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A study to assess the effectiveness of structured teaching programme on knowledge regarding tuberculosis and its management among college students at selected colleges, Chennai

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Abstract
Tuberculosis is an ancient disease. On March 24, 1882, Robert Koch announced the discovery of tubercle bacillus. He would have least expected that the world would be fighting hard to control TB, an easily curable disease, even after 125 years. Tuberculosis is a disease caused by a bacterium called Mycobacterium tuberculosis. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain. If not treated properly, TB disease can be fatal. A pre experimental study, therefore, was undertaken to assess the effectiveness of structured teaching programme on knowledge regarding tuberculosis and its management among college students at selected colleges, Chennai. 30 samples were selected using convenient random sampling technique. In order to assess the level of knowledge regarding tuberculosis and its management, a structured questionnaire was used. The study concluded that structured teaching programme improves the level of knowledge regarding tuberculosis and its management among the college students.The difference was found to be statistically significant at $p<0.001$ level which indicates the effectiveness of structured teaching programme in improving the level of knowledge.

Keywords: Assess, effectiveness, structured teaching programme, knowledge, tuberculosis.

1. Introduction
Tuberculosis is an ancient disease. On March 24, 1882, Robert Koch announced the discovery of tubercle bacillus. He would have least expected that the world would be fighting hard to control TB, an easily curable disease, even after 125 years. Tuberculosis is a disease caused by a bacterium called Mycobacterium tuberculosis. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain. If not treated properly, TB disease can be fatal.

Tuberculosis is one of the most prominent mycobacterium diseases known to humankind. Increasing cases world-wide led to the World Health Organization (WHO) declaring a global emergency in April 1993. Despite the availability of 'tools' for controlling TB, programmes have been unable to sustain high cure rate. As a consequence of this, and the increasing problems of drug resistance, the International community, through the WHO, has developed and launched the Directly Observed Treatment Short Course (DOTS) strategy. Directly Observed Treatment, Short course chemotherapy is a strategy to ensure cure by providing the most effective medicine and confirming that it is taken. It is the only strategy which has been documented to be effective Worldwide on a program basis.

2. Objectives of the Study
- To assess the level of knowledge regarding tuberculosis and its prevention among college students.
- To evaluate the effectiveness of structured teaching programme on knowledge regarding tuberculosis and its management among college students.
- To find out the association between the post-test level of knowledge of the college students with selected demographic variables.

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3. Hypothesis

- **H₁:** There is significant difference between pre-test and post-test level of knowledge of college students regarding tuberculosis and its management.
- **H₂:** There is a significant association between the post-test level of knowledge of college students with selected demographic variables.

4. Material and Method

A pre experimental study was undertaken to assess the effectiveness of structured teaching programme on knowledge regarding tuberculosis and its management among college students at selected colleges, Chennai. 30 samples were selected using convenient random sampling technique. In order to assess the level of knowledge regarding tuberculosis and its management, a structured questionnaire was used. The data was collected by delivering the question sample to the participants and then collected after 1 hour each for pretest and posttest.

The score was interpreted as follows:

Sl. N0	Level of Knowledge	Percentage
1.	Adequate	>75%
2.	Moderately adequate	51-75%
3.	Inadequate	<50%

5. Results

Results reveals that in pretest among 30 samples, 18(60%) had inadequate knowledge, 10 (33.3%) had moderate adequate knowledge and only 2(6.7%) had adequate knowledge about tuberculosis and its management. In posttest among 30 samples, 1(3.3%) had inadequate knowledge, 11(36.7%) had moderate adequate knowledge and 18(60%) had adequate knowledge about tuberculosis and its management. The pretest mean value is 14.3 and the standard deviation value is 4.5. The posttest mean value is 23.3 and standard deviation value is 1.34. The mean difference is 9 and the standard deviation difference is 3.16. The paired "t" value is 21.1 which is statistically significant at $p<0.001$. It reveals that there is significant difference between the pretest and posttest knowledge score. Thus, this proves the effectiveness of structured teaching programme in improving the knowledge among college students.

Variables	Pretest knowledge		Posttest knowledge		Difference		Paired 't' test value
	MEAN	SD	MEAN	SD	MEAN	SD	21.1***
Over All Knowledge	14.3	4.5	23.3	1.34	9	3.16	p < 0.001

6. Conclusion

The study reveals that 1(3.3%) had inadequate knowledge, 11(36.7%) had moderate adequate knowledge and 18(60%) had adequate knowledge about tuberculosis and its management in the post test after implementation of structured teaching programme. The difference was found to be statistically significant at $p<0.001$ level which indicates the effectiveness of structured teaching programme in improving the level of knowledge regarding tuberculosis and its management. Thus organizing continuous awareness programme amongst the college students and the public needs to be implemented:

7. References

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