

General Health Awareness among the Rural Population of Kannur, North Kerala, India: A Cross Sectional Study

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Abstract

Background: General health awareness is less among the persons in developing nations compared to developed nations. Kerala is a state in India with a very good literacy rate and with a very low infant mortality and maternal mortality rates per live birth, but, there is increasing burden of non-communicable diseases. Since health education is one of the key component in prevention of diseases in the community, so we conducted this study. *Objectives:* To assess the general health awareness among the rural population of Kannur, North Kerala, India. *Materials and Methods:* A cross sectional study was conducted in Pinarayi grama panchayath under the rural field practice area of Community Medicine Department, Kannur Medical College, Kannur. Convenient sampling method was used for the sampling. By visiting homes, data was collected from the adults aged >18 years by using pretested semi-structured self-administered questionnaire in local language and the descriptive statistics were analysed. *Results:* 300 persons were participated with a mean age of 58.62±10.25 years and 52% of females were participated in the study. The general awareness about maternal and child health, family planning and communicable diseases was average to good whereas about HIV/AIDS and STIs was good. Awareness about tobacco and alcohol as non-communicable diseases risk factors was good whereas importance of second hand smoking, regular blood pressure monitoring was poor. *Conclusion:* In our study, Overall, the general health awareness among the study population was average to good. So, we recommend to strengthen the existing health education component to create more awareness among the study population.

Keywords: General Health; Awareness; Rural Population; North Kerala.

Introduction

General health awareness about nutrition, maternal health and family planning, communicable diseases and non-communicable diseases is less among the persons in developing nations compared to developed nations. Education especially women education is one of the key factor which helps to increase the health awareness among the community. In India, the general

health awareness among the people is at average level in different studies and it needs to be strengthened to achieve maximum benefits of health care [1-5].

Kerala is a state in India with a very good literacy rate (94%) and with a very low infant mortality (IMR-12/1000 live births) and maternal mortality rates (MMR-66/1000 live births) [6,7]. But, there is increasing burden of non-communicable diseases (NCDs) such as hypertension, diabetes, stroke and cardiovascular diseases, etc [5].

Since lack of health education is an important cause of poor awareness of diseases and thereby increased morbidity, a study was conducted to assess the general awareness of health, its related practices, risk factors and morbidity amongst the rural population of Kannur, North Kerala.

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Material and Methods

Study Design

It was a cross sectional study design.

Study Setting

Study was conducted in Pinarayi grama panchayath under the rural field practice area of Community Medicine Department, Kannur Medical College, Kannur.

Study Population

The people aged above 18 years from Pinarayi grama panchayath of rural field practice area of Department of Community Medicine, Kannur Medical College were included in the study.

Inclusion Criteria

The people who were aged above 18 years and those who were willing to participate were included in the study.

Exclusion Criteria

The people with any known neuropsychiatric problems, memory problems or mentally challenged were excluded from the study

Study Duration

2 Months (January - February 2016).

Sample Size

Assuming the knowledge of general health awareness among the population at 50% with the absolute precision at 6% and alpha of 5%, the sample size of 267 was calculated using the OpenEpi (Version 3.03). Considering the non-response rate at 10%, sample of 300 was collected.

Sampling Method

A convenient sampling method was used to collect data. The data was collected by visiting houses with the help of health workers. If there are more than one person in home at the time of data collection, head of the family or the mother was chosen for the study.

Data Collection

The study was conducted after taking ethical

clearance from the Institutional Ethics Committee, Kannur Medical College. After explaining the purpose of the study and after taking informed written consent from study participants the data was collected from those who were willing to participate in the study. The data was collected by administering a pretested, semi structured questionnaire in local language (Malayalam) to the participants.

Data Analysis

Data was entered in Microsoft Excel and descriptive statistics in the form frequencies, proportions, mean and standard deviations were analysed using EpiData Analysis V2.2.2.182.

Results

Socio-Demographic Details

A total of 300 persons were participated in the study and the mean age of the study population was 58.62 ± 10.25 years. About 48% (144) males and 52% (156) females were participated in the study. Among the study population, about 29.7% (87) and 25% (75) persons had hypertension and diabetes mellitus respectively (Table 1).

Table 1: Sociodemographic characteristics of study participants

Sociodemographic Variables	Values (n=300) (%)
Age (in Years)	
Mean \pm SD	58.62 \pm 10.25
Gender	
Male	144 (48)
Female	156 (52)
Education	
Illiterate	06 (02.0)
Primary	40 (13.3)
High School	117 (39.0)
Higher Secondary	56 (18.7)
Degree	71 (23.6)
Post Graduate	10 (03.4)
Occupation	
Unemployed	48 (16.0)
House Maker	92 (30.7)
Unskilled Worker	25 (08.3)
Semiskilled Worker	48 (16.0)
Skilled Worker	78 (26.0)
Professional	09 (03.0)

Awareness about Nutrition, Maternal Health and Family Planning

About 10.7% (32) were aware that malnutrition as defined as inadequate or excess intake of protein, carbohydrate, fat, vitamins and minerals and 7.3% (22) felt that it as excess intake of protein, carbohydrate, fat, vitamins and minerals.

About 80% (239) were aware that anaemia is due to deficiency of iron and 55% (167) know about the correct number of iron and folic acid tablets to be taken during pregnancy. About 61.7% (185) told that two doses of tetanus toxoid injection have to be taken by pregnant women during her ante natal checkup. About 60% (182) were aware about permanent methods of family planning.

Awareness about Common Communicable Diseases

About 84% (252) of the study population were aware that cough for more than two weeks may be an impending symptom of underlying Pulmonary Tuberculosis and only 52% (158) know that availability of sputum examination facilities at government hospitals such as district hospital, taluk hospital, community health centre and primary health centre. About 65.3% (196) people were aware that oral rehydration salt (ORS) as primary treatment for diarrhoea.

Awareness about Sexually Transmitted Diseases (STIs) and HIV

About 81.3% (244) said that STIs can be prevented by using condoms but 4.3% (13) told that it can be prevented by having multiple sexual partners. 79% of them were about different modes of HIV transmission.

Awareness about Non-Communicable Diseases

Among the study population, 86.7% (260) know that smoking and alcohol are the risk factors for non-communicable diseases such as hypertension, heart attack, cancer etc.

Only 29% (87) responded that second hand smoking affects both the smoker as well as passive smoker whereas 38.7% (116) do not know about the importance of regular blood pressure monitoring for the control of complications associated with hypertension.

Only 28.7% (86) responded that daily requirement of salt per person should be less than 5 gram.

About 77.7% (233) were aware as about the various causes of road traffic accidents such as rash driving, drink and driving, usage of mobile phones while driving and not using helmets and seat belts.

Discussion

In our study, a total of 300 persons participated in the study, about one third and one fourth were hypertensive and diabetic respectively.

Awareness about Nutrition, Maternal Health and Family Planning

Almost 90% of the study population does not know about the meaning of malnutrition. About 80% of the study population knows the meaning of anaemia but only half of them know about the actual number of iron and folic acid tablets to be taken during antenatal period. Awareness about iron and folic acid consumption during antenatal period in our study was better compared to study done by Laishram J et al which showed only around 34% awareness [4].

Around two third of them were aware about the two doses of tetanus toxoid injection to be taken during ante natal period and which was slightly similar to studies done by Patel BB et al and Laishram J et al [3,4]. About two third of them know about permanent methods of family planning and was similar to study of Prachi R et al in Sikkim but better than study done by Jahan U et al in Uttar Pradesh [2,8].

Awareness about Common Communicable Diseases and STIs and HIV

Four fifth of them were aware that cough for more than two weeks a symptom Pulmonary Tuberculosis which was similar study of Chinnakali P et al [9] but better than other studies done by Aslami et al and Sreeramareddy CT et al [10,11]. Only half of them were aware about availability of sputum examination facilities at government hospitals. One third of the study population were aware that ORS is the main treatment for acute diarrhoea. Most of the study population (82%) were told that condoms will prevent STIs and HIV/AIDS which was very much better than study done by Garg S et al [12].

Awareness about Non-Communicable Diseases

Most of the study population knows about harmful effects tobacco and alcohol in causing non-communicable diseases and two third of them know about the importance of regular blood pressure monitoring for the control of complications associated with hypertension which was similar to study conducted by Zachariah et al [5]. Awareness about road traffic safety was good among three fourth of the study population.

The limitation of the study was usage of convenient sampling for data collection.

Conclusions and Recommendations

In our study, the general awareness about maternal and child health, family planning and communicable

diseases was average to good and awareness about HIV/AIDS and STIs was good. Awareness about tobacco and alcohol as non-communicable diseases risk factors was good whereas importance of second hand smoking, regular blood pressure monitoring was poor. Overall, the general health awareness among the study population was average to good. So, we recommend to strengthen the existing health education component to create more awareness among the study population.

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Declarations

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