HEALTH SURVEY IN MAYYANAD GRAMA PANCHAYATH (KOLLAM, KERALA, INDIA)

[1]Lekshmi Priya R, [2] D. Sheela Devi
[1]Designation of 1st Author, [2]Assistant Professor
[1]M.M.N.S.S College,
[1] M.M.N.S.S College, Kottiyam, India

Abstract

Kerala is a state on the southwestern, Malabar Coast of India. Kerala is home to 2.76% of India's population; with a density of 859 persons per km^2, its land is nearly three times as densely settled as the Indian national average of 370 persons per km^2. Kerala is a pioneer in implementing the universal health care programs. The sub-replacement fertility level and infant mortality rate are lower compared to those of other states, estimated from 12 to 14 deaths per 1,000 live births; as per the National Family Health Survey 2015-16, it has dropped to 6. Outbreaks of water-borne diseases such as diarrhea, dysentery, hepatitis, and typhoid among the more than 50% of people who rely on 3 million water wells is an issue worsened by the lack of sewers. Hence, the present study focusses on addressing the health problems in Mayyanad Grama Panchayath, Kollam, Kerala, India.

***IndexTerms* – Kerala, Diseases, Health, Mayyanad, Survey**

I. INTRODUCTION

Kerala has already built a strong health care system and has achieved for its people a level of health status, which is comparable with advanced countries in many aspects. Despite this, there are major challenges. Shifting family structures, an aging population, and increasing social inequities are all exacerbating health problems [1]. For Kerala, the health sector is the backbone of economic and social prosperity. Kerala's health sector would focus on twin goals of health care promotion, namely "Health for all" and "Health hubs". The new health strategy requires participation by all: public, communities and government.

Kerala has good health indictors compared to other Indian states. A prime reason for this has been the stewardship role that successive governments, before and after independence, have played. This has become even more important at a time when the state is facing the emergence and re-emergence of some of the communicable diseases along with problems resulting from the epidemiological and demographic transition. In order to navigate the sector through the multiple challenges faced in the health sector Government of Kerala needs to articulate the policy framework under which all the stakeholders can develop their strategies.

Even though the mortality rates in Kerala are low, the morbidity rates are high, which has been variously attributed to the heightened awareness and health seeking behavior, and an ageing population. However, an analysis of the morbidity patterns across socio-economic classes within Kerala points towards an unequal distribution of social and economic resources resulting in health inequities [2]. Another significant aspect that needs to be studied is the behavioral divide in consumption, the unusual pattern of lifestyle adoption that feeds into the kind of epidemiological profile. Not much research has been done on identifying the role of various social determinants of health in the state. More research is required in this area to assess the complex interactions of various social, cultural, economic and other factors that affect the health of the people. We need to collect the compelling information to support the advocacy on the social determinants of health and health inequalities that are relevant to the state. Results of such research should guide the training programs and planning programmes its implementation. State level or national data does not give a clear picture on the various determinants and hence a segregated data must be generated based on socioeconomic status, gender, age etc. This is crucial in evaluation and monitoring of programs and the progress made by the state over time.

Objectives

- To assess the steps taken by the inhabitants in their daily life for ensuring health and hygiene.
- To gather first- hand information about communicable and non- communicable diseases and other problems.
- To assess data collected for detailed analysis and elicit inferences, based on which to plan follow- up actions towards ensuring complete health and well- being of the inhabitants by the concerned authorities.

Materials and methods

Study site

Mayyanad Grama Panchayat is situated in Mukhathala Block of Kollam District. The three sides of the Panchayat are surrounded by water. About 2.5kms of area is covered by the sea. The total area of Mayyanad Panchayat is about 17.57 square kilometers. There are 23 wards in this panchayat.

Method

Personal data were collected from the inhabitants of 100 randomly selected houses in ward number -4 of Mayyanad Grama Panchayat. Primary data were collected by directly visiting household and collecting information with the help of structured questionnaires. It includes basic information like sex, age, marital status, number of children, blood group etc. The second part consist of individual based health status regarding common diseases, communicable diseases and other health problems regarding sight, hearing, hair falling, skin diseases, speaking disability, health of teeth and vaccination. Information was also collected regarding food habits, use of oils, fruits, fried fish and meat. In behavioral section other habits like smoking, alcoholism, exercise, rest, sleep, hobbies, health awareness, toilet facility, personal hygiene, medical checkup etc. were also noted.

The inhabitants are divided into four different age and identified the elderly in the area, collected details age groups and identified the elderly in the area, collected details about common ailments from person above the age of 60 to provide services to the extent possible by the concerned authorities.

Results and Discussion

In the present study a total of 330 individuals of different age group were contacted from the fourth ward of Mayyanad Panchayat. Here the individual response was very high. Integrated Disease Surveillance Project [3] in Kerala conducted a similar survey. 4430 households completed the survey. The overall individual response rate for the survey was 96%. Of the surveyed households, 56% of the households were Hindu, 23% were Muslim and about 20% were Christians. In the present study, Muslim were 60%, Hindu 30% and the rest were Christians.

Survey about the health problems encountered by the inhabitants within the last 6 months revealed the following facts regarding minor ailments (Table. 1). 94% of children below the age of 5 and 76% of individuals in the age group 5-19 and 67% of individual in the age of 20-59 and 75% of individual above the age of 60 suffered from common cold during the last six months. Indigestion, stomach ache, diarrhea and constipation are more prevalent among the children of age group below 5.

In the Kerala Sastra Sahitya Parishad (KSSP) study of 1987[4], it was reported that among the poor, 51% smoked beedi compared to 19% in the better off group. The NFHS (2006) [5] survey showed that 43.5% males with low standard of living index smoked compared to 18% in those who had high index. There is a high prevalence of tobacco chewing in coastal communities which is related to socio-economic factors such as inadequate access, high cost of oral health care and a general lack of awareness. The increasing pattern of prevalence was recorded with increasing age of people.

About major afflicted by the inhabitants, in recent times, the contagious diseases included chikungunya, dengue fever, hepatitis, chicken pox and tuberculosis and Japanese encephalitis. However new cases of malaria, filariasis and leprosy not reported (Table. 2). Intestinal worm infestation has been reported among 89% children below the age of 5. Above 60 ages, 56% of individuals have blood pressure. 50% suffers from back or joint pain, 47% have diabetes, and suffers from various heart diseases (Table. 3).

About other problems, most old aged peoples and about 50% of people of age group 20-59 suffer from decreased eye sight, hair falling and dental problems. While skin diseases are prevalent among children below the age of 5 (Table. 4).

Coming to vaccination against various diseases, more than 95% of children have got it at the proper time. Beside this, more than 35% of people from all other age groups have also taken preventive medicines against various diseases like filariasis, chikungunya, hepatitis etc.

More than 80% of individuals in all age group opted for allopathic health care as the first preference while those for Ayurveda have been below 10%. In the age group below 5, about 18% seek homeopathy. National Sample Survey Organization (NSSO) [7] data shows a high prevalence of chronic disorders in older persons (162/1000). Hospitalization of elderly has increased from 276 in 95-96 to 1315 per 100000 in 2004, the reasons for which must be elucidated. We must explore ways to mainstream actions on the social determinants of health in the presence of policy making and ways to implement through efficient mechanisms.

Foods habits of all age groups are shown in (Table. 5). More than 65% of individuals in all age groups are non- vegetarians. The consumption of bakery food is very high in alleging groups except that of old aged individuals. In old aged, the consumption of leafy vegetables is high. Consumption of fried and meat is high among individuals of all age groups.

Regarding intake of fruits, the inhabitants produce at home and use plantain (59%), guava, mango, jackfruit, papaya etc. Fruits bought from market include apple, orange, grapes, gooseberry, mango, papaya, guava and banana (40%).

Smoking is reported among men of age group above 20 (15%), and age group above 60 (12%). About 15% men used to alcoholic drinks (Table.6). Betel leaf chewing is common among old aged people (18%). Regarding health habit more than 70% of age group above 20 do regular exercise, mostly brisk walking. Age group below 60 was reported to have good sleep. While 30% of individuals above the age of 60 complained about disturbed and insufficient sleep. More than 90% of respondents said that they got enough time for rest and recreation. It was found that 10% of the people have serious occupational health problems like back pain, allergic bronchitis, regular muscle ache, joint pain etc. 10% of the respondents have participated in medical checkup camps in recent times of which 25% had it for general checkup, 20% for thyroid problems, and others for infertility, cardio vascular problems etc. It has been reported that all the respondents have their daily bath and brushing of teeth. Regarding day to day hygiene practices, 98% of people defecate in latrines while 2% do it in the open space. It was also reported the age of 60 do not use foot wears.

Regarding the source through which people get awareness about health care and wellbeing, 54% reported to have it through print media, 45% got it through audio visual media and only 3% through health awareness classes.

Table 1. The incidence of minor ailments during last six months in different age groups (%)

DISEASES	AGE BELOW 5	AGE 5-20	AGE 21-60	AGE ABOVE 60
Cold	94	76	67	75
Head ache	44	62	57	66
Fever, Body pain	67	69	61	78
Cough	67	48	56	65
Throat pain	75	42	39	28
Vertigo	--	31	36	32
Indigestion	67	19	3	32
Stomach ache	63	26	31	28
Diarrhea	88	22	19	33
Constipation	81	11	23	7

Table 2. Incidence of communicable diseases (%)

DISEASES	AGE BELOW 5	AGE 5-20	AGE 21-60	AGE ABOVE 60
Dengue fever	--	2	3	3
Chikungunya	--	2	4	15
Leptospirosis	--	--	5	--
Malaria	--	--	--	--
Japanese encephalitis	--	2	5	--
Hepatitis	--	12	9	13
Chickenpox	--	3	11	7
Filariasis	--	--	--	--
Leprosy	--	--	--	--
Tuberculosis	1	--	3	--

Table 3. Incidence of other diseases (%)

DISEASES	AGE BELOW 5	AGE 5-20	AGE 21-60	AGE ABOVE 60
Kidney stone	--	2	14	7
Worm trouble	89	30	15	19
Diabetes	--	2	19	47
Blood pressure		--	15	56
Herat diseases	--	--	6	18
Back/ joint pain	--	--	26	50
Thyroid	---	5	9	--

Table 4. Other problems (%)

DISEASES	AGE BELOW 5	AGE 5-20	AGE 21-60	AGE ABOVE 60
Decreased eye sight	--	6	34	75
Use of spectacles	--	6	31	60
Hearing problems	--	2	4	19
Hearing aids	--	--	5	--
Physically Handicapped	--	--	--	3
Hair falling	--	29	63	75
Skin diseases	19	--	2	7
Speech problems	--	--	--	--
Dental problems	--	19	17	87

Table 5. Food Habits (%)

TYPE OF FOOD	AGE BELOW 5	AGE 5-20	AGE 21-60	AGE ABOVE 60
Vegetarian	13	5	7	35
Non vegetarian	77	95	93	65
Homely food	79	63	80	100
Hotel food	31	27	20	--
Bakery	88	66	73	10
Fast food	12	22	13	--
Oily food	38	28	25	31
Sweets	44	60	22	4
Roasted food	12	6	28	13
Steamed food	6	6	25	52
Fish fry	19	96	68	79
Fried meat	85	96	68	80
Leafy vegetables	--	41	68	70

Table 6. Other habits and activities (%)

HABITS	AGE BELOW 5	AGE 5-20	AGE 21-60	AGE ABOVE 60
Smoking	--	--	15	12
Alcoholism	--	--	10	19
Tobacco chewing	--	--	1	18
Drug addiction	--	--	--	--
Exercise	--	42	77	71
Rest	100	97	100	70
Sleep	100	99	100	68
Hobbies	100	100	100	75
Health checkup	7	1	17	16
Participation in health camp	7	3	15	28
Work related diseases	--	--	17	25
Teeth cleaning	100	100	100	100
Bathing	100	100	100	100
Use of chaples	75	100	100	92

Conclusion

Research in health should investigate these social determinants and their interactions to plan programs and mechanisms of implementation. There is a need to evaluate the Kerala model of health and the challenges it faces from an SDH perspective. This will help planning the future better. Health system has a decisive role in tackling health inequities, designing programs with a social determinants approach, aiding governance and capacity building. It is time to re-evaluate the structure and functioning of the existing health system in addressing the health care delivery needs, its weaknesses and strengths, role in enhancing and ameliorating health equities. This will probably lead to evidence-based restructuring of the health system. It should include information systems measure, describe, understand and track health inequities.

REFERENCES

[1] Soman, C. R., Kutty, V. R., Safraj, S., Vijayakumar, K., Rajamohanan, K., and Ajayan, K. 2011. All-cause mortality and cardiovascular mortality in Kerala State of India: results from a 5-year follow-up of 161 942 rural community dwelling adults. Asia Pacific Journal of Public Health, 23(6): 896-903.

[2] Yamashita, N., Kannan, K., Taniyasu, S., Horii, Y., Petrick, G., and Gamo, T. 2005. A global survey of perfluorinated acids in oceans. Marine pollution bulletin, 51(8-12): 658-668.

[3] Sharma, R., Ratnesh, L., Karad, A. B., Kandpal, H., Dhariwal, A. C., and Ichhupujani, R. L. 2009. Communicable disease outbreak detection by using supplementary tools to conventional surveillance methods under Integrated Disease Surveillance Project (IDSP), India. The Journal of communicable diseases, 41(3): 149-159.

[4] Zachariah, Mathai, and R. Sooryamoorthy. Science for social revolution: achievements and dilemmas of a development movement-the Kerala Sastra Sahitya Parishad. Zed Books, 1994.

[5] International Institute for Population Sciences, & ORC Macro. MEASURE/DHS+ (Programme), 2001. National Family Health Survey (NFHS-2), India, 1998-99: Tamil Nadu (Vol. 14). International Institute for Population Sciences.

[6] Thankappan, K. R., Shah, B., Mathur, P., Sarma, P. S., Srinivas, G., Mini, G. K., and Vasan, R. S, 2010. Risk factor profile for chronic non-communicable diseases: results of a community-based study in Kerala, India. Indian Journal of Medical Research, 131(1):53-64.

[7] Selvaraj, S., & Karan, A. K, 2009. Deepening health insecurity in India: evidence from national sample surveys since 1980s. Economic and Political Weekly, 55-60.