Summary

Tuberculosis is still one of the major public health problems in many places in the world especially in Asia and Africa. More people will die from tuberculosis than in any other disease and all deaths from TB are preventable. The world health organization declared tuberculosis a global emergency in recognition of the growing importance of TB as a public health problem and one third of the world's population has been exposed to the tuberculosis pathogen. The global burden of TB in developing countries where 75% of cases are within the economically and most productive age group and that burden of TB will cause economic loss to the family and community (Bhatt, et al, 2009).

The most of TB patients continue their therapy at home. So health education is an important aspect of the TB prevention program. The community health nurse play vital role in caring for the patient with TB and his family, educate them about home health care and instructs the patient and family about infection control practice.

The study aimed to develop home health care program for patients with tuberculosis and their family caregivers, through:

1- Assess patients and their family caregivers’ knowledge about tuberculosis.
2- Assess patients and their family caregivers’ practice about tuberculosis.
3- Design and implement home health care program for tuberculosis patients and their family caregivers according their needs.
4- Evaluate the program.
5- Develop guidelines for patients and their family caregivers about home health care of tuberculosis.
The study conducted at patients’ house; and before planning the program patients and their family caregivers’ knowledge and practice were evaluated to identify needs and problems through pre test sheet. The sample included Fifty one (51) patients and their family caregivers (51) there were all the patients attending the setting during the period of the study. They were chosen according the following criteria:

- For patients :
  - Adult patients diagnosed as tuberculosis.
  - Age more than 18 years.

- For family caregiver:
  - Live with patient at the same home.
  - Responsible about direct patient care.

**Tools of the study:**

Two tools were designed to collect data needed for the study:

1- **The first tool:**

Interviewing questionnaire sheet it includes three parts:

**First part:**

Socio-demographic characteristics of tuberculosis patients and their caregivers. It included questions about age, sex, and marital status, number of family members, educational level, occupation, family income, smoking habits and kin relation. Also this part included questions about disease history of the patient such as duration of disease, classification of patient for treatment, symptoms in the onset of disease, investigation were conducting , treatment regimen, number of hospital admitting, other health problems and follow up.
Second part:

Was designed to collect data about environmental home condition. It included questions about Type of home, quality of building, number of room, source of water supply, water system storage, type of bathroom, ventilation, sun exposure, waste disposal system and garbage disposal.

Third part:

Was designed to assess the patients and their family caregivers' knowledge about tuberculosis. It included questions covered areas as the causative agent of tuberculosis, burden of disease, affected body system by disease, mode of transmission, predisposing factors, clinical manifestation, incubation period, vaccination against tuberculosis, treatment used, nutrition during period of illness and methods of prevention.

2- The second tool:

An observational check list was used to assess the patients and their family caregivers' practices toward tuberculosis. It included questions about isolation technique, treatment system, handling body secretion, feeding system and methods of prevention.

Results:

The present study revealed that the patients and their family caregivers had lack of knowledge about tuberculosis; their knowledge was improved after implementing the program. Also the study revealed that the patients and their family caregivers had lack of practices about tuberculosis; their practices were improved after implementing the program.

Significance differences association was observed regarding
patients and their family caregivers’ knowledge before and after implementing the program. Significance differences association was observed regarding patients and their family caregivers’ practices before, after, and after implementing the program.

The study results proved the hypothesis of the present study which indicated significant improvement of the subjects’ knowledge and practices post home health care implementation about TB.

**Recommendations:**

In the light of the current study the following recommendation are suggested; Conduct health education program to all newly diagnosis TB cases attended to chest hospital about disease treatment and its prevention and control measure. Continues education program to all patients and their family about TB during the follow up visit to upgrade their knowledge and practice. Booklet contains all information about TB and its control measures should be available in every health setting provided care of TB cases. Further researches is needed in others areas especially rural areas. To implement health education programs about management and prevention of TB, and evaluation its effect.