East, Central & Southern Africa Health Community

Competency Based TB Curriculum Outline for Pre-Service Nurses in the ECSA Region

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ACRONYM/ABBREVIATIONS

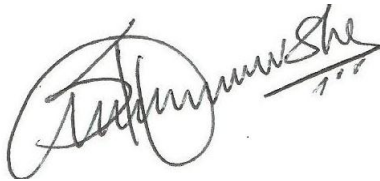|	
ACSM	Advocacy Communication and Social Mobilization
AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-Retroviral Therapy
BCG	Bacillus Calmette-Guérin
BSc N	Bachelor of Science in Nursing
CARE	Cooperative for Assistance & Relief Everywhere
CB	Community Based
CBO	Community Based Organization
CBTBC	Community Based Tuberculosis Care
CDC	Center for Disease Control and Prevention
DOTS	Directly Observed Therapy
ECSA	East, Central and Southern Africa
ECSACON	East, Central and Southern Africa College of Nursing
ECSA-HC	East, Central and Southern Africa – Health Community
HBC	High Burden TB Countries
HIV	Human Immunodeficiency Virus
HIV/TB	Human Immunodeficiency Virus/Tuberculosis
HRH	Human Resource for Health
IPC	Infection Prevention and Control
KNCV	KNCV Tuberculosis Foundation
MCH & FP	Maternal and Child Health & Family Planning
MDGs	Millennium Development Goals
MDR-TB	Multi-Drug Resistant Tuberculosis
MOH or MoH	Ministry of Health
MOHCH	Ministry of Health and Child Health
MOHSW	Ministry of Health and Social Welfare
MTB/RIF	Mycobacterium Tuberculosis and Resistance to Rifampicin
NGOs	Non-Governmental Organizations
OPD	Out Patient Department
PLHIV	People Living with Human Immunodeficiency Virus
PLWH	People Living with HIV
PLWHA	People Living with HIV and AIDS
PMDT	Programmatic Management of Drug-Resistant TB
PPE	Personal Protective Equipment
PTB	Pulmonary Tuberculosis
TB	Tuberculosis
TBS	Tanzania Bureau of Statistics
TWG	Technical Working Group
USAID	United States Agency for International Development
WHO	World Health Organization
XDR	Extensively Drug-resistant TB

ACKNOWLEDGEMENTS

1.0 INTRODUCTION

Adequate competencies in TB & MDR TB for nurses have emerged as essential in the integration of TB and MDR TB into nursing curricula in the ECSA region. These competencies are a result of a compilation of competencies which were then reviewed by a TWG consisted of Registrars of Nursing Councils, Nurse Leaders, Nurse Educators and Programme officers from Non-governmental organizations and Faith based organizations in the ECSA region. The competencies were then reviewed by TB expert committee members who scrutinized the competencies to a completion.

As nurses play a pivotal role in the control of TB and DR-TB, the East, Central and Southern Africa - Health Community (ECSA-HC) conducted a multi-country assessment with the support of partners to identify gaps in TB and MDR-TB content in the pre-service nursing curricula in the partner countries. The assessment found that all the curricula in the member countries do not have adequate TB and DR-TB content for graduates to be able to manage, prevent and control TB. The development of the curriculum outline to integrate TB and DR-TB competencies into nursing curricula is designed to empower graduate nurses with the appropriate evidence based knowledge, skills and attitude to manage TB and DT-TB effectively.

2.0 BACKGROUND

TB is an infectious disease caused by the bacillus *Mycobacterium tuberculosis*. It typically affects the lungs (pulmonary TB) but can affect other sites as well (extra-pulmonary TB). The disease is spread in the air when people who are sick with pulmonary TB expel bacteria, for example by coughing. In general, a relatively small proportion of people infected with *Mycobacterium tuberculosis* will develop TB disease; however, the probability of developing TB is much higher among people infected with the human immunodeficiency virus (HIV) (CDC 2012).

The global survey conducted by WHO in 2012, found out that 8.6 million people fell ill with TB including 1.1 million cases among people living with HIV. In 2012, 1.3 million people died from TB, including 320,000 among people who were HIV-positive. 410,000 women died from TB including 160,000 among women who were HIV-positive. Of the overall TB deaths among HIV-positive people, 50% were among women. TB is one of the top killers of women of reproductive age. An estimated 530,000 children became ill with TB and 74,000 children who were HIV-negative died of TB in 2012 (WHO 2013).

Globally in 2012, an estimated 450,000 people developed multidrug-resistant TB (MDR-TB) and there were an estimated 170,000 deaths from MDR-TB. The number of people diagnosed with MDR-TB nearly doubled between 2011 and 2012, and reached 94,000 worldwide. This includes 84,000 with confirmed MDR-TB and 10,000 with rifampicin resistance detected by Xpert MTB/RIF. However, worldwide and in most countries with a high burden of MDR-TB, less than one in four of the people estimated to have MDR-TB in 2012 were detected.
Just over 77,000 people with MDR-TB were started on second-line treatment in 2012, leaving at least 16,000 detected patients without treatment. Treatment coverage gaps for detected cases were much larger in some countries, especially in the African Region (51% enrolled in

treatment), and widened in China, Pakistan and South Africa. At least one case of extensively drug-resistant TB (XDR-TB) has been reported by 92 countries by the end of 2012. On average, an estimated 9.6% of MDR-TB cases have XDR-TB (WHO 2013).

Today, TB remains one of leading causes of death in many poor and developing countries. Africa, home to 12% of the world's population, contains almost a quarter of the TB disease burden, largely due to issues stemming from poverty, the rise of multi-drug resistant (MDR) strains, and the dual epidemic of TB and HIV/AIDS (IHI 2013). Tanzania, with over an estimated 26,000 deaths in 2006, declared TB to be a national public health emergency as did Swaziland, Zimbabwe and many other African countries with a high TB burden.

Achieving universal access to treatment requires a bold and concerted drive on many fronts of TB care. Major efforts are needed to improve treatment success rates among patients with MDR-TB. Globally, 3.7% (2.1–5.2%) of new cases and 20% (13–26%) of previously treated cases are estimated to have MDR-TB. The proportions of new TB cases with MDR-TB at country level ranged from 0% to 32.3%. As for MDR-TB mortality in all WHO regions, a much larger proportion of patients die compared with the overall TB patient cohorts (Low S et al 2009). MDR-TB has been described as an independent risk factor for dying even after adjustment for potential confounders (Mathew TA et al 2006)

The standard six-month treatment with first-line anti-TB drugs is not effective for people with MDR-TB and XDR-TB, they must be treated with drugs that are less efficacious, more toxic and much more costly. The treatment time is up to two years, causes severe side-effects and it can be difficult for the patient to maintain adherence. Non-compliance with MDR-TB treatment can lead to XDR-TB for which treatment options are severely limited. The toll on public health from counterfeit drugs is an important but rather underestimated issue. Substandard TB drugs contribute to the development of resistance and increase the incidence of MDR-TB or even XDR-TB. It is possible that many individuals die because the drugs they are consuming are counterfeit (GBC Health 2011).

Nurses play a pivotal role in TB case management as follows;
1. All hospitalized patients diagnosed or suspected of TB disease receive continuity of care during transition from hospital to the outpatient setting without interruption in treatment or essential services
2. Disease progression and drug resistance are prevented
3. Each patient receives TB care and treatment according to national standards of care
4. An integrated, coordinated system of health care allows patients to experience TB care along a continuum rather than in fragments
5. Patients complete TB treatment within appropriate time frames and with minimal interruption in lifestyle or work
6. Transmission of tuberculosis within the community is prevented through effective contact investigations and delinquency control activities
7. The patient/family/community is educated about TB infection, disease, and treatment
8. Individuals diagnosed with clinically active or suspected TB are reported according to regulations, and TB control activities are implemented according to standards of CDC and state, regional, or municipal TB control programs

9. Nurse managers participate in policy development within the healthcare system that positively affect clinical and TB control outcomes
10. Nurse managers participate in studies to improve case management services and documentation, enhancement of adherence, and nursing are of TB patients

Also nurses have to use professional values in enhancing care of these patients by listening to patients and significant others with sympathy and understanding to the patient's perception of the problem. Trying to understand the patient's point of view without correcting information or implying the patient is wrong. Nurse should listen and demonstrate a clear understanding of the patient's position. The nurse hears the explanation of the patient, acknowledges the patients' concerns and patient's cultural norms and lifestyle.

Nurses also work in inter-professional collaboration with other health professionals from different disciplines to identify needs, solve problems, make joint decisions on how best to proceed, and evaluate outcomes collectively. Inter-professional collaboration supports patient-centered care and takes place through teamwork. Health and social care professionals, such as doctors, nurses, physiotherapists and social workers, need to work together effectively to take care of patients effectively. Collaboration does not stop when the patient leaves the hospital, it needs to continue at the community to patient homes.

3.0 RATIONALE

Following PMDT missions conducted in the ECSA Member States, the ECSA-HC noted that only a very small fraction of nurses have been trained on the management of TB and especially MDR-TB. Most nurses working in the outpatient department had no knowledge on how to manage MDR-TB. Those who had received on-the-job training for MDR-TB are often moved to other departments during routine departmental shuffles, which brings new nurses into the TB clinics; this necessitates fresh training which is very expensive in poor resource countries, and delays or alters patient management as the new staff learn how to manage these patients.. ECSA-HC and partners conducted a multi-country assessment to identify gaps in TB and MDR-TB content in the pre-service nursing curricula in the member countries. The assessment found that the curricula in all member countries do not have adequate TB and DR-TB contents for graduates to be able to manage, prevent and control TB. They also found that TB and DR-TB content taught to students is inadequate and varies from institution to institution and that students do not have the opportunity to be attached in TB wards, clinics and for community attachment.

There is need for strengthening pre-service nurse education by integrating TB and MDR-TB competencies into pre-service nursing curricula. The TB and DR-TB Competence based Curriculum Outline is to be integrated in existing curricula of nurses in the region to ensure that nurses have the knowledge and skills to provide appropriate TB management, prevention and control. Nurses are crucial in the prevention and control of TB. Nurses' efficiency in managing this disease will contribute greatly to the reduction of the burden of the disease in the ECSA region.

4.0 TB COMPETENCIES FOR NURSES

The competencies included in this curriculum outline provide details of the skills, knowledge and attitudes expected of a nurse to manage TB patients, contacts and significant others. The competencies provide the detail of how a nurse is expected to practice and capable of doing regarding TB nursing management. These competencies address the knowledge, ability, skills and attitudes required for a nurse graduate in ECSA region to provide quality holistic care for patients, families, and communities impacted by TB. The competencies address eight competency areas and eight core competencies which are then broken down into sub-competencies.

4.1 Areas of the Competencies

There are eight areas from which core competencies are derived, these are as follows:
a) TB Disease, Pathophysiology, Microbiology, Epidemiology, Sociology and Public Health
b) Community-Based TB Services
c) TB Health Education and Counseling
d) Leadership and Management
e) Professional Behaviour in TB Care
f) TB Case Management at Health Facility
g) Competence Area: Risk Management in TB Health Care Settings
h) Paediatric Tuberculosis (TB)

4.2 Core competencies and sub-competencies

There are eight core competencies which are for each area of competence as mentioned earlier. These core competencies are the essential Competencies required for graduates of pre-service nursing programme to have the ability to perform.

The nurse graduate will have the ability to:
1) Apply knowledge and skills from TB disease pathophysiology, microbiology, epidemiology, social sciences and public health that form the basis for high quality, culturally relevant for the management, control and prevention of TB
2) Apply the principles and strategies of community involvement and continuum of care for TB patients and their significant others
3) Apply the principles and strategies of health education and counseling in the provision of nursing care and services to TB patients, contacts and the community
4) Apply the principles of leadership and management in the provision of high quality, sensitive and collaborative TB management and control
5) Apply professional knowledge and skills from professional ethics, laws and regulations which govern the provision of sensitive and holistic nursing care to TB patients, contacts and the community at large
6) Provide care and coordinate patient care to ensure that the patient's medical and psychosocial needs are met through appropriate utilization of resources, ensuring that patient completes a course of therapy; the patient and their family are educated about TB and its treatment; and contacts are investigated, evaluated and treated.

7) Apply principles and strategies of infection prevention and control in the health care setting to promote safety environment for health care workers, patients and the public regarding TB infection transmission.

8) Provide high quality, comprehensive care for children infected with *Mycobacterium Tuberculosis* (pediatric TB)

Each core competence has a number of sub-Competencies in knowledge and skills and some of them have sub-competencies in attitudes.

5.0 THE CURRICULUM OUTLINE

The curriculum outline is presented in a matrix with columns of core competencies, sub-competencies, teaching and learning methods, teaching aids (materials and equipment) and assessment which is divided into assessment criteria, methods and instruments/tools.

5.1 Teaching and learning Methods/Approaches

Different teaching and learning methods/approaches can be employed. Use effective participatory methods and approaches based on theories and principles of adult learning. The methods and approaches to teach these competencies should aim at developing skills of student nurses on how to manage, prevent and control TB disease. It is important that the teaching methods and approaches focus on using skills lab in developing skills and demonstrations in actual environment for clinical practice so that students learn through hands on and practice to acquire the needed competencies to the highest level of quality care. The methods and approaches which are included in the outline include the following:

a) Simulations in skills laboratory (skills lab) including demonstrations
b) Role plays
c) Case studies and presentations including scenarios
d) Practicum (Practice in actual environment; (TB wards, clinics and community outreach)
e) Audio visuals e.g. videos and films
f) Bedside teaching
g) Teaching rounds
h) Problem solving
i) Debate
j) Card sorting when teaching clinical features/signs and symptoms
k) Small group work and discussion

There is need to use teaching aids to enhance teaching and learning. Such aids include audio-visual such as video, films, PowerPoint presentation and LCD projector, manikins, real equipment and materials like hospital equipment and supplies.

5.2 Assessment of the Acquisition of the Competencies

In order to assess students' knowledge, skills and attitudes, there is need to identify assessment criteria for each of the competencies, and the assessment methods and instruments/tools to be

used. Measuring competencies requires tools which can effectively measure skills. Preferred tools include checklists of procedures and skills. There are a number of assessment methods and instruments/tools which are indicated in the matrix below. Use a variety of methods and tools to assess the sutdent in order to ensure the reliability and validity of the assessment.

6.0 COMPETENCIES, TEACHING AND LEARNING METHODS, AIDs AND ASSESSMENT

Competency Area 1: TB Disease, Pathophysiology, Microbiology, Epidemiology, Sociology and Public Health						
Core Competence 1: Apply knowledge and skills from TB disease pathophysiology, microbiology, epidemiology, social sciences and public health that form the basis for high quality, culturally relevant for the management, control and prevention of TB						
Title	Sub Competencies	Teaching and Learning Methods and Context	Teaching Aids (Materials and equipment)	Assessment		
				Assessment Criteria	Assessment Methods	Assessment Instruments/ Tools
Knowledge Sub-competencies A nurse has the ability to:	Explain etiology, pathophysiology, transmission, epidemiology, communicability, risk factors and clinical manifestations of TB disease and infection	Lecture - Discussion Video/Films Problem Solving Classroom and skills lab	Video, films, computer & LCD, screen and News print or flipcharts/ Sheets Makers pens Microscopes and Specimen	Epidemiology and pathophysiology of TB disease explained	Oral examination Written Tests Medical laboratory practical tests	Oral questions Question paper and answer guide
	Describe the contributing factors in developing X/MDR-TB	Lecture discussion Debate	Videos films Computer and LCD projector	Contributing factors in develop X/MDR-TB	Oral examination Written test	Oral question and guide Question paper

		Small group discussion Case study and presentation Problem solving	Flipcharts Sheet Maker pens	described		and Answer guide/marking scheme
	Describe the principles of drug management to prevent TB drug resistance	Lecture-discussion Small group presentation Card sorting	Computer and LCD projector, Wall screen Cards and markers	Principles of drug management to prevent TB drug resistance described	Written test Oral examination Assignment	Question paper and answer guide/marking scheme Oral questions Assignment report guide
	Explain vaccines for prevention of tuberculosis infection	Lecture-discussion Small group presentation Card sorting	Computer and LCD projector, Wall screen Cards and markers	Vaccines for prevention of tuberculosis infection explained	Written test Oral examination Assignment	Question paper and answer guide/marking scheme Oral questions Assignment report guide
	Describe the epidemiology of TB and drug resistant TB in patients with and	Lecture discussion	Computer and LCD projector,	Epidemiology of TB and drug resistant TB in	Written test	Question paper and answer guide/marking

	without HIV	Problem solving Card sorting Flipchart/sheet	Wall screen Cards and markers	patients with and without HIV described	Oral examination Assignment	scheme Oral questions Assignment report guide
	Analyze the burden of TB diseases globally, regionally and nationally for setting up prevention and control strategies.	Case scenario Problem solving Small group discussion	Case scenarios Problem situations to be solved or worked on	The burden of TB diseases globally, regionally and nationally analysed for setting up prevention and control strategies	Written tests Assignment	Question paper and answer guide/marking scheme Assignment report guide
	Analyze the community and social determinants of health.	Case scenario Problem solving Small group	Case scenarios Problem situations to be solved or worked on	The Community and social determinants of health are analyzed	Written tests Assignment	Question paper and Answer guide/Marking scheme Assignment report guide
	Describe methods of TB infection prevention and control.	Small group discussions and presentation	Flipcharts and marker	Methods of TB infection prevention and control is describe	Assignment Written test	Assignment report guide Question papers
	Describe vital statistics and indicators related to	Scenario situations and	Vital statistics for class	Vital statistics and indicators	Assignment	Assignment report

	TB.	class exercises for vital signs and indicator	exercises	related to TB are described	Written test	guide Question papers
	Describe relevant national programs which are related to TB prevention, treatment and control in the country.	Small group discussions and presentation	Flipcharts and marker	Relevant national programs which are related to TB prevention, treatment and control in the country are described	Assignment Written test	Assignment report guide Question papers
	Interpret the legal, regulatory and administrative framework governing TB management and control.	Lecture-discussion Case study for working is small groups	Case scenarios Computer & LCD projector	Legal, regulatory and administrative framework governing TB management and control are interpreted	Assignment Written test	Assignment report guide Question papers
Skills sub-competencies The nurse has the ability to:	Apply principles of epidemiology, and TB disease prevention and control in the management of TB disease and infection	Community health nursing attachment Community health nursing supervision	Community setting Community health nursing guidelines	Principles of epidemiology, and TB disease prevention and control applied in the management of TB disease and infection	Field Project assignment report	Field project report guide

	Apply principles of drug management to prevent TB drug resistance	Clinical attachment Clinical teaching Clinical supervision Bedside teaching Portfolio	Clinical learning objectives Practicum guide Log book/Practical procedure book Portfolio	Principles of drug management to prevent TB drug resistance applied	Practical examination Clinical assessment	Practical examination guide Portfolio Log book Practical procedure book
	Prevent the spread of disease by using appropriate infection prevention and control measures.	Lecture - discussion Demonstration Case scenario Clinical teaching Clinical supervision Portfolio	Computer & LCD projector Skills laboratory Clinical settings Clinical attachment	Spread of disease prevented by using appropriate infection prevention and control measures.	Practical examination Clinical assessment	Practical examination guide Portfolio Log book Practical procedure book
	Use vital statistics and indicators related to TB in the management and control of TB.	Community health nursing attachment Community health nursing	Community setting Community health nursing	Vital statistics and indicators related to TB in the management and control of TB	Field Project assignment report	Field project report guide

		supervision	guidelines	are used		
	Collaborate in national programs which are related to TB prevention, treatment and control in the country.	Lecture discussion Field visit Guest lecturer from National programme	Computer & LCD projector Community setting Community health nursing guidelines	National programs which are related to TB prevention, treatment and control in the country are collaborated.	Field Project assignment report	Field project report guide
	Apply legal, regulatory and administrative framework governing TB management and control.	Lecture discussion Field visit Guest lecturer from National programme	Computer & LCD projector Community setting Community health nursing guidelines	Legal, regulatory and administrative framework governing TB management and control are applied.	Field Project assignment report	Field project report guide
	Use technology appropriately in TB investigations	Lecture discussion Field visit Guest lecturer from National programme	Computer & LCD projector Community setting Community health nursing guidelines	Technology appropriately used in TB investigations	Field Project assignment report	Field project report guide
	Perform routine	Community health nursing	Computer &	Routine surveillance is	Field Project	Field project

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	surveillance	attachment Community health nursing supervision	LCD projector Community setting Community health nursing guidelines	performed	assignment report	report guide
	Collaborate with key stakeholders for reporting to public health authorities and for receiving descriptive epidemiology and recommendations from TB programs data	Community health nursing attachment Community health nursing supervision	Computer & LCD projector Community setting Community health nursing guidelines	For reporting to public health authorities and for receiving descriptive epidemiology and recommendations from TB programs data collaborated with key stakeholders	Field Project assignment report	Field project report guide
	Apply principles of epidemiology, and TB disease prevention and control in the management of TB disease and infection	Community health nursing attachment Community health nursing supervision	Computer & LCD projector Community setting Community health nursing guidelines	Principles of epidemiology, and TB disease prevention and control in the management of TB disease and infection applied	Field Project assignment report	Field project report guide

	Apply principles of drug management to prevent TB drug resistance	Community health nursing attachment Community health nursing supervision	Computer & LCD projector Community setting Community health nursing guidelines	Principles of drug management to prevent TB drug resistance are applied	Field Project assignment report	Field project report guide

Competency Area 2: Community-Based TB Services

Core Competency 2

The nurse has the ability to:

Apply principles and strategies of community involvement and continuum of care for TB patients and their significant others

Title	Sub Competencies	Teaching and Learning Methods and Context	Teaching Aids (Materials and equipment)	Assessment		
				Assessment criteria	Assessment Methods	Assessment Instruments/ Tools
Knowledge sub-Competencies The nurse has the ability to:	Describe public health goals for TB patient management including promptly initiating and completing effective treatment, prevent transmission and development of drug resistant TB.	Lecture – discussion Card sorting exercise	Computer & LCD Projector Cards	Public health goals for TB patient management including promptly initiating and completing effective treatment, prevent transmission and	Written tests Assignments	Question papers Assignment report guide

				development of drug resistant TB are described		
	Describe public health systems and processes for prevention, control and management of TB	Lecture discussion Small group discussion	Computer & LCD projector Flipchart & Maker pens	Public health systems and processes described for prevention, control and management of TB	Written tests Assignments	Question papers Assignment report guide
	Describe the current TB situation.	Lecture – Discussion Scenario situations to be discussed in small groups	Computer & LCD Scenarios Flipchart & Makers	Current TB situation described	Written tests Assignments	Question papers Assignment report guide
	Describe how the services can be optimized, based on the analysis of the current TB situation	Lecture discussion Debate Card sorting	Computer & LCD Issue for debate Cards	How the services can be optimized, is described based on the analysis of the current TB situation	Oral examination Written test	Oral questions Question paper and answer guide
	Describe the signs, symptoms, and risk factors associated with TB.	Lecture - discussion Small group discussion and	Computer & LCD Projector Flipchart & Maker pens	Signs, symptoms, and risk factors associated with TB is described	Oral examination Written test	Oral questions Question paper and answer guide

		presentation				
	Describe national guidelines on patients and specimen referral processes to transfer information on TB patients.	Lecture- discussion Small group discussion and presentation	Computer & LCD Projector Flipchart & Maker pens	National guidelines on patients and specimen referral processes to transfer information on TB patients is described	Oral examination Written test	Oral questions Question paper and answer guide
	Describe the purpose, procedure, and reporting mechanisms required for standard TB data reporting systems	Lecture - discussion Small group discussion and presentation	Computer & LCD Projector Flipchart & Maker pens	Purpose, procedure and reporting mechanisms required for standard TB data reporting systems is described	Oral examination Written test	Oral questions Question paper and answer guide
Skills sub-Competencies The nurse has the ability to:	Identify populations at high risk of developing active TB from Latent Tuberculosis Infection (LTBI) and develop strategies to target these populations.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Populations at high risk of developing active TB from Latent Tuberculosis Infection (LTBI) is described	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Develop strategies to target high risk populations of developing active from latent Tuberculosis	Lecture – discussion Community Field attachment	Computer & LCD projector Community setting	Strategies to target high risk populations of developing active from latent Tuberculosis	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work

	infection	Field supervision	Clinics	infection are developed		report guide
	Conduct community assessment to identify available resources	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Community assessment to identify available resources conducted	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Collect and interpret data on TB in the community	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Data on TB in the community is collected and interpreted	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Monitor trends in TB disease and participate in TB case finding	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Trends in TB disease is monitored and participated in TB case finding	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Evaluate outcomes of direct patient care, educational programs, and research	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Outcomes of direct patient care, educational programs, and research are evaluate	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide

	Request correct TB tests to ensure that as many potential cases are identified as early as possible.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinic settings Learning objectives	Correct TB tests requested to ensure that as many potential cases are identified as early as possible.	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Administer MDR –TB medications in accordance with the protocol.	Lecture – discussion Community Field Attachment in the clinic Attach Field supervision	Computer & LCD projector Community setting Clinic settings	MDR –TB medications is administered in accordance with the protocol.	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Report any adverse drug effects for TB treatment.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Any adverse drug effects for TB treatment is reported	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Carry out contact tracing and investigate the symptomatic contacts in accordance with national	Lecture – discussion Community Field	Computer & LCD projector Community	Contact tracing is carried out and investigate the symptomatic	Portfolio Supervision	Portfolio folder Supervision guide

	guidelines	attachment Field supervision	setting Clinics	contacts in accordance with national guidelines	Field work report	Field work report guide
	Interpret public health laws, regulations, and policies specific to reporting and notification of TB infection.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Public health laws, regulations, and policies specific to reporting and notification of TB infection interpreted	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Implement interventions that support treatment adherence to overcome barriers	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Interventions that support treatment adherence implemented to overcome barriers	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Collaborate with community-based organizations for effective service delivery to targeted communities	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	For effective service delivery to targeted communities collaborated with community-based organizations	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Promote community involvement in TB elimination	Lecture – discussion Community Field	Computer & LCD projector Community	Community involvement in TB elimination is	Portfolio Supervision	Portfolio folder Supervision

		attachment	setting	promoted	Field work report	guide
		Field supervision	Clinics			Field work report guide
	Provide health promotion activities for Individuals, families and communities.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Health promotion activities for individuals, families and communities are provided	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Assist the patient and family in planning for treatment follow up and adherence strategies.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Patient and family assisted in planning for treatment follow up and adherence strategies.	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Apply laws and regulations that protect health and safety of the community.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Laws and regulations that protect health and safety of the community are applied	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Conduct field visits to assess risk of TB transmission in the community.	Lecture – discussion Community Field	Computer & LCD projector Community	Field visits to assess risk of TB transmission in the community are	Portfolio Supervision	Portfolio folder Supervision guide

		attachment Field supervision	setting Clinics	conducted.	Field work report	Field work report guide
	Monitor TB patients' adherence to TB treatment plan	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	TB patients' adherence to TB treatment plan is monitored	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Apply measures to prevent acquired drug resistance and help ensure completion of therapy	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Measures to prevent acquired drug resistance and help ensure completion of therapy are applied	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Administer directly observed therapy (DOT) and monitor effect of treatment.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Directly observed therapy (DOT) is administered and effect of treatment is monitored	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Perform HIV pre and post-test counseling (if certified and/or in accordance with local regulation or policy)	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	HIV pre and post-test counseling perform (if certified and/or in accordance with local regulation or	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide

				policy)		
	Perform HIV testing using approved tests and procedures (if certified and/or in accordance with local regulation or policy)	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	HIV testing using approved tests and procedures performed (if certified and/or in accordance with local regulation or policy)	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Provide care to TB/HIV co-infected patients.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Care to TB/HIV co-infected patients is provided.	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Maintain TB data records in line with national guidelines for TB Information Management System	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	TB data records maintained in line with national guidelines for TB Information Management System	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
	Analyze how the different roles played by all actors affect treatment compliance in the community.	Lecture – discussion Community Field attachment	Computer & LCD projector Community setting	different roles played by all actors and how they affect treatment compliance in the community are	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work

		Field supervision	Clinics	analyzed		report guide
	Identify the stakeholders involved in patient care and support in the community and how their work affects the management and control of TB.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Stakeholders involved in patient care and support in the community are identified and how their work affects the management and control of TB	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide
Attitude sub-competence The nurse has the ability to:	Analyze local culture and beliefs in relation to TB disease and management.	Lecture – discussion Community Field attachment Field supervision	Computer & LCD projector Community setting Clinics	Local culture and beliefs in relation to TB disease and management are analyzed.	Portfolio Supervision Field work report	Portfolio folder Supervision guide Field work report guide

Competency Area 3: TB Health Education and Counseling

Core Competency: 3

The nurse has the ability to:

Apply principles and strategies of health education and counseling in the provision of nursing care and services to TB patients, Contacts and the community

Title	Sub Competencies	Teaching and	Teaching Aids	Assessment		

		Learning Methods and Context	(Materials and equipment)	Assessment Criteria	Assessment Methods	Assessment Instruments/Tools
Knowledge sub-competence The nurse has the ability to:	Identify the educational needs of health care providers (public and private), community partners, and clients within the jurisdiction concerning the prevention, diagnosis, treatment and control of TB.	Lecture - discussion Small group discussion and presentation	Computer & LCD Projector Flipchart & Maker pens	The educational needs of health care providers (public and private), community partners, and clients within the jurisdiction concerning the prevention, diagnosis, treatment and control of TB are identified	Written test Individual assignment	Assignment report guide Question paper and answer guide
	Identify educational materials for persons from diverse cultural, socioeconomic, educational, racial, ethnic and professional backgrounds, and persons of all ages and lifestyles.	Lecture - discussion Small group discussion and presentation	Computer & LCD Projector Flipchart & Maker pens	Educational materials for persons from diverse cultural, socioeconomic, educational, racial, ethnic and professional backgrounds, and persons of all ages and lifestyles are identified.	Written test Individual assignment	Question paper and answer guide Assignment report guide

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	Recognize and addresses misconceptions about TB disease, diagnosis treatment, and prevention in preparing training materials	Lecture - discussion Small group discussion and presentation	Computer & LCD Projector Flipchart & Maker pens	Misconceptions about TB disease, diagnosis treatment, and prevention are recognized and addressed in preparing training materials	Written test Assignment	Question paper and answer guide Assignment report guide
Skills sub-Competencies The nurse has the ability to:	Prepare educational materials for persons from diverse cultural, socioeconomic, educational, racial, ethnic and professional backgrounds, and persons of all ages and lifestyles.	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Educational materials for persons from diverse cultural, socioeconomic, educational, racial, ethnic and professional backgrounds, and persons of all ages and lifestyles are prepared	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric
	Develop a health education, health promotion and counseling plan	Lecture - discussion Planning	Computer & LCD projector Scenarios for demonstrations	A health education, health promotion and counseling plan developed.	Assignment Written test/	Assignment report Question paper

		exercises in groups or individual	and role play		Examination	and answer guide
	Evaluate available health education materials for consistency with state national guidelines and adapts for local use	Available health education materials for consistency with state national guidelines and adapts for local use are evaluated	Lecture – discussion Role play	Available health education materials for consistency with state national guidelines and adapts for local use are evaluated	Assignment Written test/ Examination	Assignment report Question paper and answer guide
	Assess patient's knowledge about TB and DR TB	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Patient's knowledge about TB and DR TB assessed	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric
	Teach simple measures that may reduce transmission of infection in the household and the community, such as cough etiquette which should be encouraged and utilized	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Simple measures that may reduce transmission of infection in the household and the community are taught, such as cough etiquette which should be encouraged and	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric

				utilized		
	Distribute TB educational materials in a variety of formats (written, video, web-based, instructor-led)	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	TB educational materials in a variety of formats (written, video, web-based, instructor-led) distributed	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric
	Teach client, contacts and public on TB diagnosis, treatment, prevention and control	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Client, contacts and public taught on TB diagnosis, treatment, prevention and control	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric
	Teach agencies/organizations concerning the importance of planning for TB risk assessment, health screening, medical evaluation, treatment and case	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Agencies/organizations taught concerning the importance of planning for TB risk assessment, health screening, medical evaluation, treatment and case	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric

	management			management	
	Educate and counsel individual, family and community on importance of treatment adherence and possible implications of non-adherence to TB treatment	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Individual, family and community are educated and counselled on the importance of treatment adherence and possible implications of non-adherence to TB treatment	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric
	Monitor DOT at the health facility or the community taking care of privacy and confidentiality.	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	DOT at the health facility or the community are monitored taking care of privacy and confidentiality	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric
	Educate and counsel individual, group and community on TB and TB/HIV co-infection	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Individual, group and community educated and counselled on TB and TB/HIV co-infection	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating

						scale/rubric
	Teach the patient and significant others on known side effects of anti-TB and TB/HIV medicines and answer patients questions honestly and correctly	Lecture-discussion\n\nDemonstrations\n\nRole plays	Computer & LCD projector\n\nScenarios for preparations demonstrations and role play	Patient and significant others are taught on known side effects of anti-TB and TB/HIV medicines and answer patients questions honestly and correctly	Written test\n\nPractical examination\n\nClinical/community assignment	Question paper and answer guide\n\nPractical examination guide/checklist/rating scale/rubric
	Conduct home visits to follow up treatment and infection prevention strategies	Lecture-discussion\n\nDemonstrations\n\nRole plays	Computer & LCD projector\n\nScenarios for preparations demonstrations and role play	Home visits conducted to follow up treatment and infection prevention strategies	Written test\n\nPractical examination\n\nClinical/community assignment	Question paper and answer guide\n\nPractical examination guide/checklist/rating scale/rubric
	Establish working relationship with community organizations,	Lecture-discussion\n\nDemonstrations\n\nRole plays	Computer & LCD projector\n\nScenarios for preparations demonstrations and role play	Working relationship with community organizations is established	Written test\n\nPractical examination\n\nClinical/community assignment	Question paper and answer guide\n\nPractical examination guide/checklist/rating scale/rubric

	Advocate for and conduct clinical and operational research	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	Clinical and operational research are advocated for and conducted	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric
	Assess patients attitude, beliefs, and feelings about TB	Lecture-discussion Demonstrations Role plays	Computer & LCD projector Scenarios for preparations demonstrations and role play	patients attitude, beliefs, and feelings about TB are assessed	Written test Practical examination Clinical/community assignment	Question paper and answer guide Practical examination guide/checklist/rating scale/rubric

Competency Area 4: Leadership and Management

Core Competency 4:

The nurse has the ability to:

Apply principles of leadership and management in the provision of quality, TB prevention, diagnosis and care

Title	Sub Competencies	Teaching and Learning	Teaching Aids (Materials and	Assessment		

		Methods and Context	equipment)	Assessment Criteria	Assessment Methods	Assessment Instruments/Tool
Knowledge sub-Competencies The nurse has the ability to:	Identify leadership and management concepts and principles in regard to TB control	Lecture discussion	Computer & LCD projector	Leadership and management concepts and principles in regard to TB control is identified	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Recognize different management and leadership styles in regard to TB control	Lecture discussion Debate Card sorting	Computer & LCD projector Scripts for debating Cards	Different management and leadership styles in regard to TB control recognized	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Determine ways of focusing the team in setting goals, objectives, specific strategies and auditing outcomes against the goals and objectives.	Lecture discussion Case scenarios and small group discussion	Computer & LCD projector Group work	Ways of focusing the team determined in setting goals, objectives, specific strategies and auditing outcomes against the goals and objectives.	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Prioritize activities and resources to meet needs of the patient and	Lecture discussion Case scenarios	Computer & LCD projector	Activities and resources prioritized to meet needs of the patient	Written tests Assignments	Question paper & Answer guide Assignment

	community.	and small group discussion	Group work	and community.		report guide
	Recognize approaches to personnel guidance in meeting patient and community needs	Lecture discussion Small group discussion	Computer & LCD projector Group work	Approaches to personnel guidance in meeting patient and community needs recognized	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Analyze approaches for problem solving in day to day delivery of TB services	Lecture discussion Case studies	Computer & LCD projector Case study scripts	Approaches for problem solving in day to day delivery of TB services analysed	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Identify training needs for capacity building of nurses in TB care	Lecture discussion Small group discussion	Computer & LCD projector Group work	Training needs for capacity building of nurses in TB care identified	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Identify organizational and infrastructural factors that may impact delivery of services or desired outcomes	Lecture discussion Small group discussion	Computer & LCD projector Group work	Organizational and infrastructural factors that may impact delivery of services or desired	Written tests Assignments	Question paper & Answer guide Assignment report guide

				outcomes identified		
	Analyze quality assurance systems and processes in the provision of TB services	Lecture discussion

Case studies | Computer & LCD projector

Case study scripts | Quality assurance systems and processes in the provision of TB services analysed | Written tests

Assignments | Question paper & Answer guide

Assignment report guide |
| | 4,10. Recognize principles and processes of change within the management of TB patient | Lecture discussion

Small group discussion | Computer & LCD projector

Group work | Principles and processes of change within the management of TB patient recognized | Written tests

Assignments | Question paper & Answer guide

Assignment report guide |
| | Interpret program policies and procedures to stakeholders | Lecture discussion

Case studies | Computer & LCD projector

Case study scripts | Program policies and procedures interpreted to stakeholders | Written tests

Assignments | Question paper & Answer guide

Assignment report guide |
| | Identify and interpret public health laws, regulations, and policies related to TB care and strategies | Lecture discussion

Case studies | Computer & LCD projector

Case study scripts | Public health laws, regulations, and policies related to TB care and strategies identified and interpreted | Written tests

Assignments | Question paper & Answer guide

Assignment report guide |

	Identify internal and external issues that may affect TB programmes at national, regional and district levels	Lecture discussion Case studies	Computer & LCD projector Case study scripts	internal and external issues that may affect TB programmes at national, regional and district levels are identified	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Recognize the roles and responsibilities of all key players in TB management at hospital, community, national and international levels.	Lecture discussion Case studies	Computer & LCD projector Case study scripts	Roles and responsibilities of all key players in TB management at hospital, community, national and international levels are recognized	Written tests Assignments	Question paper & Answer guide Assignment report guide
	Identify team's strengths and weaknesses regarding infection prevention and control, and reflect on avenues for improvement.	Lecture discussion Small group discussion	Computer & LCD projector Group work	Team's strengths and weaknesses are identified regarding infection prevention and control, and reflect on avenues for improvement.	Written tests Assignments	Question paper & Answer guide Assignment report guide
Skills sub-competence The nurse has the	Develop a plan for implementation of TB programme which includes goals, process	Lecture - discussion	Computer & LCD projector	A plan for implementation of TB programme developed which	Project work	Project report guide

ability to:	objectives, and implementation steps, strategies and outcomes	Simulation exercises	Group work Field trip to TB projects	includes goals, process objectives, implementation steps, strategies and outcomes	Group work and presentation	Group work and presentation report guide
	Provide leadership in developing policies that support TB control and prevention activities	Lecture - discussion Simulation exercises	Computer & LCD projector Group work Field trip to TB projects	Leadership in developing policies that support TB control and prevention activities is provided	Project work Group work and presentation	Project report guide Group work and presentation report guide
	Perform Leadership and management tasks and activities, including quality and human resource management, appropriate for level of health facility and TB patient care	Lecture - discussion Simulation exercises	Computer & LCD projector Group work Field trip to TB projects	Leadership and management tasks and activities, including quality and human resource management, appropriate for level of health facility and TB patient care is performed	Project work Group work and presentation	Project report guide Group work and presentation report guide
	Develop a procurement plan according to services	Lecture discussion	Computer & LCD projector	A procurement plan developed according to	Group assignments	Group assignment

	needed	Simulation exercises in groups	Group assignment	services needed.	report	report guide
	Develop, implement, monitor, and be accountable for the budget for the defined area(s) of responsibility	Lecture discussion Case studies	Computer & LCD projector Case study script	The budget for the defined area(s) of responsibility developed, implemented, monitored and accounted for	Written test Group assignment report	Question paper & answer guide Assignment report guide
	Apply evidence-based findings in developing a TB health policy proposal and explaining the advantages and disadvantages of each option.	Lecture discussion Simulation exercises in groups	Computer & LCD projector Group assignment	Evidence-based findings in developing a TB health policy proposal applied and explaining the advantages and disadvantages of each option.	Group assignments report	Group assignment report guide
	Advocate for review of the legislation in line with the current TB Management	Lecture discussion Simulation exercises in groups	Computer & LCD projector Group assignment	Review of the legislation advocate in line with the current TB Management	Group assignments report	Group assignment report guide

	Apply current techniques in decision analysis and health planning regarding TB programmes	Lecture discussion Case studies	Computer & LCD projector Case study script	Current techniques applied in decision analysis and health planning regarding TB programmes	Written test Group assignment report	Question paper & answer guide Assignment report guide
	Promote national legislation and regulation aimed at reducing public health risk for TB transmission.	Lecture discussion Case studies	Computer & LCD projector Case study script	National legislation and regulation aimed at reducing public health risk for TB transmission promoted	Written test Group assignment report	Question paper & answer guide Assignment report guide
	Provide for a systematic collection of practice data as part of a program of quality management	Lecture discussion Simulation exercises in groups	Computer & LCD projector Group assignment	A systematic collection of practice data is provided as part of a program of quality management	Group assignments report	Group assignment report guide
	Conduct site visits to regions and districts to observe how national guidelines activities are carried out and how performance standards are met	Lecture - discussion Attachment to National programmes Simulation exercises	Computer & LCD projector Group work Field with national TB programmes	Site visits to regions and districts are conducted to observe how national guidelines activities are carried out and how performance standards are met	Project work Group work and presentation	Project report guide Group work and presentation report guide

	Compile programme report in collaboration with other staff and key stakeholders	Lecture - discussion

Attachment to National programmes

Simulation exercises | Computer & LCD projector

Group work

Field with national TB programmes | Programme report is compiled in collaboration with other staff and key stakeholders | Project work

Group work and presentation | Project report guide

Group work and presentation report guide |
| | Collect data on TB in children in routine reporting and in reviews of national TB programmes. | Lecture - discussion

Attachment to National programmes

Simulation exercises | Computer & LCD projector

Group work

Field with national TB programmes | Data on TB in children is collected in routine reporting and in reviews of national TB programmes. | Project work

Group work and presentation | Project report guide

Group work and presentation report guide |
| | Promote evidence based practice by participating in and involving the nursing staff in evaluative research activities. | Lecture - discussion

Attachment to National programmes

Simulation exercises | Computer & LCD projector

Group work

Field with national TB programmes | Evidence based practice is promoted by participating in and involving the nursing staff in evaluative research activities. | Project work

Group work and presentation | Project report guide

Group work and presentation report guide |
| | Develop mechanisms for monitoring and evaluating effectiveness and quality of TB | Lecture - discussion

Attachment to | Computer & LCD projector

Group work | Mechanisms for monitoring and evaluating effectiveness and | Project work

Group work and presentation | Project report guide

Group work and |

	programme	National programmes Simulation exercises	Field with national TB programmes	quality of TB programme are developed		presentation report guide
	Develop clear and concise performance appraisal system, for nurses in TB services	Lecture discussion Simulation exercises in groups	Computer & LCD projector Group assignment	Clear and concise performance appraisal system, for nurses in TB services is developed	Group assignments report	Group assignment report guide
	Act as an effective role model for the profession by creating a positive professional image to the public	Lecture discussion Role play	Computer & LCD projector Role play scripts	An effective role model for the profession is acted upon by creating a positive professional image to the public	Written tests Assignments report	Question paper & answer guide Assignment report guide
	Participate in a program of quality management for the evaluation of practice in which it occurs	Lecture discussion Simulation exercises in groups	Computer & LCD projector Group assignment	In a program of quality management participated for the evaluation of practice in which it occurred	Group assignments report	Group assignment report guide
	Monitor quality of own practice and participate in training of staff on TB	Lecture discussion Simulation	Computer & LCD projector Group	Quality of own practice is monitored and	Group assignments report	Group assignment report guide

	updates	exercises in groups	assignment	participated in training of staff on TB updates		
	Act as a change agent and manager to advocate for positive changes in the profession of nursing	Lecture discussion Simulation exercises in groups	Computer & LCD projector Group assignment	To advocate for positive changes in the profession of nursing acted as a change agent and manager	Group assignments report	Group assignment report guide
	Collaborate to address childhood TB across disciplines by providing leadership and guidance	Lecture – discussion Problem solving	Computer & LCD projector Problem scenarios	To address childhood TB across disciplines, collaborated by providing leadership and guidance	Group assignments report	Group assignment report guide
	Develop an evidence base for preventive therapy for children exposed to TB and drug-resistant TB	Lecture discussion Simulation exercises in groups	Computer & LCD projector Group assignment	An evidence base for preventive therapy for children exposed to TB and drug-resistant TB is developed	Group assignments report	Group assignment report guide

| | Implement policies for early diagnosis and ensure there is an uninterrupted supply of high-quality anti-TB medicines for children | Lecture discussion

Simulation exercises in groups | Computer & LCD projector

Group assignment | Policies for early diagnosis are implemented and ensure there is an uninterrupted supply of high-quality anti-TB medicines for children | Group assignments report | Group assignment report guide |
|---|---|---|---|---|---|---|

Competency Area 5: Professional Behaviour in TB Care

Core Competency 5

The nurse has the ability to:

Apply professional knowledge and skills from professional ethics, laws and regulations which govern the provision of sensitive and holistic nursing care to TB patients, contacts and the community at large

Title	Sub Competencies	Teaching and Learning Methods and Context	Teaching Aids (Materials and Equipment)	Assessment		
				Assessment Criteria	Assessment Methods	Assessment Instruments/Tools
Knowledge Sub-Competencies

The nurse has the ability to: | Recognize the historical background of TB infection and disease including its management. | Lecture – Discussion

Assignment n groups library search | Computer & LCD projector

Group assignment | Historical background of TB infection and disease including its management is recognized | Assignment report | Assignment report guide |
| | Identify the structure and | Lecture | Computer & | Structure and function of | Assignment | Assignment |

	function of professional and regulatory authorities/bodies in the country including laws and legislature on TB management and control.	discussion Group work assignment to visit professional and regulatory bodies	LCD projector Group assignment Feld visit	professional and regulatory authorities/bodies in the country including laws and legislature on TB management and control are identified	report	report guide
	Recognize the code of ethics, regulations and standards for TB management in the country	Lecture discussion Group work assignment to visit professional and regulatory bodies	Computer & LCD projector Group assignment Feld visit	Code of ethics, regulations and standards for TB management in the country are recognized	Assignment report	Assignment report guide
	Identify the process of team-building and engaging in professional and inter-professional partnerships	Lecture - discussion Team building games and exercises	Computer & LCD projector Scripts for the team building games and exercises	Process of team-building and engaging in professional and inter-professional partnerships is identified	Written tests Assignments	Question paper and answer guide Assignment report guide
	Recognize strengths and limitations in skill, knowledge and experience and share or seek, counsel, consult with, or refer to a relevant	Lecture - discussion Simulation exercises	Computer & LCD projector Scripts for the exercises	Strengths and limitations in skill, knowledge and experience are recognized and shared or seek, counsel, consult with, or refer to a relevant	Written tests Assignments	Question paper and answer guide Assignment report guide

	resource, other TB experts, or other health practitioners			resource, other TB experts, or other health practitioners		
	Recognize legal requirements of nursing practice, including those of respecting privacy and freedom of information, informed consent and informed choice, recording and reporting, and national data collection requirements.	Lecture - discussion Simulation exercises	Computer & LCD projector Scripts for the exercises	Legal requirements of nursing practice recognized, including those of respecting privacy and freedom of information, informed consent and informed choice, recording and reporting, and national data collection requirements.	Written tests Assignments	Question paper and answer guide Assignment report guide
	Recognize own values and beliefs and not imposing them on others	Lecture - discussion Value clarification exercises	Computer & LCD projector Scripts for the exercises	Own values and beliefs are recognized and not imposing them on others.	Written tests Assignments	Question paper and answer guide Assignment report guide
Skills Sub-competencies The nurse has the ability to:	Act consistently in accordance with professional ethics, values and human rights in taking care of TB patients and contacts	Lecture - discussion Value clarification exercises	Computer & LCD projector Scripts for the exercises	Consistently act in accordance with professional ethics, values and human rights in taking care of TB patients and contacts	Written tests Assignments	Question paper and answer guide Assignment report guide

	Maintain and update own knowledge and skills, in order to remain current in practice.	Lecture - discussion Small group discussion and presentation	Computer & LCD projector Small group work	Own knowledge and skills is maintained and updated, in order to remain current in practice.	Written tests Assignments	Question paper and answer guide Assignment report guide
	Take responsibility and accountability for clinical decisions and actions.	Lecture - discussion Simulation exercises on decision making	Computer & LCD projector Scripts for the exercises	Responsibility and accountability is taken for clinical decisions and actions.	Written tests Assignments	Question paper and answer guide Assignment report guide
	Demonstrate universal/standard precautions, infection prevention and control strategies.	Lecture – discussion Demonstrations	Computer & LCD projector Skills laboratory	Universal/standard precautions, infection prevention and control strategies are demonstrated	Written tests Practical examination	Question paper and answer guide Practical examination checklist or guide
	Demonstrate non-judgmental, non-discriminatory, and culturally appropriate manner with all clients in all settings.	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Non-judgmental, non-discriminatory, and culturally appropriate manner is demonstrated with all clients in all settings.	Written tests Assignments	Question paper and answer guide Assignment report guide

	Respect diversity of individual's culture and customs, regardless of status, ethnic origin or religious belief	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	diversity of individual's culture and customs is respected, regardless of status, ethnic origin or religious belief	Written tests Assignments	Question paper and answer guide Assignment report guide
	Maintain confidentiality of all information shared by the patient and communicate essential information between/among other health providers or family members only with explicit consent from the patient and compelling need	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Confidentiality of all information shared by the patient is maintained and communicate essential information between/among other health providers or family members only with explicit consent from the patient and compelling need	Written tests Assignments	Question paper and answer guide Assignment report guide
	Support patients and their significant others to make informed choices about their health and their right to refuse testing or intervention	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Patients and their significant others are supported to make informed choices about their health and their right to refuse testing or intervention.	Written tests Assignments	Question paper and answer guide Assignment report guide
	Work collaboratively (teamwork) with other	Lecture - discussion	Computer & LCD projector	Collaboratively (teamwork) worked with	Written tests	Question paper and

	health workers to improve the delivery of services to TB patient and the community	Value clarification exercises Role plays	Scripts for the exercises and role plays	other health workers to improve the delivery of services to TB patient and the community	Assignments	answer guide Assignment report guide
	Communicate effectively and professionally with colleagues, students and other care-givers	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Effectively and professionally communicated with colleagues, students and other care-givers	Written tests Assignments	Question paper and answer guide Assignment report guide
	Participate in continuing professional development	Lecture - discussion Small group discussion and presentation	Computer & LCD projector Group work	In continuing professional development participated	Written tests Assignments	Question paper and answer guide Assignment report guide
	Mentor student nurses in the development of their nursing knowledge and skills in clinical settings	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Student nurses mentored in the development of their nursing knowledge and skills in clinical settings	Written tests Assignments	Question paper and answer guide Assignment report guide
	Respect patient's stated preferences and tailor interventions to fit	Lecture - discussion Value	Computer & LCD projector Scripts for the	Patient's stated preferences respected and tailor interventions to fit	Written tests Assignments	Question paper and answer guide

	patient's needs, circumstances, and health or cultural beliefs	clarification exercises Role plays	exercises and role plays	patient's needs, circumstances, and health or cultural beliefs		Assignment report guide
	Listen to and address patient fears, concerns, and challenges in a respectful manner	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	patient fears, concerns, and challenges are listened to and addressed in a respectful manner	Written tests Assignments	Question paper and answer guide Assignment report guide
	Treat the TB patient and significant others with respect and establish rapport.	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	TB patient and significant others are treated with respect and rapport established	Written tests Assignments	Question paper and answer guide Assignment report guide
	Demonstrate sensitivity towards the patient's response to being tested for TB and answer questions correctly	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Sensitivity towards the patient's response to being tested for TB is demonstrated and questions answered correctly	Written tests Assignments	Question paper and answer guide Assignment report guide
	Develop and sustain positive relationships with TB patients through	Lecture - discussion	Computer & LCD projector	Positive relationships with TB patients developed and sustained	Written tests	Question paper and

	effective communication skills.	Value clarification exercises Role plays	Scripts for the exercises and role plays	through effective communication skills.	Assignments	answer guide Assignment report guide
	Create a positive atmosphere where patient feels welcome and confident in the TB service	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	A positive atmosphere is created where patient feels welcome and confident in the TB service	Written tests Assignments	Question paper and answer guide Assignment report guide
	Establish and maintain Therapeutic working relationship and rapport with patients, significant others and colleagues	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Therapeutic working relationship and rapport with patients, significant others and colleagues is established and maintained	Written tests Assignments	Question paper and answer guide Assignment report guide
	Evaluate own nursing practice in relation to professional practice standards and relevant laws and regulations	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	Own nursing practice evaluated in relation to professional practice standards and relevant laws and regulations	Written tests Assignments	Question paper and answer guide Assignment report guide
	Apply ethical principles to the collection,	Lecture -	Computer &	Ethical principles applied to the collection,	Written tests	Question paper and

	maintenance, use, and dissemination of data according to national policy	discussion Value clarification exercises Role plays	LCD projector Scripts for the exercises and role plays	maintenance, use, and dissemination of data according to national policy	Assignments	answer guide Assignment report guide
	Create a positive atmosphere where patient feels welcome and confident in the TB service	Lecture - discussion Value clarification exercises Role plays	Computer & LCD projector Scripts for the exercises and role plays	A positive atmosphere created where patient feels welcome and confident in the TB service	Written tests Assignments	Question paper and answer guide Assignment report guide

Competency Area 6: TB Case Management at Health Facility

Core competence 6
The nurse has the ability to:
Provide care and coordinate patient care to ensure that the patient's medical and psychosocial needs are met through appropriate utilization of resources, ensuring that patient completes a course of therapy; patient and family educated about TB and its treatment; and contacts investigated, evaluated and treated

Title	Sub Competencies	Teaching and Learning Methods and Context	Teaching Aids (Materials and Equipment)	Assessment		
				Assessment Criteria	Assessment Methods	Assessment Instruments/Tools
Knowledge Sub-	Recognize the determinants of health as	Lecture –	Computer &	Determinants of health as it pertains to TB	Written tests	Question paper and

competence The nurse has the ability to:	it pertains to TB screening, infection and TB disease	discussion Small group discussion and presentation	LCD projector Group work	screening, infection and TB disease are recognized	Assignments	answer guide Assignment report guide
	Describe the epidemiology of TB; latent TB infection (LTBI) and drug resistant TB in patients with and without HIV	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	Epidemiology of TB; latent TB infection (LTBI) and drug resistant TB in patients with and without HIV is described	Written tests Assignments	Question paper and answer guide Assignment report guide
	Recognize TB modes of transmission, signs and symptoms, complications, diagnostic tests and findings, recommended treatments, and control procedures	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	TB modes of transmission, signs and symptoms, complications, diagnostic tests and findings, recommended treatments, and control procedures are recognized	Written tests Assignments	Question paper and answer guide Assignment report guide
	Recognize risk factors for acquisition of TB infection and progression of infection to TB disease	Lecture – discussion Debate	Computer & LCD projector Debate scripts	Risk factors recognized for acquisition of TB infection and progression of infection to TB disease	Written tests Assignments	Question paper and answer guide Assignment report guide
	Identify strategies to assist clients and patients in improving treatment adherence	Lecture – discussion Small group discussion and	Computer & LCD projector Group work	Strategies to assist clients and patients in improving treatment adherence are identified	Written tests Assignments	Question paper and answer guide Assignment

		presentation				report guide
	Identify interventions that support treatment adherence and overcome barriers	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	Interventions that support treatment adherence and overcome barriers are identified	Written tests Assignments	Question paper and answer guide Assignment report guide
	Identify correct treatment regimens for TB, MDR-TB and XDR-TB management according to standard national treatment guidelines	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	Correct treatment regimens for TB, MDR-TB and XDR-TB management are identified according to standard national treatment guidelines	Written tests Assignments	Question paper and answer guide Assignment report guide
	Determine the importance of medication supervision (e.g., directly observed therapy) and case management for all TB cases	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	Importance of medication supervision (e.g., directly observed therapy) and case management for all TB cases are determined	Written tests Assignments	Question paper and answer guide Assignment report guide
	Recognize and manage all adverse reaction associated with antiretroviral and TB treatment	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	All adverse reaction associated with antiretroviral and TB treatment are recognized and managed	Written tests Assignments	Question paper and answer guide Assignment report guide

	Document and report all adverse reaction associated with TB and antiretroviral treatment	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	all adverse reaction associated with TB and antiretroviral treatment are documented and reported	Written tests Assignments	Question paper and answer guide Assignment report guide
	Identify current national guidelines for the diagnosis, treatment and prevention of tuberculosis, including management of MDR-TB, pediatric TB, surgical intervention of TB and TB/HIV co-infection	Lecture – discussion Small group discussion and presentation	Computer & LCD projector Group work	current national guidelines for the diagnosis, treatment and prevention of tuberculosis, including management of MDR-TB, pediatric TB, surgical intervention of TB and TB/HIV co-infection are identified	Written tests Assignments	Question paper and answer guide Assignment report guide
Skills Sub-competence The nurse has the ability to:	Assess, diagnose, plan, implement, monitor and evaluate care of TB, MDR and XDR TB patients.	Lecture-discussion Demonstrations	Computer & LCD projector Skills laboratory	TB, MDR and XDR TB patients care is assessed, diagnosed, planned, implemented, monitored and evaluated	Written tests Assignments	Question paper and answer guide Assignment report guide
	Apply national protocols for notification and tracing of contacts	Lecture – discussion Clinical attachment Community attachment	Computer & LCD projector Practicum guide and Clinical attachment learning	National protocols are applied for notification and tracing of contacts	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or

		Supervision	objectives			guide Portfolio document
	Implement universal precautions for infection, prevention and control	Lecture – discussion Clinical attachment Community attachment Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	universal precautions for infection, prevention and control is implemented	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document
	Document and interpret the TB test results and report.	Lecture – discussion Clinical attachment Community attachment Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	TB test results are documented, interpreted and reported.	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document
	Apply the national guidelines for clinical management of TB patient with HIV co-	Lecture – discussion Clinical	Computer & LCD projector Practicum guide and	National guidelines applied for clinical management of TB patient with HIV co-	Written tests Practical examinations	Examination papers and answer guide Practical

infection	attachment Community attachment Supervision	Clinical attachment learning objectives	infection	Portfolio	examination checklists or guide Portfolio document
	Collaborate with other health care providers to maintain continuity of care throughout treatment by working with the community –based outreach services to track patient care	Lecture – discussion Clinical attachment Community attachment for outreach sevices Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	Collaborated with other health care providers to maintain continuity of care throughout treatment by working with the community –based outreach services to track patient care	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document
	Apply national guidelines in the collection, maintenance, use, and dissemination of data for confidentiality of protected medical information	Lecture – discussion Clinical attachment Community attachment Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	National guidelines in the collection, maintenance, use, and dissemination of data for confidentiality of protected medical information ae applied	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document
	Conduct education and counseling to TB patients, contacts and	Lecture – discussion	Computer & LCD projector	ducation and counseling to TB patients, contacts and significant others	Written tests Practical	Examination papers and

	significant others	Clinical attachment Community attachment Supervision	Practicum guide and Clinical attachment learning objectives	conducted	examinations Portfolio	answer guide Practical examination checklists or guide Portfolio document
	Create awareness among the public on the availability of TB services	Lecture – discussion Clinical attachment Community attachment Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	Awareness created among the public on the availability of TB services	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document
	Apply measures to prevent acquired drug resistance and help ensure completion of therapy	Lecture – discussion Clinical attachment Community attachment Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	Measures to prevent acquired drug resistance and help ensure completion of therapy are applied	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document

	Conduct directly observed therapy (DOT) and monitor efficacy and side effects of treatment	Lecture – discussion Clinical attachment Community attachment Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	Directly observed therapy (DOT) conducted and efficacy and side effects of treatment monitored	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document
	Maintain data entry records and use the TB Information Management System and/or other locally developed electronic information system for case and/or contact data management and reporting	Lecture – discussion Clinical attachment Community attachment Supervision	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	Data entry records maintained and use the TB Information Management System and/or other locally developed electronic information system for case and/or contact data management and reporting	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio document
	Prepare reports for program evaluation using documentation from investigations and interviews	Lecture – discussion Clinical attachment Community attachment	Computer & LCD projector Practicum guide and Clinical attachment learning objectives	Reports prepared for program evaluation using documentation from investigations and interviews	Written tests Practical examinations Portfolio	Examination papers and answer guide Practical examination checklists or guide Portfolio

		Supervision				document
Attitude Sub-Competencies The nurse has the ability to:	Create a good therapeutic environment at the initial contact with the patient to aide compliance	Lecture – discussion Simulation exercises Role plays Case study	Computer & LCD projector Simulations, Role plays and case study scripts	A good therapeutic environment created at the initial contact with the patient to aide compliance	Written tests Portfolio Case studies and presentations	Question paper & answer guide Portfolio document and guide Case study and presentation guide
	Demonstrate good communication skills in the management of TB patients.	Lecture – discussion Simulation exercises Role plays Case study	Computer & LCD projector Simulations, Role plays and case study scripts	Good communication skills in the management of TB patients demonstrated	Written tests Portfolio Case studies and presentations	Question paper & answer guide Portfolio document and guide Case study and presentation guide

	Maintain patient confidentiality and privacy during the caring process including respecting client's choices and beliefs	Lecture – discussion Simulation exercises Role plays Case study	Computer & LCD projector Simulations, Role plays and case study scripts	Patient confidentiality and privacy maintained during the caring process including respecting client's choices and beliefs	Written tests Portfolio Case studies and presentations	Question paper & answer guide Portfolio document and guide Case study and presentation guide
	Demonstrate self-awareness of own beliefs, values, and practice limitations	Lecture – discussion Simulation exercises Role plays Case study	Computer & LCD projector Simulations, Role plays and case study scripts	Self- awareness demonstrated of own beliefs, values, and practice limitations	Written tests Portfolio Case studies and presentations	Question paper & answer guide Portfolio document and guide Case study and presentation guide
	Demonstrate sensitivity regarding impact of TB diagnoses, infectious disease surveillance, reporting, and contact	Lecture – discussion Simulation exercises	Computer & LCD projector Simulations, and case study	Sensitivity demonstrated regarding impact of TB diagnoses, infectious disease surveillance, reporting, and contact	Written tests Portfolio Case studies and	Question paper & answer guide Portfolio document and

	tracing	Case study	scripts	tracing	presentations	guide Case study and presentation guide
	Address stigma and discrimination by counseling and educating TB patients and significant others	Lecture – discussion Simulation exercises Role plays Case study	Computer & LCD projector Simulations, Role plays and case study scripts	Stigma and discrimination addressed by counselling and educating TB patients and significant others	Written tests Portfolio Case studies and presentations	Question paper & answer guide Portfolio document and guide Case study and presentation guide

Competence Area 7: Risk Management in TB Health Care Settings

Core Competence 7

The nurse has the ability to:

Apply knowledge and skills of infection prevention and control in the health care setting to promote a safe environment for health care workers, patients and the public regarding TB infection transmission.

Title	Sub Competencies	Teaching and Learning	Teaching Aids (Materials and	Assessment		

		Methods and Context	Equipment)	Assessment Criteria	Assessment Methods	Assessment Instruments/Tools
Knowledge Sub-competence The nurse has the ability to:	Recognize principles of infection prevention and control in regard to TB infection transmission	Lecture discussion Small group discussion	Computer & LCD projector Small group work	Principles of infection prevention and control are recognized in regard to TB infection transmission	Written test Assignment	Question paper & answer guide Assignment report guide
	Recognize the risk factors promoting TB transmission in clinical settings.	Lecture discussion Debate	Computer & LCD projector Debate scripts	Risk factors promoting TB transmission in clinical settings recognized	Written test Assignment	Question paper & answer guide Assignment report guide
	Recognize occupational risks of TB infection in health care settings and develop preventive and control strategies	Lecture discussion Card sorting	Computer & LCD projector Cards	Occupational risks of TB infection in health care settings recognized and preventive and control strategies developed	Written test Assignment	Question paper & answer guide Assignment report guide
	Define roles and responsibilities of each person in the health care setting regarding TB care	Lecture discussion Small group discussion and presentations	Computer & LCD projector Small group work	Roles and responsibilities of each person in the health care setting regarding TB care are defined	Written test Assignment	Question paper & answer guide Assignment report guide
	Identify staff/patients with presumptive TB	Lecture	Computer &	Staff/patients with presumptive symptoms	Written test	Question paper &

	symptoms early to prevent spread of infection.	discussion Problem solving exercises	LCD projector Problem solving scripts and guide	are identified early to prevent spread of infection.	Assignment	answer guide Assignment report guide
	Identify potential signs of TB outbreaks in clinical settings and institute measures to avert the outbreak.	Lecture discussion Small group discussion and presentation	Computer & LCD projector Small group work	Potential signs of TB outbreaks in clinical settings identified and measures to avert the outbreak instituted	Written test Assignment	Question paper & answer guide Assignment report guide
	Identify changes in epidemiology trends and disseminate the information to policy makers to facilitate formulation of evidence based policy and TB care.	Lecture discussion Small group discussion and presentation	Computer & LCD projector Small group work	Changes in epidemiology trends identified and the information to policy makers disseminated to facilitate formulation of evidence based policy and TB care.	Written test Assignment	Question paper & answer guide Assignment report guide
Skills Sub-competence The nurse has the ability to:	Apply infection prevention and control measures at the work place	Lecture – discussion Demonstration in skills lab Practicum	Computer & LCD projector Skills lab Clinical setting	Infection prevention and control measures applied at the work place	Written test Practical examination	Question paper & answer guide Examination checklist/guide
	Assess environmental and personal infection control strategies	Lecture discussion Small group discussion and	Computer & LCD projector Small group	environmental and personal infection control strategies are assessed	Written test Assignment	Question paper & answer guide Assignment

		presentation	work			report guide
	Apply waste management principles	Lecture – discussion

Demonstration in skills lab

Practicum | Computer & LCD projector

Skills lab

Clinical setting | Waste management principles are applied | Written test

Practical examination | Question paper & answer guide

Examination checklist/guide |
| | Audit waste management and IPC practices | Lecture – discussion

Demonstration in skills lab

Practicum | Computer & LCD projector

Skills lab

Clinical setting | Waste management and IPC practices are audited | Written test

Practical examination | Question paper & answer guide

Examination checklist/guide |
| | Put in place strategies and plans for the prevention and control of TB transmission in the workplace | Lecture discussion

Small group discussion and presentation | Computer & LCD projector

Small group work | Strategies and plans for the prevention and control of TB transmission in the workplace are put in place | Written test

Assignment | Question paper & answer guide

Assignment report guide |
| | Develop and implement a plan that takes into consideration many different internal and external factors contributing to risk of transmission of infection. | Lecture discussion

Small group discussion and presentation | Computer & LCD projector

Small group work | a plan that takes into consideration many different internal and external factors contributing to risk of transmission of infection are developed and | Written test

Assignment | Question paper & answer guide

Assignment report guide |

				implemented .		
	Initiate testing and counselling for TB and HIV amongst presumptive TB cases for TB/HIV at the workplace/health facility	Lecture – discussion Demonstration in skills lab Practicum	Computer & LCD projector Skills lab Clinical setting	testing and counselling for TB and HIV amongst presumptive TB cases for TB/HIV at the workplace/health facility initiated	Written test Practical examination	Question paper & answer guide Examination checklist/ guide
	Create awareness in clients, contacts and the community about treatment options, and promote an enabling environment to facilitate treatment completion.	Lecture discussion Simulation exercises Role plays	Computer & LCD projector Simulations scripts	Awareness in clients, contacts and the community is created about treatment options, and promote an enabling environment to facilitate treatment completion.	Written test Assignment	Question paper & answer guide Assignment report guide
	Create awareness on areas and procedures which pose an increased risk of TB transmission (e.g. X-ray rooms, or sputum collection area), for additional precautions which must be observed by all staff	Lecture discussion Simulation exercises Role plays	Computer & LCD projector Simulations scripts	awareness on areas and procedures which pose an increased risk of TB transmission (e.g. X-ray rooms, or sputum collection area) are created for additional precautions which must be observed by all staff	Written test Assignment	Question paper & answer guide Assignment report guide
	Advocate for a well-equipped workplaces with air ventilation and minimize overcrowding	Lecture discussion Simulation	Computer & LCD projector Simulations	A well-equipped workplaces is advocated with air ventilation and minimize overcrowding	Written test Assignment	Question paper & answer guide

	to reduce the spread of TB bacteria including triaging of patients.	exercises Role plays	scripts	to reduce the spread of TB bacteria including triaging of patients.		Assignment report guide
	Coordinate a multi-disciplinary approach to infection control. other health care workers of every cadre (e.g. clinical, paramedical staff, administrative staff and others like drivers, cleaners, cooks) on the prevention of transmission of TB infection.	Lecture discussion Simulation exercises Role plays	Computer & LCD projector Simulations scripts	A multi-disciplinary approach to infection prevention and control Coordinated with workers of every cadre (e.g. clinical, paramedical staff, administrative staff and others like drivers, cleaners, cooks) on the prevention of transmission of TB infection.	Written test Assignment	Question paper & answer guide Assignment report guide
	Put into practice the knowledge on infection control in a consistent manner.	Lecture discussion Simulation exercises Role plays	Computer & LCD projector Simulations scripts	Knowledge on infection control is put into practice in a consistent manner.	Written test Assignment	Question paper & answer guide Assignment report guide
	Supervise and monitor patient treatment	Lecture discussion Simulation	Computer & LCD projector Simulations	Patient treatment is supervised and monitored	Written test Assignment	Question paper & answer guide Assignment

		exercises Role plays	scripts			report guide
	Monitor and evaluate implementation of infection control strategies	Lecture discussion Simulation exercises Role plays	Computer & LCD projector Simulations scripts	Implementation of infection control strategies is monitored and evaluated	Written test Assignment	Question paper & answer guide Assignment report guide

Competency Area 8: Paediatric Tuberculosis (TB)						
Core competency 8: The nurse has the ability to: Initiate early investigation of TB amongst children and provide high quality, comprehensive care for children infected/exposed with mycobacterium tuberculosis (paediatric TB)						

Title	Sub Competencies	Teaching and Learning Methods and Context	Teaching Aids (Materials and Equipment)	Assessment		
				Assessment Criteria	Assessment Methods	Assessment Instruments/Tools
Knowledge Sub-competence The nurse has the ability to:	Identify risk factors that contribute to TB infection in children	Lecture – discussion Small group discussion and	Computer & LCD project Group work	Risk factors identified that contribute to TB infection in children	Written test Assignment	Question paper & answer guide Assignment

		presentation				report guide
	Recognize signs and symptoms of TB in children	Lecture – discussion Card sorting	Computer & LCD project	signs and symptoms of TB in children recognized	Written test Assignment	Question paper & answer guide Assignment report guide
	Recognize danger signs, such as respiratory distress or severe malnutrition, and refer to the appropriate level of care	Lecture – discussion Card sorting	Computer & LCD project	Danger signs, such as respiratory distress or severe malnutrition are recognized and refer to the appropriate level of care	Written test Assignment	Question paper & answer guide Assignment report guide
	Determine appropriate approaches for identifying children who have been exposed to TB	Lecture – discussion Case scenarios	Computer & LCD project	Appropriate approaches determined for identifying children who have been exposed to TB	Written test Assignment	Question paper & answer guide Assignment report guide
	Recognize management strategies for a child with TB and levels of referral	Lecture-discussion Problem solving	Computer & LCD project	Management strategies recognized for a child with TB and levels of referral		
	Determine appropriate doses for children	Lecture –	Computer &	Appropriate doses for children receiving anti-	Written test	Question paper &

	receiving anti-TB medicines and regimens.	discussion Case scenarios	LCD project	TB medicines and regimens are determined	Assignment	answer guide Assignment report guide
	Identify prevention and control strategies for paediatric TB	Lecture – discussion Small group discussion and presentation	Computer & LCD project	Prevention and control strategies for paediatric TB identified	Written test Assignment	Question paper & answer guide Assignment report guide
Skills Sub-Competencies The nurse has the ability to:	Perform active TB screening for children in all settings	Lecture – discussion Demonstration	Computer & LCD projector Skills laboratory	Active TB screening performed for children in all settings	Written test Assignment	Question paper & answer guide Assignment report guide
	Notify all cases of pulmonary TB at the health facility or as according to national reporting system	Lecture discussion Simulation exercises	Computer & LCD projector Simulation scripts	all cases of pulmonary TB are notified at the health facility or as according to national reporting system	Written test Assignment	Question paper & answer guide Assignment report guide
	Assess, diagnose, plan, implement, monitor and evaluate care of children with TB.	Lecture – discussion Demonstration Clinical attachments	Computer & LCD projector Skills laboratory Clinical setting	Care of children with TB. assessed, diagnosed, planned, implemented, monitored and evaluated	Written test Assignment	Question paper & answer guide Assignment report guide

	Monitor and evaluate the epidemiology of TB and TB/HIV co-infection in pediatrics.	Lecture discussion Simulation exercises	Computer & LCD projector Simulation scripts	Epidemiology of TB and TB/HIV co-infection in pediatrics is monitored and evaluated	Written test Assignment	Question paper & answer guide Assignment report guide
	Record and report data systematically disaggregated by age and sex to capture all TB cases including paediatric TB	Lecture – discussion Demonstration Clinical attachments	Computer & LCD projector Skills laboratory Clinical setting	data systematically recorded and reported disaggregated by age and sex to capture all TB cases including paediatric TB	Written test	
	Collaborate with other psychosocial and educational providers to increase TB case-finding.	Lecture discussion Simulation exercises Clinical attachment	Computer & LCD projector Simulation scripts Clinical setting – paediatic ward	other psychosocial and educational providers collaborated with to increase TB case-finding.	Assignment	Question paper & answer guide
	Administer Bacille Calmette–Guérin (BCG) vaccine at birth	Lecture – discussion Demonstration Clinical practice	Computer & LCD projector Practicum area Clinical learning objectives	Bacille Calmette–Guérin (BCG) vaccine administered at birth	Assignment report guide	Question paper & answer guide

	Participate in the development of training materials on childhood TB for health care workers.	Lecture – discussion Demonstration Clinical practice	Computer & LCD projector Practicum area Clinical learning objectives	Participated in the development of training materials on childhood TB for health care workers.	Written test	Question paper & answer guide
	Implement and evaluate training activities relating to TB in children.	Lecture – discussion Demonstration Clinical practice	Computer & LCD projector Practicum area Clinical learning objectives	Training activities relating to TB in children implemented and evaluated	Assignment	Question paper & answer guide
	Participate in the development and operationalization of clinical guidelines for managing childhood TB.	Lecture – discussion Demonstration Clinical practice	Computer & LCD projector Practicum area Clinical learning objectives	Participated in the development and operationalization of clinical guidelines for managing childhood TB.	Question paper & answer guide	Question paper & answer guide
	Disseminate latest information on TB, paediatic TB and TB/HIV co-infection to co-workers.	Lecture – discussion Demonstration	Computer & LCD projector Practicum area Clinical	latest information on TB, paediatic TB and TB/HIV co-infection disseminated to co-workers.	Question paper & answer guide	Question paper & answer guide

		Clinical practice	learning objectives			
	Timely Refer children to next level of care as per protocol.	Lecture – discussion Simulation exercises	Computer & LCD projector Simulation scripts	Children are timely referred to next level of care as per protocol.	Question paper & answer guide	Question paper & answer guide
	Provide preventive therapy to all children whose mothers have confirmed TB and all HIV-positive children without active TB	Lecture – discussion Demonstration Clinical practice	Computer & LCD projector Practicum area Clinical learning objectives	Preventive therapy provided to all children whose mothers have confirmed TB and all HIV-positive	Question paper & answer guide	Question paper & answer guide

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