

Awareness, Attitude and Practice Regarding Prevention of Tuberculosis among Middle Aged Adults

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Abstract

The present study investigated the awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults residing in selected panchayath of Kottayam district. The objectives of the study were to, assess the awareness, determine the attitude and identify the practice regarding prevention of tuberculosis, find out the correlation between awareness, attitude and practice regarding prevention of tuberculosis, find out the association of awareness, attitude and practice regarding prevention of tuberculosis with selected variables and prepare an information booklet regarding tuberculosis and its prevention. A cross sectional survey design was adopted for this study. The conceptual framework used was Rosenstock's Health Belief Model. Four hundred middle aged adults were selected through purposive sampling from the outpatient department of Athirampuzha primary health center. Tools used for data collection were socio personal data sheet, awareness questionnaire, attitude and practice rating scale. An information booklet was given after the data collection. The data was collected and analyzed by using descriptive and inferential statistics (SPSS). The findings revealed that 29.8% had good, 56.2% had average and 14% had poor awareness, 35.5% had favorable and 64.5% had an unfavorable attitude regarding prevention of TB. Regarding the practice 52.5% had well and 47.5% had poor practice. A significant positive correlation found between awareness, attitude and practice. A significant association was found between awareness with gender, education, occupation and income status. Regarding attitude, a significant association was found with education and occupation. There was also a significant association found between practice with gender, education, occupation and family history of tuberculosis. The study also recommended the need for organizing awareness programmes on TB for improving the knowledge, attitude and practice.

Keywords: Awareness; Attitude; Practice; Selected variables; Middle aged adults

Introduction

About one-quarter of the world's population has latent TB, which means people have been infected by the tuberculosis bacilli but are not yet ill with the disease and cannot transmit the disease. TB occurs in every part of the world [1]. In 2019, 87% of new TB cases occurred in the 30 high TB burden countries. Of which the largest number of new TB cases has occurred in the South-East Asian region with a 44% of new cases followed by the African region with a 25% of new cases and the Western Pacific with 18%. Eight countries were accounted for two thirds of the new TB cases: India, China, Indonesia, Philippines, Pakistan, Nigeria, Bangladesh and South Africa.

According to WHO 2018 statistics, estimated that 10 million people fell ill with TB which includes 5.7 million men, 3.2 million women and 1.1 million children [2]. In India, TB is responsible for the death of every one-third of AIDS patient. Moreover, India accounts for about a quarter of the global TB burden. Every year approximately 2.2 lakhs deaths are reported due to tuberculosis. Kerala's incidence is estimated to be 67 cases per 100000 as per 2017 RNTCP figures. Kerala's strategy and potential success has implications for all of India, which has the world's largest TB burden 2.74 million or 27% of the global total.

Limiting the transmission of TB in the community is critical to curbing the spread of TB [3-5]. Transmission of TB takes place mostly within the household. Improving patient knowledge of TB is an important component of enhancing patient-centric care and is a major goal of the End TB strategy. As family is the basic unit in the community, prevention of tuberculosis at family level will help to reduce the incidence of disease in the community. Increase in the level of knowledge creates a positive attitude in the public which subsequently influences the practice regarding the prevention of tuberculosis. If the

public get awareness regarding TB their attitude and practice regarding the prevention of TB will increase. Hence the researcher felt the need to conduct a study to assess the awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults [6].

Statement of the problem

Awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults residing in selected panchayath of Kottayam district.

Objectives

1. To assess the awareness regarding prevention of tuberculosis among middle aged adults.
2. To determine the attitude regarding prevention of tuberculosis among middle aged adults.
3. To identify the practice regarding prevention of tuberculosis among middle aged adults.
4. To find out the correlation between awareness and attitude

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regarding prevention of tuberculosis among middle aged adults.

5. To find out the correlation between awareness and practice regarding prevention of tuberculosis among middle aged adults.

6. To find out the correlation between attitude and practice regarding prevention of tuberculosis among middle aged adults.

7. To find out the association of awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults with selected variables.

8. To prepare an information booklet regarding tuberculosis and its prevention.

Hypothesis

H1 There is a significant correlation between awareness and attitude regarding prevention of tuberculosis among middle aged adults.

H2 There is a significant correlation between awareness and practice regarding prevention of tuberculosis among middle aged adults.

H3 There is a significant correlation between attitude and practice regarding prevention of tuberculosis among middle aged adults.

H4 There is a significant association between awareness regarding prevention of tuberculosis among middle aged adults and selected variables.

H5 There is a significant association between attitude regarding prevention of tuberculosis among middle aged adults and selected variables.

H6 There is a significant association between practice regarding prevention of tuberculosis among middle aged adults and selected variables.

Methodology

Research approach: A quantitative non experimental approach was used for this study.

Research design: A cross-sectional survey design was used for this study.

Study setting: Outpatient department (OPD) of Athirampuzha primary health center (PHC) of Kottayam district.

Population: Middle-aged adults residing in Athirampuzha Panchayath of Kottayam district.

Sample: 400 middle-aged adults in the age group between 30 - 60 years residing in Athirampuzha Panchayath of Kottayam district

Sampling technique: Nonprobability purposive sampling technique

Inclusion criteria

Middle aged adult persons:

- Who are willing to participate in the study
- Who can read and understand Malayalam
- Male and female in the age group between 30-60 years
- Who are residing in Athirampuzha Panchayath

Exclusion criteria

- Middle aged adult persons

- Who are working in health sectors
- Who are having previous history of tuberculosis

Description of tool

Tool 1: Socio-personal data sheet

A questionnaire was used for assessing the socio personal data of middle-aged adults. It consists of seven items such as age, gender, family size, education, occupation, income status and family history of TB.

Tool 2: Structured awareness questionnaire to assess the awareness regarding tuberculosis and its prevention.

A structured questionnaire prepared by researcher is used to assess the awareness of middle-aged adults regarding prevention of tuberculosis. It consists of 20 items regarding causes, signs and symptoms, management, control and prevention of tuberculosis. Questions were answered by choosing the best answer from the four options given for each item. Each correct answer is given a score of one. Minimum score was one and the maximum score was 20.

The awareness score was categorized as follows

14-20	Good
8-13	Average
1-7	Poor

Tool 3: A rating scale to assess the attitude regarding prevention of tuberculosis

The attitude of middle-aged adults regarding the prevention of tuberculosis was assessed using three-point Likert scale. It consists 15 items which includes 8 positive and 7 negative statements indicating the viewpoints of middle-aged adults regarding prevention of tuberculosis. 2,6,7,8,9,10,13 and 15 are positive statements and is scored as 2,1,0. Negative statements are 1,3,4,5,11,12,14 which are scored as 0, 1, 2.

Score ranges from 1 to 30 and it was categorized as follows

24-30	Favorable
1-23	Unfavorable

Tool 4: A rating scale to determine the practice regarding prevention of tuberculosis

The practice of middle-aged adults regarding the prevention of tuberculosis was assessed using a rating scale which is a three-point Likert scale. It comprises 12 questions which includes 7 positive and 5 negative responses indicating the practices regarding prevention of tuberculosis. 3, 4,5,7,10,11 and 12 are positive responses which are scored as 2, 1, 0. Negative responses are 1,2,6,8 and 9 which are scored as 0, 1,2. Score ranges from 1-24 and it was categorized as follows

19-24	Good
1-18	Poor

Data collection procedure

The study was conducted after obtaining formal approval from Scientific Review Committee and Institutional Ethics Committee, Secretary of Athirampuzha panchayath and Medical Officer in Charge, Athirampuzha PHC. The data collection period was for six weeks from 01/03/2020 to 10/04/2020 at Athirampuzha Primary health center.

The researcher explained the purpose of the study and a good

rapport was established with the study participants and an informed consent was obtained from the participant in the prescribed format prior to data collection after assuring the confidentiality of the response. The data were collected from 400 middle aged adults attending outpatient department of Athirampuzha PHC. The subjects were selected purposively based on inclusion criteria. Basic information was collected using socio personal data sheet and awareness was assessed by awareness questionnaire which took 20 minutes to complete, followed by a rating scale to assess the attitude which took 10 minutes to answer. Practice was assessed by using rating scale and it took 10 minutes to answer. All data collection procedure took 40 minutes. At the end of the data collection process, the researcher gave information booklet regarding tuberculosis and its prevention.

Analysis and interpretation

Section 1

Socio personal data of middle-aged adults

- Among middle aged adults 36.7% and 29.5% belonged to the age group between 30-40 years and 41-50 years respectively.
- Majority (63%) of the study participants were females and 37% were males.
- With regards to the family size, majority (59%) had a family size of 4-5 and 20.2% had a family size of 2-3.
- Regarding the educational status, 34.2% of participants were with degree/ post-graduation only 4.3% had professional/ technological education and remaining 5.2% had primary education.
- Considering the occupational status, 37.7% of middle-aged adults were unemployed and 16.8% were working in government sector.
- Out of 400 middle aged adults, 55.5% belonged to the above poverty line and 44.5% were below the poverty line.
- The majority of middle-aged adults (95.8%) had no family history of tuberculosis

Section 2

Awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults

Section 2.1

Awareness regarding prevention of tuberculosis among middle aged adults

- The study revealed that 29.8% of middle-aged adults had well, 56.2% had average and 14% had poor awareness regarding prevention of tuberculosis.
- Regarding the item wise analysis of awareness questionnaire, 83.5% knew that the lung is primarily affected by tuberculosis, 55% were not aware that tuberculosis is a communicable disease, 77.3% knew that tuberculosis is an airborne disease, 91.7% were aware of the cardinal features of pulmonary tuberculosis, 91.2% knew that sputum examination is the diagnostic test to detect TB, about 93% were didn't know which food is more included in the diet of TB patients, 82.5% knew that measures to prevent TB from one person to another and 79.7% were unaware about the fact that AIDS patients are highly vulnerable to tuberculosis.

Section 2.2

Attitude regarding prevention of tuberculosis among middle-aged adults

- The study showed that 35.5% of middle-aged adults had favorable attitude and 64.5% had an un favorable attitude regarding prevention of tuberculosis.

Section 2.3

Practice regarding prevention of tuberculosis among middle-aged adults

- From the study, it is evident that 52.5% of middle-aged adults had good practice and 47.5% had poor practice regarding prevention of tuberculosis.

Section 3

Correlation between awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults

Spearman correlation coefficient was used to analyze the correlation between awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults.

Section 3.1

Correlation between awareness and attitude regarding prevention of TB among middle aged adults

- The study revealed that there was a significant positive correlation between awareness and attitude regarding prevention of tuberculosis among middle aged adults.

Section 3.2

Correlation between awareness and practice regarding prevention of TB among middle aged adults

- A significant positive correlation was found between awareness and practice regarding prevention of tuberculosis among middle aged adults.

Section 3.3

Correlation between attitude and practice regarding prevention of TB among middle-aged adults

- There was a significant positive correlation found between attitude and practice regarding prevention of tuberculosis among middle aged adults.

Section 4

Association of awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults with selected variables

The association of awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults with selected variables were analyzed by using chi- square test.

Section 4.1

Association between awareness regarding prevention of tuberculosis among middle aged adults and selected variables.

- The study findings revealed that there was a significant association found between awareness regarding prevention of tuberculosis with gender, education, occupation and income status.

Section 4.2

Association between attitude regarding prevention of tuberculosis among middle aged adults and selected variables.

- A significant association was found between attitude regarding prevention of tuberculosis with education and occupation.

Section 4.3

Association between practice regarding prevention of tuberculosis among middle aged adults and selected variables.

- There was a significant association found between practice regarding prevention of tuberculosis with gender, education, occupation and family history of tuberculosis.

Nursing Implications

Nursing education

- Community health nurse can act as a change agent by providing health education to individual, family and community regarding prevention of tuberculosis.
- As a nurse educator, we have to give more emphasize on prevention of TB in the curriculum of Diploma, Bachelorette and Masters in Nursing. We should incorporate various activities including the preparation of leaflets, pamphlets, posters and role play in disseminating the information to the general public during their community field experience.

Nursing practice

- A mass awareness campaign will help to reduce the incidence of tuberculosis in various community settings including schools, colleges, factories and residential institutions. This includes various interventional strategies including awareness training programs, videos, television programs, short films, printed materials such as posters, stickers, information booklet and newspaper articles.
- The community health nurse as a facilitator must assume the role of trainer and educate the general public regarding the tuberculosis and its prevention

Nursing Administration

- Nurse administrators can utilize the findings of the study to organize the programs regarding prevention of tuberculosis in the hospital and community settings. Administrative support can be given to nurses to plan, organize and implement mass awareness programs to general public in various settings.
- Being the administrators, they can recommend the higher authorities through local health and education departments for strengthening the awareness programs to the general public regarding tuberculosis and its prevention.

Nursing research

- Findings of the present study can be utilized as a scientific basis for carrying out further studies.
- The nurse administrators can motivate nurses to repeat the same study on a large population with various interventional strategies depending upon the age, literacy status, residential setting, socio economic and cultural background.

Recommendations

- A study can be conducted to assess the prevalence of tuberculosis among middle aged adults.

- The study can be replicated on a large sample and various settings, there by finding can be generalized to a larger population.
- The study can be conducted by using multistage random sampling technique and can collect data by doing house to house survey for data collection.
- Mass awareness program can be organized regarding prevention of tuberculosis in schools, colleges, industry including various community settings.
- An exploratory study can be done to identify the risk factors of tuberculosis.
- Mass screening programs for TB can be organized for vulnerable groups.
- A study can be done to assess the effectiveness of IEC package on tuberculosis to the general public.
- A comparative study can be conducted to evaluate the effectiveness of various interventional strategies regarding prevention of tuberculosis among general public.
- A comparative study can be conducted to assess the knowledge, attitude and practice regarding prevention of tuberculosis among general public in rural and urban settings.
- A qualitative study can be conducted to identify the utilization and non-utilization of health services in prevention of tuberculosis.
- Seminars and workshops should be organized for ASHA workers, Anganwadi workers and community volunteers including Arogyasena on tuberculosis and its prevention.
- Extensive health education as part of curriculum directed towards attitudinal changes among school children, college students and nursing students will definitely make a great role in creating awareness and remove myths about TB among children and in turn community at large.
- Disseminate the findings of the study to the local health authorities and collaborate with local self-government and organize various awareness campaigns.

Conclusion

The present study was to assess the awareness, attitude and practice regarding prevention of tuberculosis among middle aged adults residing in selected panchayath of Kottayam district [7]. The findings of the study were, among 400 middle aged adults, 29.8% of middle-aged adults had well, 56.2% had average and 14% had poor awareness regarding prevention of tuberculosis [8]. Regarding attitude, 35.5% of middle-aged adults had favorable and 64.5% had an unfavourable attitude. Considering practice 52.5% of middle-aged adults had good and 47.5% had poor practice regarding prevention of tuberculosis. The present study revealed that there was a positive correlation between awareness attitude and practice regarding prevention of tuberculosis. A significant association was found between awareness regarding prevention of tuberculosis with gender, education, occupation and income status. Regarding attitude, a significant association was found with education and occupation. There was a significant association found between practice with gender, education, occupation and family history of tuberculosis [9-10]. The study also recommended the need for organizing awareness programs on TB for improving the awareness, attitude and practice.

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