

## Health and hygienic activities of dalits, a special reference with arunthathiars in western tamil nadu

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### Abstract

Health is a common right to people in all aspects. According to Article 25 of the Universal Declarations of Human Rights, everyone has the right to a standard of living, adequate for the health of himself, including food, clothing, housing, medical care and necessary services. Though “health is wealth”, a popular saying in almost every family world over, one seldom pays attention to the fact that it is the wealth. It determines that health and access to health care without wealth can remain merely an illusion. In India Caste system plays an important role in distribution of power and adequate services. In it, Dalits are most depressed and under drowned people, especially in rural areas they don’t even have a permanent work and sufficient income and they do not acquire an adequate service of health. Dalits don’t have basic knowledge towards health care and preventive measures and they don’t have a proper health care service too. This conclusion however raises another obvious question i.e., whether one’s social or caste background determines his economic status, and consequently his access to better health care services as well. Without an economic stability and basic knowledge towards health, how they will take care of themselves and their family? Dalits are treated as untouchables till now then who will direct their health care activities? Then what is the part of government in their health progress? What is their present socio- economic and educational condition? What is their attitude towards disease and preventive measures? Who will be more responsible in families’ health? Answering these questions becomes more crucial not only to understand the health status of any community or caste but also to identify the various factors responsible for the same.

The main focus of the study is to study the Socio- Economic condition and educational status, to understand their health condition and Preventive Measures performed to protect their health and to know about the responsibility of the government and a family member in their family members health.

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### Introduction

India is one of the developing nations of the modern world. The country has been engaged in efforts to attain development and growth in various areas such as building infrastructure, production of food grains, science of medicine, technology and spread of education. The life expectancy has increased and many diseases have been controlled. However, there are many areas in which Indian society is experiencing most of the problems. Some of these problems have their roots in our colonial past while others are related to demographic changes, socio-political conditions and cultural processes. Social Problem is objectively as well as subjectively oriented social phenomenon. Objectively, poverty implies a dehumanizing condition in which people are unable to look after the basic needs. Subjectively poverty stands for perceived deprivation. As such it is relative and anybody can feel poor by comparing himself or herself with a rich person. Poor people lack the necessary resources and capacity to satisfy basic needs like food, shelter, health and education. In fact, they live under difficult conditions which are not conducive for development of their human potential. For healthy human development a child needs environmental support for survival and development. Poverty interferes with development in many ways. For instance lack of or inadequate nutrition arrests mental development during early childhood. The issue of massive poverty, food shortages, lack of basic hygiene, spread of incurable diseases, ethnic cleansing, and lack of education inhibits the development of society. Moreover, these problems are related to each other and it can seem hard to address one without addressing all of them. The very nature of social problem suggests that society itself is a problem. No country has perfected a society where all are happy and where no problems exist. Perhaps the individual nature of humans prevents this and as many people state that perfection may not be an achievable goal. In India, especially in rural areas, amidst an unprecedented rate of economic growth, the incidence of income poverty, human deprivation, gender inequality and discrimination, violation of women’s rights and social exclusion continue to be

widespread and persistent, especially among the scheduled castes (SCs) and scheduled tribes (STs). A number of scheduled caste, scheduled tribe and backward communities have been put to discrimination for many centuries. They are socially disadvantaged and are deprived from the experiences necessary for development on account of their membership of specific groups. In this sense they are doubly deprived. The Scheduled Caste and Scheduled Tribe population together constitute nearly 20.04% of the Tamil Nadu state population – Scheduled Caste population accounting for 19 % and the Scheduled Tribe 1.04% of the State population of 6,24,05,679 ( 2001 Census ). The Indian census of 2001 reported the Arunthathiyar population to be 777,169. In it 70% of the Scheduled Castes are living in rural areas. Arunthathiyar are one of the most marginalized social groups or castes from Tamil Nadu and Sri Lanka. Along with Pallar and Parayar, they form the largest Dalit groups in the southern and northern regions of Tamil Nadu. Socially disadvantaged groups of Scheduled Castes (SCs) and Scheduled Tribes (SCs) need a constant special focus for their socio- economic advancement. Within SCs, Arunthathiyars is a well-known and yet hither to ignore fact that the Arunthathiyars have been the oppressed of the oppressed in the Indian society. However this important and distinct segment of Tamil society has been confronting all round injustice imposed on it. When compared with the other vocal elements of the dalit community, though, they themselves still face untouchability related abuses, the plight of the Arunthathiyars is the most severest as they are considered as most degraded and despised as low even by these Dalit communities than Pallars and Parayars (other Dalits in Tamil Nadu).

“Health is Wealth” is the common proverb and health concern becomes a right of every person today. Health is the general condition of a person in all aspects. For happy living, it is necessary to remain healthy and free from any diseases. The state of disease is the opposite to the state of health. Diseases may be the result of infection in the body such as typhoid or chickenpox, or they may be related to the physiology of the body such as hypertension and diabetes. The very nature of social problem suggests that society itself is a problem. No country has perfected a society where all are happy and where no problems exist. Perhaps the individual nature of humans prevents this and as many people state that perfection may not be an achievable goal. It would be easy to assume that a social problem only affects the people whom it directly touches. Easy spread of disease for instance may tamper with the society at large. In the Hospitals, at home (domestic) and everyday life settings, hygiene practices are being employed as preventative measures to reduce the incidence and spreading of disease. The terms cleanliness (or cleaning) and hygiene are often used interchangeably, which can cause confusion. In general, hygiene mostly means practices that prevent spread of disease-causing organisms. Since cleaning processes (e.g., hand washing) remove infectious microbes as well as dirt and soil, they are often the means to achieve hygiene. Other uses of the term appear in phrases including: body hygiene, personal hygiene, sleep hygiene, mental hygiene, dental hygiene, and occupational hygiene are used in connection with public health. *Hygiene* is also the name of a branch of science that deals with the promotion and preservation of health, also called *hygienic*. Home hygiene pertains to the hygiene practices that prevent or minimize disease and the spreading of disease at home (domestic) and in everyday life settings such as social settings, public transport, the work place, public places etc. Hygiene practices vary widely and what is considered acceptable in one culture might not be acceptable in another. Since most of the poor people are being affected by all kinds of the diseases due to poverty or low income who are none other than SCs (Dalits) STs and some backward castes. It is important to mention that this paper exclusively deals with the Arunthathiyars community (Dalits in Tamil Nadu) and therefore we have to know about the term Dalits and how they have been push into lowest level of the caste system thereby they are proven to the diseases.

The term Dalit means downtrodden and depressed Classes of the Indian Society. Dalit also called Outcaste is a self-designation for a group of people traditionally regarded as of Untouchables by the caste system and unsuitable for making personal relationships. Dalits are a mixed population of numerous caste groups all over South Asia and speak various languages. Although the caste system has been abolished under the Indian constitution, there is still discrimination and prejudice against Dalits in India. In the context of traditional Hindu society, Dalit status has often been historically associated with occupations regarded as ritually impure, such as any involving leatherwork, butchering, or removal of animal carcasses, and waste. Dalits work as manual laborers cleaning streets, latrines, and sewers due to their poor income and forced to accept these kinds of jobs. Engaging in these activities was considered to be polluting to the individual, and this pollution was considered contagious. As a result, The Dalits were commonly segregated, and banned from full participation in Hindu social life. For example, in the early years, they are not allowed to enter any temple or any school, and were required to stay outside the village. Still in some pockets of Indian village this kind of discriminated is being faced by them. Elaborate precautions were sometimes observed to prevent incidental contact between Dalits and other castes. Discrimination against Dalits still exists in rural areas in the private sphere, in everyday

matters such as access to eating places, schools, temples and water sources. It has largely disappeared in urban areas and in the public sphere. Some Dalits have successfully integrated into urban Indian society, where caste origins are less obvious and less important in public life. In rural India, however, caste origins are more readily apparent and Dalits often remain socially excluded from local religious life, though some qualitative evidence suggests that its severity is fast diminishing. Since the Dalits are facing multi level social exclusion, social defamation and social discrimination in the Indian society and that may be the reason that they are not able to give importance to hygiene and health as whole. Thus, one can make a hypothesis that caste status determines health status of any person in the Indian Social System.

At the time of the creation of the World Health Organization (WHO), in 1948, health was defined as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". In 1986, the WHO, in the Ottawa Charter for Health Promotion, said that health is "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities." Classification systems such as the WHO Family of International Classifications (WHO-FIC), which is composed of the International Classification of Functioning, Disability, and Health (ICF) and the International Classification of Diseases (ICD) also define health, as "Overall health is achieved through a combination of physical, mental, and social well-being, which, together is commonly referred to as the Health Triangle"

Social determinants of health are the economic and social conditions under which people live which determine their health. They are "societal risk conditions", rather than individual risk factors that either increase or decrease the risk for a disease, for example for cardiovascular disease and type II diabetes. As stated in *Social Determinants of Health: The Solid Facts* (WHO, 2003): "Health policy was once thought to be about little more than the provision and funding of medical care: the social determinants of health were discussed only among academics. This is now changing. While medical care can prolong survival and improve prognosis after some serious diseases, more important for the health of the population as a whole are the social and economic conditions that make people ill and in need of medical care in the first place. Nevertheless, universal access to medical care is clearly one of the social determinants of health." For instance, the social determinants of health have been recognized by several health organizations such as the Public Health Agency of Canada and the World Health Organization to greatly influence collective and personal well-being. A list of determinants of health — only some of which are social determinants — is follows, income and social status, social support networks, education and literacy, i.e. health literacy, employment/Working conditions, Social environments, Physical environments, Life skills, Personal health practices and coping skills, Healthy child development, Biology and genetic endowment, Health services, Gender, Culture and Sexual orientation. The term social determinants of health grew out of the search by researchers to identify the specific exposures by which members of different socio-economic groups come to experience varying degrees of health and illness. While it was well documented that individuals in various socio-economic groups experienced differing health outcomes and the specific factors and means by which these factors led to illness remained to be identified. Overviews of the concept, recent findings, and analysis of emerging issues are available. All these formulation share a concern with factors beyond those of biomedical and behavioral risk. The Cultural and Structuralist Approaches provide space to deliberate with regard to socio-economic condition and health of any person in the society. These materialist/structuralist conceptualizations have been refined such that analysis is now focused upon three frameworks by which social determinants of health come to influence health. These frameworks are: (a) materialist; (b) neo-materialist; and (c) psycho-social comparison. The materialist explanation is about how living conditions – and the social determinants of health that constitute these living conditions—shape health. In the case of the neo-materialist explanation extends the materialist analysis by asking how these living conditions come about. With regard to psychosocial comparison and its explanation considers whether people compare themselves to others and how these comparisons affect health and wellbeing and also the concept relative deprivation was being discussed by the R.K.Merton. The individuals experience varying degrees of positive and negative exposures over their lives that accumulate to produce adult health outcomes. Generally speaking, the overall wealth of nations is a strong indicator of population health. But within nations, socio-economic position is a powerful predictor of health as it is an indicator of material advantage or disadvantage over the lifespan. It is also important to mention that the material conditions of life determine health by influencing the quality of individual development, family life and interaction and community environments. In addition, the material conditions of life lead to differing likelihood of physical (infections, malnutrition, chronic disease, and injuries), developmental (delayed or impaired cognitive, personality, and social development), educational (learning disabilities, poor learning, early school leaving), and social (socialization, preparation for work, and family life) problems. Material conditions of life also lead to differences in

psychosocial stress: The fight-or-flight reaction—chronically elicited in response to threats such as income, housing, and food insecurity among others—further weakens the immune system which leads to increased insulin resistance, greater incidence of lipid and clotting disorders, and other biomedical insults that are precursors to adult disease. Most of the social determinants of health research simply focus on determining the relationship between a social determinant of health and health status. Therefore, a researcher may document that lower income is associated with adverse health on people. Or a researcher may demonstrate that food insecurity, living in crowded housing is related to poor health status.

**Material and Methods:** In this backdrop, the present paper intended to analyze the socio- economic condition of Arunthathiar and its impact on health condition; to know about the responsible person towards the family member's health and the Preventive measures they carried out and awareness about communicable diseases and the participation of other health workers in health care activities. In order to realize objectives four districts from the western part of Tamil Nadu namely, Coimbatore, Erode, Nammakkal and Dharmapuri were chosen for pilot study. Purposive sampling method is used to describe the healthy life style of Arunthathiar community. 80 samples were collected through pilot study. The researcher used simple frequency table and factor analysis to describe the present health condition of Arunthathiar. Concentrations of Arunthathiar were chosen as study district based on the information of 2001 census. To find out the impact of socio- economic condition on health while using the data related to age, education, occupation and income with regard to health condition and health problems. Gender is the responsible variable in family health concern and the activities as they performed to prevent the family health is considered to judge the second objective. The knowledge about diseases, its effect on body and treatment is considered to know about the level of awareness among Arunthathiar. The outcome of results is follow.

**Result and Discussions:** The Considering fact predict that the poor people are vulnerable to avail the basic amenities like water, food and health care in general and Arunthathiar in particular. For instance, In Erode 100 percent of respondents is highly suffered by the health problems followed by Nammakkal as 95 percent and Dharmapuri around 75 per cent. In Coimbatore, where the people are living in urban setup their life style is better than the rural people. Sixty five per cent of Arunthathiar are suffering from anyone of the health problem in Coimbatore district. The urban respondents are gaining the health care facilities easily; this is precious because of close proximity of hospitals are available in urban areas. Distance is one of the policy variables to determine the poor health care. In Erode 100 percent of respondents are highly suffered by health problems followed by Nammakkal as 95 percent of respondents have health problem. The district wise distribution of health has moderate level of significance. These differences made us to use the statistical technique to find out the statistical significant differences. The Chi-Square test is being employed and test has been confirmed that there are differences between the districts with respect to availing health care facilities at 5 % level of significance.

**Table 1: Distribution of the Respondent's Health Problem**

Districts	Heath Problems		Percent
	Total of Respondents	No. of person affected	
Coimbatore	20	13	65.0
Erode	20	20	100.0
Nammakkal	20	19	95.0
Dharmapuri	20	15	75.0
<b>Total</b>	80	67	83.8
<i>x<sup>2</sup>; Sig. Level</i>	<b>12.032; Sig. 0. 007</b>		

In the case of urban area, specifically in Coimbatore most of the respondents are being suffered by Ulcer, Frailty whereas the construction workers are highly reporting about the skin diseases or skin infection are often affecting them. In rural area people are commonly suffered by nee pain, Joint pain and slipped disc. It is because of their work burden as they are doing agricultural work, where they continuously work for a whole day. Two fourth of female and male are suffering from dental problems. It's all because of a habit of chewing the Betel nut and *Pan*. Thus, as aforementioned facts explore the health problem of this community and therefore it is due to respondents' life style and working nature.

**Table 2: Distribution of the Respondents by their Selected Personal background characteristics**

Background Characteristics	Health Problem		Total	
	%	No	%	No
<b>1. Sex</b>				
Male	82.9	29	100.0	35
Female	84.4	38	100.0	45
<i>x<sup>2</sup>; Sig. Level</i>	0.036; P < NS		--	
<b>2. Current Age (in Yrs.)</b>				
Up to 30 years	66.6	20	100.0	30
Up to 40 years	88.9	24	100.0	27
<40	100.0	23	100.0	23
<i>x<sup>2</sup>; Sig. Level</i>	11.420 P; < 0.001		--	
<b>3. Marital Status</b>				
Married	71.4	10	100.0	14
Si. / Wi. / Se. / Di	86.4	57	100.0	66
<i>x<sup>2</sup>; Sig. Level</i>	1.893 P; < NS		--	
<b>4. Educational Status</b>				
Illiteracy	88.6	31	100.0	35
1 <sup>st</sup> to 5 <sup>th</sup>	85.7	12	100.0	14
6 +	77.4	24	100.0	31
<i>x<sup>2</sup>; Sig. Level</i>	1.550 ; P < 0.225		--	
<b>5. Monthly Family Income (in Rs.)</b>				
Up to 5000	87.5	21	100.0	24
Up to 8000	87.5	21	100.0	24
8000 +	78.1	25	100.0	32
<i>x<sup>2</sup>; Sig. Level</i>	1.240 ; P < NS		--	
<b>6. Total No. Family Members</b>				
2 - 3	79.3	23	100.0	29
4 - 5	84.2	32	100.0	38
6+	92.3	12	100.0	13
<i>x<sup>2</sup>; Sig. Level</i>	1.125 ; P < NS		--	
<b>7. Total No. of Earning Members</b>				
1	92.2	13	100.0	14
2	84.4	38	100.0	45
3+	76.2	16	100.0	21
<i>x<sup>2</sup>; Sig. Level</i>	1.751 ; P < NS		--	
<b>8. Type of Family</b>				
Joint	81.3	13	100.0	16
Nuclear	84.4	54	100.0	64
<i>x<sup>2</sup>; Sig. Level</i>	0.092; P < NS		--	
<b>Total</b>	<b>100.0</b>	<b>67</b>	<b>100.0</b>	<b>80</b>

Note: -- = Not Applicable, NS = Non significant.

Marital status: Si. = Single, Wi. = Widow, Se. = Separated, Di. = Divorced.

Percentages for each category of the variables have been calculated by Row-wise.

The aforementioned table infers that the male and females are affected around 82.9 % and 84.4% respectively. In the rural areas, the female are playing dual roles, where they have to do household as well as agricultural work. The work burden as well as economic and family problems are highly dominating barriers for women's and in respective to concerning their health. Although there is small difference between male and female's health problem but it is not statistically significant. This is confirmed through Chi-Square test at 5 % level significant difference. Age is another important policy variable which is turned significant. There is positive relationship between the age and health problem. In other words lower the age lower the health problem and higher the age higher the percentage of health problems. For instance, 89 percent of the respondents who belong to the age group of 30 percent are highly being suffered by the health

problems. Therefore, lower the age lower the risk and higher the age higher the risk, While considering the marital status of the respondents with regard to their health, 86.4 percent of the respondents who are all belonging to the category of widows, separated or divorced are having health problems, again it also creates an influence on age. Literacy also another important policy variable but it is not significantly influencing the health status of the respondents. There is negative relationship between education and health problems. This shows that lower the education higher the health problems and higher the education lower the health problems. Another important policy variable is Income which determines health care. Supposedly it has to have higher the income lower the health problem and lower the income higher the health problem but in reality it is not significant determinant as far as reality is concerned. If the family income is higher, the health status of the people is also look better. For Instance twenty two percent of the respondents who belong to an income of above Rs.8000 had responded that they don't have any health problem. At that same time the respondents who are belonging to other two categories (Up to Rs. 5000 & Up to Rs. 8000) are affected at 87.5 percent and where there is no significance because each category is belonging to the same percentage. The table clearly reveals that if the numbers of family members are high, the percentages of health problem are gradually increased. The highest rates of 92.3 percent of respondents who belong to more than 6 members are highly affected by the diseases. At the mean time the higher the earning member in the family the lower the level of affected respondents. Whereas ninety three per cent of respondents are belonging to a single employee family and in fact it is lower in their earnings. It helps to explore the lower level of health care available to the respondents. But in the present day context the joint family system is being reduced due to the factors like Modernization, Urbanization and Industrialization. The above table shows that the higher the nuclear family and there is a higher rate of health problems which come around 84.4 percent. In the case of joint family, the level of health problem is low within 80 samples only 16 families are living in the joint family set up are having higher level of health problems. Therefore, the variables such as family income, total number of family member, total number of earning members, type of family, marital status, educational status are all not significant, still we are able to draw a few inferences with regard to personal variables.

**Table 3: Responsible Family members with regard to Health by District wise**

Districts	Female		Both Male & Female		Total	
	%	No.	%	No.	%	No.
Coimbatore	20.0	4	80.0	16	100.0	20
Erode	35.0	7	65.0	13	100.0	20
Nammakkal	95.0	19	5.0	1	100.0	20
Dharmapuri	75.0	15	25.0	5	100.0	20
<i>x<sup>2</sup>; Sig. Level</i>	29.410; .000				--	
<b>Total</b>	56.3	45	43.8	35	100.0	80

Note: -- = Not Applicable.

Percentages for each category of the variables have been calculated by Row-wise.

As general saying gives an idea about the better health i.e. "Prevention is better than cure", and to lead a healthy life and to gain accumulation of wealth of life there is a need to follow some basic Preventive activities. At present both the male and female have to work for an enlistment and economic stability. Of course most of them don't have a time to take care of their own health. Basically, India is a patriarchal society and the female have to do the household activities as well as to take care of family member's health. So the researcher tries to understand the present situation and a contribution of both the male and female towards their family member's health concern on district wise. For instance, 95 percent of Nammakkal females are highly responsible towards their family member's health followed by Dharmapuri which comes around 75 percent family members are receiving the health care from their female members. The above mentioned facts give ideas about the patriarchal patterns of life style as the female have to take care of their family and to stabilize the economic needs of their family members. In the case of urban based areas such as Coimbatore and Erode both the male and female are highly responsible towards their family members health. For instance, eighty percent of Coimbatore and sixty five percent of Erode respondents are collaboratly working together to improve their health condition of family members. Thus in the urban and semi-urban setting changes are occurring is due to modernization of culture in the

traditional family life style and as they are started adopting the modern life style. In the district wise analysis towards responsible family members towards health concern is highly significant as far as aforementioned table is concern.

**Table 4: Distribution of Respondents Hygienic Practices by Gender wise**

Factors	No. of Activities Performed by the Families						Total	
	No		1		2+			
	%	No.	%	No.	%	No.	%	No.
<b>1. Responsible person</b>								
Female	20.0	9	51.1	23	28.9	13	100.0	45
Male & Female	2.9	1	31.4	11	65.7	23	100.0	35
<i>x<sup>2</sup>; Sig. Level</i>	12.356 ; 0.001						--	
<b>Total</b>	12.5	10	42.5	34	45.0	36	100.0	80

Note: -- = Not Applicable.

Percentages for each category of the variables have been calculated by Row-wise

The preventive measures are being considered on the basis of hygienic practices performed by the respondents. For instance, in the daily activities such as using hot water, preparing healthy food, keeping the surroundings clean, make yearly once health checkup for elderly, taking extra care for children's health such as taking them to the hospital for polio drops, providing nutritious food for them etc. In fact maintenance of hygiene by both the male and female, among them 20 percent of female do not practice the maintenance of hygiene for the aged person and disabled. Around fifty one percent of female are performing the single hygienic practice such as keeping the surroundings clean and some of them are using hot water to prevent water born diseases. More than two hygienic practices are being performed by both the male and female at 66 percent, where they are performing the surroundings clean and daily household activities and cleanliness. In addition both the male and female are collaborately working together to prevent diseases for their family members' health. The Chi-Square test is being employed and test has been confirmed that there are differences between the districts with respect to availing health care facilities at 5 % level of significance.

**Table 5: Distribution of the Respondents Prevention Action towards their Health by Gender Wise**

Factors	Never mind		Taking medicine		Regular Health care		Total	
	%	No.	%	No.	%	No.	%	No.
<b>1. Responsible persons</b>								
Female	11.1	5	55.6	25	33.3	15	100.0	45
Male & Female	14.3	5	62.9	22	22.9	8	100.0	35
<i>x<sup>2</sup>; Sig. Level</i>	1.089 ; NS						--	
<b>Total</b>	12.5	10	58.8	47	28.8	23	100.0	80

Note: -- = Not Applicable.

Percentages for each category of the variables have been calculated by Row-wise.

The above table infers that the preventive measures are being followed by the respondents to avoid diseases. In these 45 families, only female members are highly following the preventive measures. With regard to heal, among them 56 percent of females are following the doctor's prescription and taking rest properly and also another 35 families, both the male and female are concerning about their health care activities. Sixty three per cent of both the male and female are depending upon the doctor's prescription. Further it reveals that three fourth of male and female members are not consuming food as per their health condition and they don't have a control towards their diets and thereby they are often falling ill. Only 33 per cent of females are going for regular checkup and consulting the doctors for their maintenance of health condition. There is no high variation within the habits of male and female members with regard to health preventive measures. Therefore, there is no significance as aforementioned data is concern.

**Table 6.1: Factor Analysis-KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.612
Bartlett's Test of Sphericity	Approx. Chi-Square	234.861
	df	105
	Sig.	.000

The above shown table reveals that the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett’s test of Sphericity have been applied, to the resultant correlation matrix to test whether the relationship among the variables have been significant or not. The result of the test shows that with the significant value of 0.000 and therefore there is significant relationship among the variables chosen. In addition, KMO test yields a result of 0.612 which states that factor analysis can be carried out appropriately for these thirteen variables as they have been taken for the study.

**Table 6.2: Rotated Factor Loadings on Level of Awareness**

Stimulus Factor	Factors					Communalities - Extraction
	1	2	3	4	5	
Cough & Sneeze of TB Patients spread the germs of TB K1	-.280	<b>.768</b>	-.117	.083	-.008	.688
TB germs attack lungs & bones of the patient K2	-.017	<b>.852</b>	.124	-.027	.014	.743
BCG is the name of TB Vaccination K3	.337	<b>.605</b>	-.119	.194	.073	.536
Malaria fever is spread through mosquitoes (Anopheles) K4	<b>.715</b>	-.064	-.069	.115	-.158	.558
Spraying DDT is used to kill the mosquitoes K5	.542	-.329	.041	.005	<b>-.142</b>	.424
Cholera is being spread by the houseflies K6	<b>.610</b>	-.087	.002	-.245	.446	.639
Eye disease is spread by the secretions of the affected person K7	<b>.568</b>	.099	.176	-.042	.110	.377
An anesthetic patch on the Skin is a symptom of leprosy K8	.462	.011	<b>.626</b>	.057	-.223	.659
Leprosy can be cured in the initial stage K9	-.407	-.210	.248	.116	<b>.627</b>	.678
Anthrax disease is spread by improperly preserved skin of the animals.K10	.023	-.026	<b>-.741</b>	.275	.125	.641
The germ of bacterial dysentery is spread through air K11	.085	.195	-.119	.036	<b>.757</b>	.634
Fungus causing skin diseases is spread by the direct contact of affected person. K12	-.049	-.101	<b>.745</b>	.183	.307	.695
Ascories or roundworms cause Jaundice & dysentery K13	.426	.299	-.172	<b>.485</b>	.015	.537
Good food habits & clean environment are necessary to prevent the spread of communicable diseases.K14	-.013	.014	.005	<b>.870</b>	.045	.759
Self- hygienic is necessary for every human being to prevent the spread of communicable diseases. K15	-.393	.452	.026	<b>.478</b>	.009	.588

**Extraction Method:** Principal Component Analysis.

**Rotation Method:** Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations

The aforementioned table shows that the principal component analysis and rotated factor loading method are used for stimulating factors. In this table, it is observed that out of 15 factors, 5 factors are identified by the rotation method.

**Table 6.3: Clustering of Stimulating factor in Awareness about Communicable Disease**

<b>Factors</b>	<b>Stimulating</b>	<b>Rotated Factor Loadings</b>
I. Mode of Disease Transmitters (63.1)	Malaria fever is spread through mosquitoes (Anopheles) - K4	<b>.715</b>
	Cholera is being spread by the houseflies –K6	<b>.610</b>
	Eye disease is spread by the secretions of the affected person – K7	<b>.568</b>
II. Cause and Treatment for Tuberculosis (74.1)	Cough & Sneeze of TB Patients spread the germs of TB – K1	<b>.768</b>
	TB germs attack lungs & bones of the patient – K2	<b>.852</b>
	BCG is the name of TB Vaccination – K3	<b>.605</b>
III. Cause and Symptom of Skin Diseases (7.04)	Fungus causing skin diseases is spread out by the direct contact of affected person – K12	<b>.745</b>
	Anthrax disease is spread out by improper preserved skin of the animals – K10	<b>-.741</b>
	An anesthetic patch on the Skin is a symptom of leprosy – K8	<b>.626</b>
IV. Basic Reasons for communicable disease & the better ways to prevent (61.1)	Ascories or roundworms cause Jaundice & dysentery – K13	<b>.485</b>
	Good food habits & clean environment are necessary to prevent the spread of communicable diseases. – K14	<b>.870</b>
	Self- hygienic is necessary for every human being to prevent the spread of communicable diseases. – K15	<b>.478</b>
V. Common information / Knowledge about infectious diseases (50.9)	The germ of bacterial dysentery is spread through air – K11	<b>.757</b>
	Leprosy can be cured in the initial stage – K9	<b>.627</b>
	Spraying DDT is used to kill the mosquitoes – K5	<b>-.142</b>

The table shown above explains the clustering of stimulating factor in awareness about health disease. It is observed that the three factors were identified as being maximum per cent variance accounted. The three factors K4, K6 and K7 were clustered together as factor I and it named as 'Mode of Transmitter'; it accounts 31.607 per cent of the total variance. The next three statements K1, K2 and K3 were constituted as factor II and named as 'Cause and Treatment for TB', it accounts 22.502 per cent of the total variance, the next three statements K12, K10 and K8 were constituted as factor III and it named as 'Cause and Symptoms of Skin Disease', it accounts 20.590 per cent of the total variance. The next three statements K13, K14 and K15 were constituted as factor IV and named as 'Basic Reasons for Communicable Diseases and the better way to Prevent', it accounts 22.502 per cent of the total variance and the last three statement K11, K9 and K5 constituted as factor V and it named as 'Common Knowledge about Infectious Diseases', it accounts 10.509 per cent of the total variance. Hence, the factor that stimulates the level of awareness among the respondents is given below.

- I. Mode of Transmitter,
- II. Cause and Treatment for Tuberculosis,
- III. Cause and Symptoms of Skin Disease,
- IV. Basic Reasons for Communicable disease and the better way to Prevent and
- V. Common Knowledge about Infectious Diseases.

**Table 7: Distribution of the Respondents and Health Workers participation by District Wise**

Health workers visiting in selected Dist.	Directing towards Health care		Total	
	%	No.	%	No.
<b>1. Visiting</b>				
Coimbatore	75.0	15	100.0	20
Erode	70.0	14	100.0	20
Nammakkal	80.0	16	100.0	20
Dharmapuri	65.0	13	100.0	20
<i>x<sup>2</sup>; Sig. Level</i>	1.254 ; NS		--	
<b>2. G. H Nurse</b>				
Coimbatore	35.0	7	100.0	20
Erode	45.0	9	100.0	20
Nammakkal	35.0	7	100.0	20
Dharmapuri	65.0	13	100.0	20
<i>x<sup>2</sup>; Sig. Level</i>	4.848 ; NS		--	
<b>3. ANM</b>				
Coimbatore	70.0	14	100.0	20
Erode	60.0	12	100.0	20
Nammakkal	70.0	14	100.0	20
Dharmapuri	.0	0	100.0	20
<i>sx<sup>2</sup>; Sig. Level</i>	27.200 ; 0.000		--	

Note: -- = Not Applicable.

Percentages for each category of the variables have been calculated by Row-wise.

In the study areas, the proposed respondents are Arunthathiars who do not have any basic knowledge about the cause and effect of the disease and an importance of health care activities. It is important to mention that the government has got a duty to assist them for maintaining the proper health care. The above shown table reveals the percentage availability of responsible person from the part of government or non-governmental levels have been initiating to improve the health status of Arunthathiars. Although the inference results differently, still there is no significance as for as aforementioned data is concern.

**Table 8: Distribution of Suggestion provided by the Health workers**

Health workers Suggestion	Government Health Nurse / ANM		Total	
	%	N o.	%	N o.
<b>Suggestion</b>				
Common Hygiene	62.1	36	45.0	36
Health care service	19.0	11	13.8	11
Child Care	19.0	11	13.8	11
<b>Total</b>	100.0	58	72.5	58
<i>x<sup>2</sup>; Sig. Level</i>	80.000 ; 0.000		--	

Note: -- = Not Applicable.

Percentages for each category of the variables have been calculated by Row-wise.

ANM (Ancillary Mid Wives), who are working in the door step for the Public welfare and a responsible person to provide a health care and also directing in a right way, by insisting the importance of cleanliness, healthcare and treatment. In Coimbatore, 75 percent of the respondents are agreeing about the health worker is directing them towards their health care activities. Eighty percent of Nammakkal respondents are being directed towards healthy behaviours by the health workers and followed by Coimbatore and Erode districts. Thus it resulted with non-significant as above said data is concern. Further, in Dharmapuri district around 65 percent of respondents are receiving the health care concerns from the government hospital nurse as they do not have a primary health care centers. Similarly, other districts are also

receiving the health care service from both the government health nurse and ANM. In Coimbatore and Nammakkal 70 percent of respondents are receiving health care service from ANM alone and followed by the Erode district which rates at 60 percent and therefore it is highly significant.

The suggestions from the government nurse are being received by the people of Dharmapuri which accounts for 73 percent. 62 percent out of 58 respondents reveals that the GH (Government Hospital) nurses are suggesting the respondents to keep the surrounding clean and they asked them to pour chlorine in water tank and in ditch side. The health care service such as providing iron tablets, giving some injection for fever and tablets for some other health problem are being received by the respondents which come around 19 percent. As far as health care service is concerned about 19 percent respondents are receiving child care such as providing preventive medicine/polio drops, providing nutritious powder and egg, besides checking the children's height and weight and so on. Therefore it is highly significant as far as the above said data is concerned. But, the services are being provided by the government nurse and ANM are not enough to improve the health status of Arunthathiars in the studies areas. Thus, the government has to provide health care facilities and advice all age group of all the areas/ districts. In addition, there is lack of participation and involvement of government Doctor's, NSS students or non-governmental organization in improving the health condition of respondents.

### **Findings & Conclusion**

In the study areas, The Chi-Square test is being employed and test has been confirmed that there are differences between the districts with respect to availing health care facilities at 5 % level of significance. Similarly, the age is important policy variable which is turned significant. There is positive relationship between the age and health problem. In other words lower the age lower the health problem and higher the age higher the percentage of health problems.

In the urban setup the health status of the respondents one third of the total respondents are enjoying better health status than the rural settings. In urban area, the respondents are able to receive better health care service at a low cost. Further, three fourth of total respondents are also receiving some of the health care suggestions from the health workers of government nurses and ANM. At the same time they are getting more than 8000 Rs. salary (83.3) as compared to other rural people. The family members' health is being concerned by both the male and female at 80 percent as they are doing more than two preventive measures for maintaining their family members' health. It is also essential to mention that they are collectively working together for well being of their family members as well as upliftment of the socio-economic condition of family as a whole, which in turn facilitates the respondents to take care of their health condition.

Most of the respondents (90%) are being affected by any one of the health problem due to their daily activities and unorganized habits as they are working as agricultural coolies and daily wage workers and also they have heavy physical work to gain 100 to 150 Rs. per day. In addition, three fourth of them are having common fertility problems and joint pains as well. As a result, they preferred to take alcohol and other substances to relax themselves from the work burden and consequently they are succumbed to become as an alcohol addict; they spent three fourth of their salary for a relaxation and to satisfy their habits and they never follow their diets (they don't take food at proper time). These are all the factors affecting their health condition in a major level.

The low level education and illiteracy making them to gain less basic knowledge about the health and hygienic care as they are in need of other's help for their healthy behavior. Therefore majority of the respondents that is to say about 95 per cent of Nammakkal and 75 per cent of Dharmapuri respondents are being affected by the health problems. It is quite obvious to infer that the Dharmapuri respondents are receiving a lower level of (65%) services from the health workers from government as well as from ANM and also important to mention that the female are more responsible towards family members health care. But in social reality they do not have right to decide the activities based on economy as they are largely depending on male members. The reason is crystal clear to say that the system of patriarchy still exists in major parts of the study areas.

In the Nammakkal and Erode districts level more than three fourth of respondent are agreeing the service of health workers from the ANM and GHN. In fact, the Health workers are educating the people with regard to cleanliness, child care and healthy behavior. In the Erode district about 65 per cent of respondent's families are collectively working together for maintaining the health care of their family members. More than three fourth of total respondents from the

Nammakkal district are running the family smooth by taking care of their female members. More or less the three districts are slightly fall under the same level of frequency on the background characteristics. But in the social reality of the study areas, there is lack of participation and involvement of NSS member, NGO or PHC Doctors in the health care services and ultimately the vulnerable people like Arunthathiars are being suffered by different health related diseases. For that academics as well as the state have to put an eye on the people like oppressed among oppressed who are living for many centuries in the vulnerable areas.

### **Suggestions**

- ✓ Health care activities are not only a duty of female members of the family alone but everyone has to participate and involve in the family health care concern. If the male do not know about importance of the health and health care activities, the female members have to perform all such activity and vice-versa. Therefore, it is one of the ways to improve their life style in general and health care in particular.
- ✓ In the rural area, most of the Arunthathiars families do not know anything about health care and preventive measures and they do not have an adequate information and awareness of health education. By providing health awareness education to the vulnerable people they may accustomed to maintain their health care in the near future. Therefore it is the duty and social responsibility of the State and Central governments and to some extent Non-governmental organizations to introduce health awareness education in all parts of the vulnerable areas of the society. Of course, it not only helps to improve their health status rather they may get more information regarding the government concern which will further improve their status in the society.
- ✓ The mass media has got a major role to broadcast the information related to health and diseases and the media has to give news regarding availability of rehabilitation centers health centers and hospitals in and around of every village.
- ✓ The doctors should have a social concern and responsibility to insist the health care activities and importance of preventive health care tips and medicines. It is very essential to mention that the doctors and other health workers must be ready to provide health care facilities to the vulnerable people irrespective of their caste and creed. Since they are not having sufficient money and health awareness, these kinds of steps will surely benefit the deprived communities.
- ✓ Government should take significant steps to facilitate the opportunities in education and jobs which may further solve the problem of health in the rural settings and to some extent in the urban settings. In addition, the social organizations and civil society have to encourage proactive provisions to better the conditions of Dalits in general and Arunthathiars in particular.

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