed one step ahead by educating them about the methodologies to practice a healthy life style in order to prevent them.

Table 4.1.9 Respondents view on being an active member in any health clubs or Organizations is beneficial.

S.No	Beneficial to be a member	Frequency	Percent
1	Never	0	0
2	Rarely	12	8.0
3	Sometimes	52	34.7
4	Frequently	25	16.7
5	Always	61	40.7
	Total	150	100.0

Figure 4.1.9 Respondents view on being an active member in any health clubs or Organizations is beneficial.



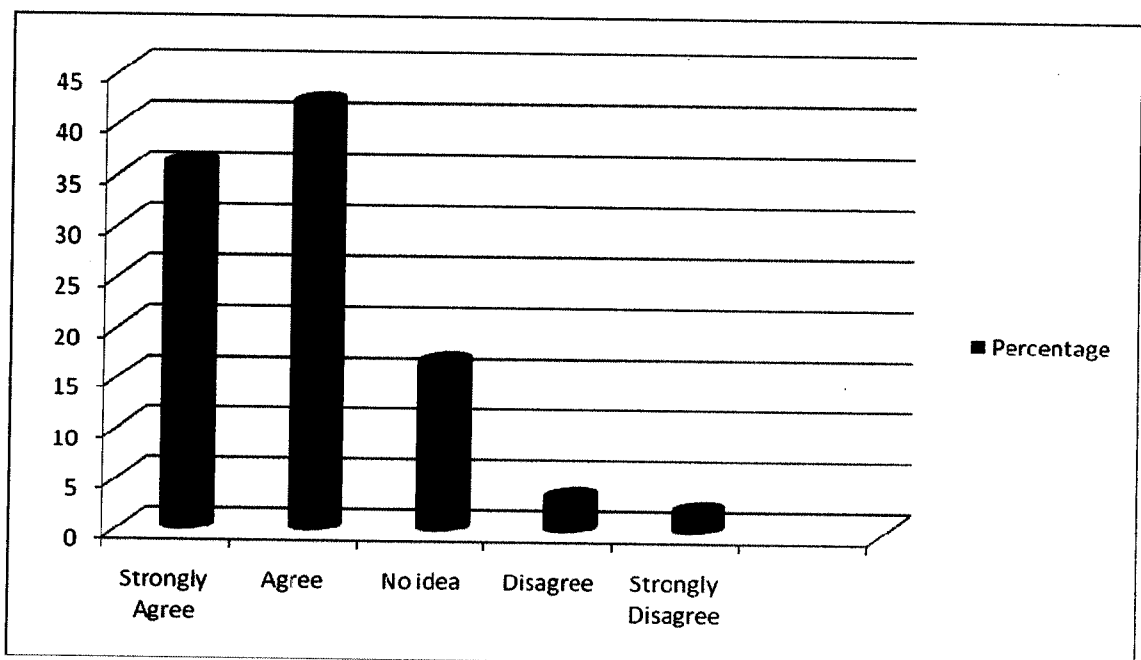
The above table gives the respondents opinion if being an active member in any health clubs or Organizations is beneficial. The majority (40.7%) of the respondents have agreed that it is beneficial to be an active member in any health club or organization, whereas 34.7 % of the respondents feel that it is beneficial sometimes and no respondents have disagreed.

Interpretation: The need for health clubs and welfare organizations is very much vital. The respondents when given common classes, workshops and medical camps will be easily motivate to live a healthful, happy, disease free living.

Table 4.1.10 Respondents view on possibility of occurrence of chronic diseases (Eg., Diabetes, Hypertension, arthritis , Asthma, Cardio vascular diseases) when minor signs and symptoms are neglected

S.No	Possibility of chronic disease	Frequency	Percent
1	Strongly Agree	54	36.0
2	Agree	63	42.0
3	No idea	25	16.7
4	Disagree	5	3.3
5	Strongly Disagree	3	2.0
	Total	150	100.0

Figure 4.1.10 Respondents view on possibility of occurrence of chronic diseases (Eg., Diabetes, Hypertension, arthritis , Asthma, Cardio vascular diseases) when minor signs and symptoms are neglected



The above table and figure gives the respondents view on occurrence of chronic diseases due to neglected minor signs and symptoms. It was found that majority (42%) of the respondents agrees and 36% of the respondents strongly agree, while 16.7% of the respondents have no idea and minority of the respondents disagrees.

Interpretation : The tendency to overlook minor signs and symptoms is the prevailing cause for major diseases and the respondents positively agree that the chronic diseases are due to neglecting of minor signs and symptoms. This is a major advantage where the middle aged people are prone for minor signs and symptoms of major diseases that may occur. These physical changes may be due to improper life style practices in earlier stages or lack of preventive action.

4.2. DEMOGRAPHIC INFORMATION OF THE RESPONDENT:

S.No	Age (in yrs)	Frequency	Percent
1	41-45	33	22.0
2	46-50	25	16.7
3	51-55	52	34.7
4	56-60	40	26.6
5			
	Total	150	100.0

Table 4.2.1 Age of the Respondent

On analysis of the above table , majority of the people who have attended the primary health centre is among the age group above 50 yrs and minority have attended the primary health centre constituting the age below 50 yrs, in the last one year. This shows that occurrence of disease is directly proportionate to age.

Table 4.2.2 Gender of the respondents

S.no	Gender	Frequency	Percent
1	Male	61	40.7
2	Female	89	59.3
	Total	150	100.0

On analysis of the above table, majority of respondents are female attending the primary health centre showing that the frequency of falling ill is little higher in female than male

Table 4.2.3 Occupation of the respondents

S.No	Occupation	Frequency	Percent
1	Self Employed	47	31.3
2	Government employed	6	4.0
3	Privately employed	62	41.3
4	Other Category	35	23.3
	Total	150	100.0

On analysis of the above table, majority (41.3 %) of the respondents were Privately employed, followed by 31.3% were self employed, 23.3% were in other category, and 4% were government employed.

Table 4.2.4 Income of the respondents

S.No	Income (in Rs.)	Frequency	Percent
1	less than 5000	103	68.7
2	5000 to 10000	45	30.0
3	10000 to 15000	1	.7
4	15000 to 20000	1	.7
5	Above 20000	0	0
	Total	150	100.0

On analysis of the above table, majority (68.7 %) of the respondents had family income less than Rs. 5000, followed by 30% of the respondents had family income between Rs.5000 to Rs 10000, 0.7% were earning above Rs.10,000 and Rs.15000 and none of the

respondents family annual income is above Rs 20,000. This shows that the lack of financial support also has a major role to play in health care services.

Table 4.2.5 No. of Children for the respondent

S.no	No.of Children	Frequency	Percent
1	No children	9	6.0
2	One	51	34.0
3	Two	75	50.0
4	Three	12	8.0
5	Four or more	3	2.0
	Total	150	100.0

On analysis of the above table, 50% of the respondents have two children, 34% have one child, 8% of the respondents have three children, 6% of the respondent did not have any children and only 2% of the respondents have four or greater than four children. This shows that the majority of the respondents have family size of four.

4.3 CHI SQUARE ANALYSIS

TABLE 4.3.1
CROSS TABULATION FOR AGE OF THE RESPONDENT AND THE NEED FOR
EMERGENCY CARE

Emergency care	Age (in yrs)				
	41-45	46-50	51-55	56-60	Grand Total
Never	11	14	24	14	63
Rarely	13	5	16	14	48
Sometimes	7	6	10	8	31
Frequently	2	0	2	1	5
Always	0	0	0	3	3
Grand Total	33	25	52	40	150

Null Hypothesis (Ho) : There is no significant relationship between age and need for emergency care.

Alternate Hypothesis (H_i) : There is a close significant relationship between age and need for emergency care.

Chi-Square Test for the above table:

Degrees of freedom 12

Level of significance is 0.05

The calculated value is 59.19

The tabulated value is 21.026

Inference: The calculated value is 59.19 and the tabulated value is 21.026 for the two variables age of the respondent and the need for emergency care. Since the calculated value is greater than the tabulated value, null hypothesis is rejected and they are dependent. From this we can interpret that when the age increases the need for emergency care increases proportionately.

TABLE 4. 3.2
CROSS TABULATION FOR AGE OF THE RESPONDENT AND THE LEVEL OF
AWARENESS ON PREVENTIVE HEALTH CARE PRACTICE

	Age				
Awareness	41-45	46-50	51-55	56-60	TOTAL
Very High	5	4	14	8	31
High	11	11	15	12	49
Moderate	14	3	17	12	46
Low	3	7	5	8	23
Very low	0	0	1	0	1
TOTAL	33	25	52	40	1

Null Hypothesis(Ho) : There is no significant relationship between age and the level of awareness on the preventive health care practices

Alternate Hypothesis (H₁) : There is a close significant relationship between age and the level of awareness on the preventive health care practices

Chi-Square Test for the above table:

Degrees of freedom 12

Level of significance is 0.05

The calculated value is 19.532

The tabulated value is 21.026

Inference: The calculated value is 19.532 and the tabulated value is 21.026 for the two variables age of the respondent and the level of awareness on the preventive health care practices. Since the calculated value is lesser than the tabulated value, null hypothesis is accepted and they are independent. From this we can interpret that there is no significant relationship between the age and the level of awareness on the preventive health care practices

TABLE 4.3.3
CROSS TABULATION FOR INCOME OF THE RESPONDENT AND THE NEED FOR
EMERGENCY CARE

	INCOME (IN Rs)					
Emergency care	< 5000	5000-10000	10000-15000	15000-20000	>20000	Total
Never	42	20	0	1	0	63
Rarely	34	13	1	0	0	48
Sometimes	20	11	0	0	0	31
Frequently	4	1	0	0	0	5
Always	3	0	0	0	0	3
TOTAL	103	45	1		1	150

Null Hypothesis (H₀) : There is no significant relationship between income and need for emergency care.

Alternate Hypothesis (H₁) : There is a close significant relationship between Income and need for emergency care.

Chi-Square Test for the above table:

Degrees of freedom 16

Level of significance is 0.05

The calculated value is 5.793

The tabulated value is 26.296

Inference: The calculated value is 5.793 and the tabulated value is 26.296 for the two variables income of the respondent and the need for emergency care. Since the calculated value is lesser than the tabulated value, null hypothesis is accepted there exist no significant relationship between income and need for emergency. From this we can interpret that the level of income is independent of the emergency situations to be admitted in the hospitals and the preventive health care is necessary universally irrespective of income.

TABLE 4.3.4
CROSS TABULATION FOR AGE OF THE RESPONDENT AND THE FREQUENCY
OF TAKING MEDICATION

Frequency of taking medication	AGE				Total
	41-45	46-50	51-55	56-60	
Never	11	7	20	17	55
Rarely	12	11	18	7	48
Sometimes	8	7	12	12	39
Frequently	2	0	2	3	7
Always	0	0	0	1	1
Total	33	25	52	40	150

Null Hypothesis (H₀) : There is no significant relationship between age and the frequency of taking medication

Alternate Hypothesis (H₁) : There is a close significant relationship between age and the frequency of taking medication.

Chi-Square Test for the above table:

Degrees of freedom 12

Level of significance is 0.05

The calculated value is 30.261

The tabulated value is 21.026

Inference: The calculated value is 30.261 and the tabulated value is 21.026 for the two variables age of the respondent and the frequency of taking medication practices. Since the calculated value is greater than the tabulated value, null hypothesis is rejected and they are dependent. From this we can interpret that there is a close significant relationship between the age and the frequency of taking medication and which strongly conveys that incidence of falling sick is higher with age and the preventive health care practices are the most essential tool to overcome the dependent living in the older age.

TABLE 4.3.5

CROSS TABULATION FOR AGE OF THE RESPONDENT AND THE FREQUENCY
OF HAVING PROBLEM WITH BODY WEIGHT

WEIGHT PROBLEM	AGE				Total
	41-45	46-50	51-55	56-60	
Never	8	6	14	6	34
Rarely	7	3	9	9	28
Sometimes	10	10	10	11	41
Frequently	5	4	11	7	27
Always	3	2	8	6	20
Total	33	25	52	40	150

Null Hypothesis (H₀) : There is no significant relationship between age and the frequency of feeling problem with body weight

Alternate Hypothesis (H₁) : There is a close significant relationship between age and the frequency of feeling problem with body weight

Chi-Square Test for the above table:

Degrees of freedom 12

Level of significance is 0.05

The calculated value is 13.643

The tabulated value is 21.026

Inference: The calculated value is 13.643 and the tabulated value is 21.026 for the two variables age of the respondent and the feeling problem with body weight. Since the calculated value is lesser than the tabulated value, null hypothesis is accepted and they are independent. From this we can interpret that there is a no significant relationship between the age and the frequency of feeling problem with body weight and this strongly conveys that the problem in body weight is a reflection in life style alteration which may occur at any part of middle age and earlier it occurs, more preventive modalities one has to follow.

TABLE 4. 3.6
CROSS TABULATION FOR OCCUPATION OF THE RESPONDENT AND THE
DURATION OF PRACTICE OF LIFE STYLE CHANGES

DURATION	OCCUPATION				Total
	Self-employed	Government Employed	Privately Employed	Other category	
Never	8	0	4	1	13
One month	5	0	11	6	22
Six months	6	0	4	6	16
One Year	16	1	11	8	36
Life Long	12	5	32	14	63
TOTAL	47	6	62	35	150

Null Hypothesis (Ho) : There is no significant relationship between occupation and the duration to practice new life style changes

Alternate Hypothesis (H_i) : There is a close significant relationship between occupation and the duration to practice new life style changes

Chi-Square Test for the above table:

Degrees of freedom 12
 Level of significance is 0.05
 The calculated value is 21.222
 The tabulated value is 21.026

Inference: The calculated value is 21.222 and the tabulated value is 21.026 for the two variables occupation of the respondent and the duration to practice new life style changes .

Since the calculated value is greater than the tabulated value, null hypothesis is rejected and they are dependent. From this we can interpret that there is a close significant relationship between the occupation of the respondent and the duration to practice new life style changes .Work timing and the extent of physical work has direct relation to practice of healthy life style changes where lack of time may lead to improper diet, improper rest, improper exercise etc.

TABLE 4. 3.7
CROSS TABULATION FOR INCOME OF THE RESPONDENT AND THE VIEW ON
FACTOR CAUSING DISEASE

		INCOME				
FACTOR CAUSING DISEASE		5000-10000	10000-15000	15000-20000	>20000	Total
Psychologically unhealthy	25	15	0	1	0	41
Physical weakness	21	8	0	0	0	29
Hereditary	4	3	0	0	0	7
Improper preventive health practices	20	8	1	0	0	29
Life style changes	33	11	0	0	0	44
TOTAL	103	45	1	1	0	150

Null Hypothesis (H₀) : There is no significant relationship between
Income and the view on factor causing disease

Alternate Hypothesis (H₁) : There is a close significant relationship between
Income and the view on factor causing disease

Chi-Square Test for the above table:

Degrees of freedom 16

Level of significance is 0.05

The calculated value is 9.094

The tabulated value is 26.296

Inference: The calculated value is 9.094 and the tabulated value is 26.296 for the two variables income and the view on factor causing disease

Since the calculated value is lesser than the tabulated value, null hypothesis is accepted and they are independent. From this we can interpret that there is no significant relationship between the income and the view on factor causing disease. Financial insufficiency is not an hurdle at any point of time to practice healthy life style practices.

CHAPTER 5

This chapter deals with the summary of findings, suggestions and recommendations, conclusion and directions for future research.

5.1 SUMMARY OF FINDINGS

On the basis of the analysis of the data collected through the interview schedule from the respondents the following points can be inferred.

5.1.1 GENERAL INFORMATION OF THE RESPONDENTS

- ❖ The majority (42%) of the respondents are not subjected to any emergency and the frequency of having any illness, injury or any condition that needed care right away in a clinic or emergency room.
- ❖ The majority (53.3%) of the respondents self –evaluate their overall health status to be in good physical health
- ❖ The majority (34.7%) of the respondents undergo health check up only when sick.
- ❖ The majority (32.7%) of the respondents believe themselves to have high level of awareness on Preventive Health care practices.
- ❖ The majority (29.3%) of the respondents view on the factor responsible to cause disease was found to be life style changes.
- ❖ The majority (54.7%) of the respondents have strongly agreed that adapting oneself to healthy life style practices is necessary.
- ❖ The majority (31.3%) of the respondents idea on the hurdle to practice preventive health care practices is lack of awareness
- ❖ The majority (33.3%) of the respondents view that the life threatening diseases can be prevented sometimes.
- ❖ The majority (40.7%) of the respondents have agreed that it is beneficial to be an active member in any health club or organization
- ❖ The majority (42%) of the respondents agree that occurrence of chronic diseases are due to neglected minor signs and symptoms

5.1.2 DEMOGRAPHIC INFORMATION OF THE RESPONDENT:

- ❖ The majority (34.7%) of the respondent belonged to the age group of 50-55 yrs.
- ❖ The majority (59.3%) of the respondents were female.
- ❖ The majority (41.3 %) of the respondents were Privately employed.
- ❖ The majority (68.7 %) of the respondents had family income less than Rs. 5000
- ❖ The majority (50%)of the respondents have two children

5.1.3 FINDING FROM CHI-SQUARE TEST

- ❖ When Chi-Square Test is applied for age of the respondent and the need for emergency care, the factors had close association. This shows that when the age increases the need for emergency care increases proportionately.
- ❖ When Chi-Square Test is applied for age of the respondent and the awareness on preventive health care practices, the factors had no association. This explains that there is no significant relationship between the age and the level of awareness on the preventive health care practices.
- ❖ When Chi-Square Test is applied for income of the respondent and need for emergency care, there exist no significant relationship. We can interpret that the level of income is independent of the emergency situations to be admitted in the hospitals and the preventive health care is necessary universally irrespective of income.
- ❖ When Chi-Square Test is applied for age of the respondent and the frequency of taking medication there exists a close significant relationship and they become dependent variables. This association strongly conveys that incidence of falling sick is higher with age and the preventive health care practices are the most essential tool to overcome the dependent living in the older age.



- ❖ When Chi-Square Test is applied for age of the respondent and the frequency of feeling problem with body weight there exists no significant relationship. This association suggests that the problem in body weight is a reflection in life style alteration which may occur at any part of middle age and earlier it occurs, more preventive modalities one has to follow.
- ❖ When Chi-Square Test is applied for occupation of the respondent and the duration to practice new life style changes, there is a close significant relationship. Work timing and the extent of physical work has direct relation to practice of healthy life style changes where lack of time may lead to improper diet, improper rest, improper exercise etc.
- ❖ When Chi-Square Test is applied income of the respondent and their view on factor causing disease there exist no significant relationship. Financial insufficiency is not a hurdle at any point of time to practice healthy life style practices

5.2 SUGGESTIONS AND RECOMMENDATIONS

- ❖ Primary health centers are the cornerstone of the rural health care system. The preventive health care should be predominant over the clinical and curative concerns in these centers. Primary health centers should play an adversarial role in local efforts to implement national preventive health policies.
- ❖ Life style, diet and environment are being identified as causes of ailments that the health care system of the country has not been able to keep pace with. It is noteworthy that our health system is primarily geared to cope with infectious diseases while the instance of chronic diseases which starts to develop at middle age is being neglected. Various awareness programs and camps are to be organized.

- ❖ Various screening tests have to be arranged periodically in order to monitor the minor signs and symptoms and awareness on healthy life style practices have to be insisted at the primary health centers.
- ❖ The voluntary organizations have to supplement the efforts of the government. The schemes introduced by government will be reached effectively if it reaches the people through the voluntary organization.
- ❖ Intake on Fruits and vegetables should be insisted which will save one's life. These foods provide the body with the raw materials of good health. Antioxidants, example, help the body to prevent damage. One has to eat more fruits and vegetables -- 7 to 9 servings every day is a great goal.
- ❖ Maintaining ideal weight, exercising and eating right can add years to the life of a 40-year-old because extra weight is hard the body, it is hard on the heart, which has to pump more blood. It is hard on the knees, which have to support more weight. It is hard on the emotions, which have to deal with guilt and blame. Maintaining ideal weight should be sustained
- ❖ Certain routine tests at home or with the help of a clinic should be recommended by health care providers in order to self - monitor. These are things like blood pressure, heart rate and hip-to-waist ratio. These tests tell whether a person is living a lifestyle that promotes health.
- ❖ Middle aged men termed as the "Sandwich Generation", who are taking care of both kids and parents. Being in the middle of the "sandwich" is incredibly demanding and stressful -- so much so that it can create illness. They need more emotional stability combined with coping up with stressful situation from the external environment. Primary health care should also insist on counseling sessions mind relaxing techniques.

5.3 CONCLUSION

Optimum health starts with a man's observance of good habits—healthy thoughts, choices, and actions that include moderate eating, proper rest and sleep adequate exercise and sunlight, natural supplements, and harmonious relations.

It was found from the study that many of them simply can't, not just because they are financially or physically unable, but more because they are carrying the burden of depression related to their declining health, obesity, stress, dependency on different substances, or lifestyle as one factor and lack of awareness as a contributing factor

Other reasons for the decline in the number of people following a healthy lifestyle are because they feel they just can't afford it. For example, individuals with lower levels of socioeconomic means have a higher rate of inconvenience with their body weight than individuals of higher socioeconomic means. This might be because they are forced to work longer hours for lower pay, or hold more than one job, and therefore don't have the time or energy to exercise on a regular basis. These same rushed individuals are more likely to depend on fast food or other shortcuts that are detrimental to health.

The findings of the study suggest that healthy habits adopted later in life can still make a difference, though. Adopting healthy habits in 40s and 50s is not too late to lower the risk of many chronic diseases (Eg., Diabetes, Hypertension, arthritis , Asthma, Cardio vascular diseases) simply by living better.

5.4 DIRECTIONS FOR FUTURE RESEARCH

- ❖ From the study further research can be done on the performance and productivity changes due to unhealthy life style of the middle aged men at their work place.
- ❖ Further study can be narrowed down to frequency of occurrence of certain particular disease (Eg., Diabetes, Hypertension, arthritis , Asthma, Cardio vascular diseases) and their relationship to life style changes.
- ❖ Similar study can be applied to children and adult group to study the depth of harm that the unhealthy life style can cause starting at juvenile stage and in younger adults.

APPENDIX 1

A STUDY ON PREVENTIVE HEALTH CARE PRACTICES AMONG MIDDLE AGED PEOPLE WITH RESPECT TO UDAGAMANDALAM

QUESTIONNAIRE

Demographic Data

1. Name :

2.Age : 41-45 yrs ☐ 46-50 yrs ☐ 51 – 55 yrs ☐ 56-60 yrs ☐

3.Gender : Male ☐ Female ☐

4.Occupation : Self- employed ☐

Government Employed ☐

Privately Employed ☐

Other category ☐

5.Family Annual Income :Less than 5000 ☐

5000 to 10000 ☐

10000 to 15000 ☐

15000 to 20000 ☐

Above 20000 ☐

6.Marital Status : Single / Married

7.No.of Children : 0 ☐

1 ☐

2 ☐

3 ☐

1. In the last 6 months, how often did you have any illness, injury or any condition that needed care right away in a clinic or emergency room

- a) Never ☐
- b) Rarely ☐
- c) Sometimes ☐
- d) Frequently ☐
- e) Always ☐

2. How would you evaluate your overall health. Would you say you are:

- a) In good physical health. (No significant illnesses or disabilities. Only routine medical care such as annual checkups required.) ☐
- b) Mildly physically impaired. (You have only minor illnesses and/or disabilities which might benefit from medical treatment or corrective measures.) ☐
- c) Moderately physically impaired. (You have one or more diseases or disabilities which are either painful or which require substantial medical treatment.) ☐
- d) Severely physically impaired. (You have one or more illnesses or disabilities which are either severely painful or life threatening, or which require extensive medical treatment.) ☐
- e) Totally physically impaired. (Confined to bed and requiring full-time medical assistance or nursing care to maintain vital bodily functions.) ☐

3. How often you go for routine health check ups?

- a) Every 3 months once ☐
- b) Every 6 months once ☐
- c) Yearly once ☐
- d) Only when sick ☐

4. What is your level of awareness on preventive healthcare practices?

a) Very high

☐

b) High

☐

c) Moderate

☐

d) Low

☐

e) Very Low

☐

5. What do you think the factor responsible to cause diseases

a) Psychologically unhealthy

☐

b) Physical weakness

☐

c) Hereditary

☐

d) Improper preventive health practices

☐

e) Life style changes

☐

6. Do you agree that adapting oneself to healthy lifestyle practices is necessary?

a) Strongly Agree

☐

b) Agree

☐

c) No idea

☐

d) Disagree

☐

e) Strongly Disagree

☐

7. What do you think is the hurdle to practice preventive health care practices?

a) Lack of financial support

☐

b) Laziness

☐

c) Lack of time

☐

d) Lack of awareness

☐

e) Lack of Confidence

☐

8. Do you think life threatening diseases can be prevented by preventive health care practices?

- a) Never ☐
- b) Rarely ☐
- c) Sometimes ☐
- d) Frequently ☐
- e) Always ☐

9. Do you think it is beneficial to be a active member in any health clubs or organizations?

- a) Never ☐
- b) Rarely ☐
- c) Sometimes ☐
- d) Frequently ☐
- e) Always ☐

10. Do you think minor signs and symptoms when neglected leads to chronic disease (Eg., Diabetes, Hypertension, arthritis , Asthma, Cardio vascular diseases)

- a) Strongly Agree ☐
- b) Agree ☐
- c) No idea ☐
- d) Disagree ☐
- e) Strongly Disagree ☐

11. What is the time duration that is necessary to adapt to the new, healthy, lifestyle practices on giving awareness on the same?

- a) Immediately ☐
- b) One week ☐
- c) One month ☐
- d) Two months ☐

12. How long can you practice the new lifestyle changes and dietary alterations if made?

- a) Never ☐
- b) One month ☐
- c) Six months ☐
- d) One Year ☐
- e) Life Long ☐

13. Which of the following best describes your capacities to perform everyday activities:

- a) You can perform all physical activities of daily living without assistance. (Excellent capacity) ☐
- b) You can perform all physical activities without assistance but may need some help with the heavy work such as laundry and housekeeping. (Good capacity) ☐
- c) You regularly require help with certain physical activities and/or heavy work but can get through any single day without help. (Moderate capacity) ☐
- d) You need help each day but not necessarily throughout the day or night. (Severely impaired capacity) ☐
- e) You need help throughout the day and/or night to carry out the activities of daily living. (Completely impaired capacity) ☐

14. How often you take medication ?

- a) Never ☐
- b) Rarely ☐
- c) Sometimes ☐
- d) Frequently ☐
- e) Always ☐

15. Have you ever felt you had a problem with your weight?

(underweight, overweight, anorexia, bulimia)

- a) Never ☐
- b) Rarely ☐
- c) Sometimes ☐
- d) Frequently ☐
- e) Always ☐

APPENDIX 2

HEALTHY LIVING FOR MIDDLE-AGED MEN

Diet and Lifestyle Changes for Optimum Health

Optimum health starts with a man's observance of good habits—healthy thoughts, choices, and actions that include moderate eating, proper rest and sleep adequate exercise and sunlight, natural supplements, and harmonious relations.

Giving up smoking, which is a self-imposed pollution, lowers risk of developing lung cancer, bronchitis, emphysema and heart attacks. Sense of taste and smell will improve and breathing becomes easy.

Here, then, are health tips to promote high-level of health, which middle-aged men can put to practice today because tomorrow can be late.

Diet and Lifestyle Leading to a Healthy Living

Healthy Eating Habits

Eat foods that are high in fiber. Fibers have cholesterol-lowering properties and are present in most fruits, vegetables, beans, and grains. A balanced diet includes carbohydrates, proteins, and fibers. A “Cut Down on” sugar intake will help prevent glucose intolerance, and tooth decay.

Since middle-aged men are salt-sensitive, use less salt and sauces in cooking as salt causes body to retain water, which may lead to high blood pressure. Use spices and herbs to flavor food instead of soya, tomato, or chili sauces. Avoid canned or salted foods. Instead, use fresh meat and vegetables.

Eat less fatty food to reduce risk of heart disease. Trim away all fat and skin from meat before cooking. Do not eat more than 2 to 3 eggs a week. Boil, bake, grill, roast or stew food instead of deep-fry. Use margarine in place of butter.

The human body needs fiber for healthy digestion. Eating more cereals, fresh fruits, vegetables prevent constipation. Avoid creamy cakes and pastries.

Drink at least eight glasses of water daily to help flush out impurities from the systems. Limit alcohol intake to moderate. Alcohol abuse is the culprit behind high blood pressure and heart disease.

Natural Dietary Supplements

Food nutrients are essential for cell growth for the body to function efficiently. Daily calcium supplement is a critical factor in the prevention of osteoporosis in men. Beans, and dried peas, bean curd and soya, and leafy green vegetables are good sources of calcium.

Middle-aged men have greater risks in developing cardiovascular diseases. A daily supplement of vitamins C and E, carotenoids, as well as omega-3 fish oil promotes healthy cardiovascular functions, and normal cell growth.

Other natural supplements beneficial to a man's health are present in dried fruits and green leafy vegetables. Cabbage, broccoli, Lima beans, and green peas are good sources of iron, which helps make hemoglobin that transports oxygen to the body tissues. Extracts of ginger and turmeric boost the body's resistance to both mental and physical stress. Whole, fresh garlic is beneficial to the immune system, against viruses, bacteria, parasites, and fungi.

Regular Exercise

Heart disease is lesser among men who are physically active than in those who are sedentary, overweight or obese middle aged men. Cardiovascular fitness slows the process of hardening of the arteries, reduces the risk of heart attack and stroke, keeps weight down and reduces the risk of diabetes, reduces bad cholesterol and increases good cholesterol level, and puts aging at bay.

A good exercise begins with 5 minutes of stretching exercises and ends with 5 minutes of cooling-down stretches. Remember, the aim is to exercise 3 to 5 times a week, 15 to 60 minutes each time to build strength. Choose an exercise according to body strength, endurance, mobility, and cardiovascular-pulmonary performance. Start slowly and gradually increase the amount and duration of the workout.

Healthy Relationships and Social Interactions

“Distress promotes poor health habits and heart disease,” says Researcher Peter P. Vitaliano, PhD, of the University of Washington in the May issue of the journal *Psychosomatic Medicine*.

Healthy relations bring about extra benefits. It enables a man to function at a high level of emotional health.

Spend time with family. Try to learn new hobbies and skills. Perform voluntary works. A good work is a clear statement of a vivacious spirit. Keep the mind active. The challenge for the middle-age man is to stay in touch with current events, to adapt to life, and to aspire for achievements—endeavors that are within his reach.

Healthy living helps reverse stress, and frustration that are part of middle age. Healthy relationships and social interactions can motivate men to practice healthy habits. In addition, doctor's suggestions for diet, exercise, nutrition, and preventive health care can help prevent further health risks.

APPENDIX 3

LONGEVITY TO-DOS FOR YOUR 40S

By your 40s, you may think you are set in your ways -- time to shake it up. Your 40s are a great time for a lifestyle overhaul. Every time you notice a little ache or pain -- let that make you more determined to be as active as possible, to live at a healthy weight and to have a great attitude. Pick one or two items from this To-Do list each month and make your 40s your healthiest decade yet. You'll feel great and live longer too.

1. Screenings, Screenings, Screenings

From mammograms to prostate checks -- your 40s are a time to begin making (and keeping) appointments for screenings. Depending on your gender, family history and own health, the screenings you need will change, but what doesn't change is that you are going to need some screenings in your 40s -- everyone does. Make an appointment today to talk with your doctor about prevention and screenings.

2. Focus on Relationships

Studies have shown that being married actually increases your life span. Research is also showing that having a strong network of friends and family can help, too. Other people can help you reduce your stress and keep you from developing bad habits. (Of course, they can lead you down the path of bad habits, too). Invest time in cultivating healthy relationships with people who are good for you -- your spouse, your children and your friends. Make an effort to strengthen those relationships for your long term physical and emotional health.

3. Add More Fruits and Vegetables

Fruits and vegetables will save your life. These foods provide your body with the raw materials of good health. Antioxidants, for example, help your body to prevent damage. You need to eat more fruits and vegetables -- 7 to 9 servings every day is a great goal. Start by adding 2 servings every day this week.

4. Your Perfect Weight

Extra weight is hard on your body. It is hard on your heart, which has to pump more blood. It is hard on your knees, which have to support more weight. It is hard on your emotions, which have to deal with guilt and blame. Losing the weight is great. The good news is that creating a healthy lifestyle now can still help to prevent and even reverse the damage done. Losing the weight, exercising and eating right can add years to the life of a 40-year-old. Don't think it's too late -- you can still do a lot be healthier and live longer.

5. Monitor Your Lifestyle

Those tests your doctor gives you are just a part of the prevention picture -- there are also simple tests you can do at home or with the help of a clinic. These are things like blood pressure, heart rate, your hip-to-waist ratio and more. These tests tell whether you are living a lifestyle that promotes health. Get out a piece of paper and create a health lifestyle log today.

6. Put Yourself in "Time Out"

If you haven't established a daily relaxation habit, now is the time to start. You need some way of letting go of the business of the world. This will reduce stress and help prevent chronic illnesses like high blood pressure. Find some outlet, a way to let the day drop away for just a few minutes.

7. Make Exercise Fun

Whether you've been exercise for years or need to get started, be sure that your exercise is fun. Exercise can be so much more than just moving your feet on a treadmill. Find ways to use exercise to socialize with other people, to learn new things and to challenge different parts of your body and mind. Don't accept exercise drudgery -- find a way to make it fun.

8. Find a Great Doctor

Your doctor becomes an important part of your longevity plan in your 40s. You need a doctor who can help monitor your health and make sure you get all the right

you want them managed. If you don't have a good doctor, time to start looking. First write out what you want in a doctor and then be sure to ask lots of questions. You are looking for a doctor who "fits" with your style and approach to health.

9. Master Sleeping

Sleep is hugely important for your health. In the early 1900s, people got an average of 9 hours of sleep a day -- now it had dropped to less than 7.5. With commuting, long hours and (let's admit it) lots of TV channels and the Internet, we just don't seem to have as much time for sleep. That's not good for your health. Studies link poor sleep habits with heart conditions and other serious health outcomes. Make a pledge to get to bed early and become a master at falling asleep.

10. Prepare for Being a Sandwich

The "Sandwich Generation." That's the name for people who are taking care of both kids and parents. Being in the middle of the "sandwich" is incredibly demanding and stressful -- so much so that it can create illness. If you are a caregiver, be sure to find some way of relaxing and taking just 5 minutes for yourself every day. If you think you might become a caregiver for a parent, take some time to make plans and arrangements ahead of time.

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