A study to assess the need for training of nurses regarding management of Tuberculosis patients receiving DOTS and DOTS Plus under Revised National Tuberculosis Control Programme in selected hospitals in Delhi

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ABSTRACT

Background- India is high tuberculosis (TB), high HIV and high Multidrug Resistant TB burden country, accounting for more than one fifth of total global TB burden. Nurses are the backbone of any health care delivery system as they provide services in all settings like hospitals, communities, schools, prisons etc. Assessment and fulfillment of training needs of nurses regarding TB is crucial for achievement of targets of TB control. To achieve the targets of TB control, right number of people, with right skill, in right places at right time are needed. India is preparing approximately 2.25 lakh nurses by various nursing institutions in different cadres apart from already registered nurses.

Aim- To assess the needs for training nurses regarding management of Tuberculosis patients receiving dots and dots plus under Revised National Tuberculosis Control Programme (RNTCP).

Objectives- To assess the learning needs, knowledge and attitude of nurses for tuberculosis, MDR, RNTCP. To see co-relation between knowledge and attitude. To ascertain the opinion of RNTCP managers and nurse educators regarding need for training nurses.

Methodology – Research approach was non- experimental, cross –sectional descriptive study. Four different tools were prepared, validated, pre-tested and used. One to assess learning needs, second was knowledge questionnaire with six domains, third was attitude assessment scale and
fourth tool was opinionnaire. The data was collected from the 400 nurses working in tertiary care TB institutions by using first 3 tools. The fourth tool, one semi structured opinionnaire constructed for the study was used to collect the data from RNTCP managers and nurse educators. The fourth tool had three parts starting from broad question to specific questions. Descriptive and inferential statistics that is Chi square and exact test were used using SPSS with Confidence interval of 95%.

**Results** – Out of 400 nurses, about 15% were males and 85% females. A substantial number of nurses expressed that they need to learn about RNTCP, its records and reports, category IV treatment, diagnosis of TB as per RNTCP. This finding was validated by the finding of scores of knowledge questionnaire. Mean knowledge score was 31.54 out of 50 (63.08%). Knowledge was the lowest in the RNTCP domain (49.40%) followed by prevention of TB (58%) drug resistant TB (63%), treatment of drug resistant TB (63%) and basics of drug sensitive TB (73%). Demographic variables such as age, gender, qualification, designation did not affect the total knowledge score but source of learning, training and experience has affected the knowledge score. Mean attitude score was 69.77±8.0. Demographic variables did not affect the attitude score except qualification. There is positive co-relation between knowledge and attitude (r =.339) Though there was 100% agreement that nurses should be trained to involve in RNTCP for tuberculosis control but statistically significant difference of opinion was found regarding content of training such as in domains like RNTCP, DOTS plus strategy and DOTS strategy. Opinion regarding imparting skills in TB control, statistical significant difference of opinion was spotted in activities like screening TB suspects, interpretation of reports, diagnosing the patient, categorizing the patient, stooping and modifying the drug quantity and maintaining TB register. Nurse educators had a broader view of training than the RNTCP managers.
**Discussion** - The present study showed mean knowledge score as 31.54 out of 50 marks which is just above average score in nursing profession. This low score in domains of drug resistant TB and can be attributed to Multiple and extensive drug resistant tuberculosis (MDR and XDR TB) which is new to nurses. Previous studies have also shown that nurses knowledge regarding tuberculosis was inadequate especially the nursing staff of general hospital as compared to nurses working in TB hospital. RNTCP managers have difference in opinion with the nurse educators in training the nurses in knowledge and skill. Nurse educators have the broader opinion for training to nurses for involvement in TB control than the RNTCP managers. RNTCP managers being the medical professionals may not have deep insight into nursing curriculum and learning objectives of various curriculums. Similar finding is reported by Ghebrehiwit T. nurse professionals must be fostered to tackle burden of TB related disease by proper investment in their training and support as inherited role of nurses is to promote health, to prevent illness, to restore health and to alleviate suffering.

**Conclusion** – Though nurses had good knowledge regarding drug sensitive TB, they need to be updated for drug resistant TB as per guidelines of RNTCP. Nurse educators had a broader view of training for nurses than the RNTCP managers.

**Key words**- Learning needs, knowledge, attitude, RNTCP, nurses, tuberculosis (TB).