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Management Practices of TB DOTS Nurses in Dealing with TB Patients

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Abstract — The study determined the management practices of the TB DOTS nurses in dealing with TB patients. Their socio-demographic profile was taken among TB DOTS nurses assigned in the Rural Health units, Community Hospital, and District Hospital within the Urdaneta District InterLocal Health Zone. A descriptive research design was utilized, and a survey questionnaire was based on the manual on tuberculosis. Different statistical tools were used in the computation of results that include frequency counts and percentages, weighted means, t-test, and analysis of Variance.

The TB DOTS nurse respondents were mostly middle-aged adults, married, Bachelor's degree holders, TB DOTS nurses, had been in the service for a few years, and had undergone several trainings. The management practices of the TB DOTS nurses were perceived to be highest along recording and reporting, case finding, management of TB drugs, and case holding, and perceived that the other areas need to be improved, particularly in advance communication, referral system and monitoring, supervision and evaluation. There were no significant differences or relationships noted in all the profile variables, which suggests the acceptance of the null hypothesis.

The proposed advocacy program can be adapted by the different health care institutions to improve the practices of TB DOTS nurses among their TB patients. Future studies can be done on a wider scale using other variables of the study.

Keywords — Management practices, TB patients, TB DOTS Nurses, Rural Health Units

I. Introduction

Tuberculosis is the tenth leading cause of death from a single infectious agent worldwide. Heads of state committed to ambitious targets aimed at eliminating TB during the first-ever United Nations High-Level Meeting on Tuberculosis conducted in September 2018, at the United Nations General Assembly. WHO has identified 30 countries where the TB burden is high. A total of 1.5 million people died from TB in 2018 (including 251,000 people with HIV). In 2018, an estimated 10 million people fell ill with tuberculosis (TB) worldwide. 5.7 million Men, 3.2 million women, and 1.1 million children. There were cases in all countries and age groups. But TB is curable and preventable. In 2018, 1.1 million children fell ill with TB globally, and there were 205,000 child deaths due to TB (including among children with HIV). Health providers often overlook child and adolescent TB, which can be difficult to diagnose and treat. The 30 high TB-burden countries

accounted for 87% of new TB cases. Eight countries account for two-thirds of the total, with India leading the count, followed by China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh, and South Africa.

Once a patient has been diagnosed, he/she is enrolled in a partner TB-DOTS facility, which also provides anti-TB drugs. Medicines are administered by the nurses inside the facility using the direct observation approach. Treatment duration usually lasts for six months in most cases. Treatment progress is monitored using x-ray or DSSM results, done three times throughout the treatment. Any weight changes are also monitored to adjust the dosage of the medicine provided. Treatment is administered inside the facilities under the direct supervision of nurses. Anti-TB medications are taken daily in front of the DATRC nurses, usually every morning before breakfast. Five key informants stated that TB treatment lasts for a duration of six months, while for one DATRC, the treatment duration was stated to last for four to six months (Guevarra et al., 2021)

As cited in the article of Science Direct (2023), case finding is used to identify additional cases and determine who is at risk to: Understand the magnitude of the outbreak (including size and geographic distribution). Case finding is a system for locating every patient, either inpatient or outpatient, who is diagnosed or treated with a reportable diagnosis. All healthcare facilities must perform case finding. Case finding refers to the process of identifying potential cases by using various methods such as reviewing patients in clinical settings, checking lists, and utilizing databases to ensure accurate and consistent identification.

In the context of Tuberculosis (TB) management, "case holding" refers to the processes and practices implemented to ensure patients with TB receive appropriate care and treatment, including diagnosis, treatment adherence, and follow-up, to prevent transmission and improve outcomes. Case holding encompasses the various activities involved in managing a TB case, from initial diagnosis to completion of treatment and follow-up. Effective case holding is crucial for: a) **Preventing transmission:** Ensuring patients complete treatment prevents the spread of TB to others, b) **Improving treatment outcomes:** Adherence to treatment regimens is essential for successful TB treatment, c). **Identifying and managing drug resistance:** Monitoring treatment outcomes and identifying cases of drug resistance is vital, and **reducing mortality:** Early diagnosis and effective treatment are key to reducing TB-related deaths.

Key Components of Case Holding include a). **Early and Accurate Diagnosis like Case finding:** Identifying TB cases through active (screening high-risk groups) or passive (identifying patients with symptoms) methods, **Symptom recognition:** Health workers and volunteers should be trained to recognize TB symptoms, **Access to testing:** Ensuring access to reliable laboratory tests for TB diagnosis; b) **Treatment Adherence includes Directly Observed Treatment (DOT):** Supervising patients as they take their medication to ensure they take it correctly and on time; **Patient education:** Providing patients with information about TB, treatment, and the importance of adherence; **Support services:** Offering counseling, transportation, and other support services to help patients adhere to treatment; **Follow-up and Monitoring, Regular**

monitoring: Tracking patients' progress and identifying any problems with treatment; **Treatment outcome assessment:** Determining whether treatment was successful or if there were any complications, **Drug resistance management:** Identifying and managing cases of drug-resistant TB, **Contact Tracing, Identifying contacts:** Tracing contacts of TB patients to identify and screen those who may be at risk of infection.,and **Preventing transmission:** Early identification and treatment of contacts can help prevent further transmission (Guevarra, 2021).

Meanwhile, in the Philippines, tuberculosis is the sixth leading cause of mortality and morbidity, and it is still a burden to the country's health community nowadays. The Department of Health (DOH) regulated an integrated health care system to manage the problem, providing a basic health service to Rural Health Units (RHU), Health Centers (HC), and Barangay Health Stations that are under the local and municipal, and city government units. The National Tuberculosis Control program (NTP) conceptualized and developed a strategy to end the Tuberculosis in the World and it is called Direct Observe Treatment, Short Course (DOTS), it provides counseling, diagnostic test and assuring that the medication regimen is available in different DOTS facilities at provide awareness and compliance of presumptive TB patients.

According to the Centers for Disease Control (2024), TB drug management involves a two-phase approach: an initial intensive phase with four drugs (rifampin, isoniazid, pyrazinamide, and ethambutol) followed by a continuation phase with two drugs (rifampin and isoniazid). There are several treatment regimens recommended for TB disease. TB treatment can take 4, 6, or 9 months, depending on the regimen. TB treatment regimens include: a 4-month Rifapentine-moxifloxacin TB Treatment Regimen and a 6- or 9-month RIPE TB Treatment Regimen. Shorter regimens help patient's complete treatment faster. Healthcare providers can choose the appropriate TB treatment regimen based on drug-susceptibility results, coexisting medical conditions (e.g., HIV, diabetes), and potential for drug-drug interactions.

In the report published by the Benioff Children's Hospital (2025), they cited that in children, a positive PPD (purified protein derivative) skin test, also known as a tuberculin skin test, indicates potential TB infection, requiring further evaluation, including a chest X-ray and assessment of risk factors, to determine if active TB disease or latent TB infection is present. An abnormal (positive) result means you have been infected with the bacteria that cause TB.

Modernization of the TB registry was initiated in 2005 with the launch of the electronic TB registry in two regions (National Capital Region and CHD III Central Luzon). However, the initiative was discontinued in 2010 and was replaced by the Integrated TB Information System in 2011. This system is being implemented in phases and is currently used in selected facilities in four of the country's 17 regions, including South Luzon, National Capital Region, Central Luzon, and Western Visayas. The objective of this report is to provide a national summary of TB cases reported to the NTP surveillance system from 2003 to 2011.

In November 2017, WHO launched a core document: the "Compendium of WHO guidelines and associated standards: ensuring optimum delivery of the cascade of care for patients with tuberculosis", hereafter referred to as the Compendium. It is structured into WHO-recommended TB standards and consolidates all current WHO TB policy recommendations into a single resource. The document thus provides a framework for reaching the ambitious targets in the End TB Strategy. This editorial aims to introduce this comprehensive resource to a wide audience. The Compendium is relevant for all healthcare providers (clinically oriented as well as public health-oriented readers) in both the private and public sectors.

The document describes the principles on which the End TB Strategy is based (such as ethical considerations, community engagement, public–private mix, and engaging all care providers) and provides insight into the formal WHO policy development process. Furthermore, the Compendium covers the activities of Pillar I of the End TB Strategy, focusing on integrated, patient-centered diagnosis, treatment, and prevention of TB in adults and children, within close collaboration involving civil society, the social sector, local communities, and other stakeholders (WHO, 2017).

The TB referral system involves identifying potential TB cases, referring them to microscopy centers for diagnosis, and ensuring they receive appropriate treatment and follow-up, often through DOTS (Directly Observed Treatment, Short-course). All children and adolescents with severe forms of TB (TBM, peritonitis, pericarditis, renal, spinal, disseminated or osteoarticular TB) and those suspected of having MDR/RR-TB (in contact with a person with confirmed or suspected MDR/RR-TB, or children and adolescents diagnosed with TB who are not responding to first-line TB treatment) should be referred to a specialist for further management if management capacity where they present is insufficient. After discharge from the hospital, if treatment is continued at a PHC facility, it is important that dosages recommended by the referral center are followed and clear communication is established between the hospital and the PHC facility. All patients should be registered and notified to the NTP, either at the hospital or at the PHC facility (WHO, 2025).

In a TB program, monitoring, supervision, and evaluation are crucial for ensuring effective control and measuring progress. This involves tracking program activities, data quality, and treatment outcomes, while also identifying and addressing challenges to improve patient care and program performance. Monitoring and evaluating the performance of TB control programs involves assessing activities, monitoring costs and expenditure, determining the extent of program coverage, and evaluating treatment outcomes, as well as the epidemiological impact of the program. Important factors monitoring supervision and evaluation include: ensuring that training, supervision, logistics and communication activities are being carried out effectively at each level from the national level to the peripheral clinic; deciding whether health units are collecting the data needed to assess case notification rates and treatment outcomes; identifying technical and operational problems, specifying the reasons for the problems and taking the necessary corrective

actions, assisting staff to improve standards of practice; improving patient care and support, and the quality of information.

Alva and Cloutier, (2019) found out that the success of TB elimination strategies and universal health coverage at the country level and worldwide depends on (1) the service capacity of facilities to provide TB and comorbid services, and to minimize the risk of transmission that may expose patients to danger; (2) the management systems to support a minimum standard of quality for TB-related services; and (3) the capacity of the TB and/or health sector logistics systems to provide a reliable and uninterrupted supply of the commodities required. There is no doubt that good quality of care in TB services helps patients and their families address their health needs safely and effectively. Therefore, an assessment and improvement of the quality of TB services can enhance TB service use. This study was conducted to assess the quality of TB services in randomly selected health facilities in the Philippines to identify where services were of high quality, where there were gaps, and ultimately, to ensure that TB patients were receiving the care that they deserved. The purpose of the study was to measure the quality of services of the TB program at selected facilities by assessing the three domains of quality of care—the structure of the health facility, the processes, and the outcomes—and to use the results to develop programs or interventions to improve TB service delivery.

Huddart et al. (2018) believed that patient knowledge of TB may encourage infection prevention behaviors and improve treatment adherence. After the process, patients beginning TB treatment demonstrated moderate knowledge of TB; 52.5% knew that cough was a symptom of TB, and 67.2% knew that TB was communicable. Overall, patient knowledge was significantly associated with literacy, education, and income, and was higher at the end of treatment than at the beginning. Infection prevention behaviors like covering a cough and sleeping separately were less prevalent. The age difference between the patient and the health worker, as well as a shared language, significantly predicted patient knowledge and adherence to infection prevention behaviors. Social proximity between health workers and patients predicted greater knowledge and adherence to infection prevention behaviors, but the latter rate remains undesirably low.

With the above-cited literature and studies, this study is deemed important as it will assess the management practices of TB DOTS nurses in dealing with TB patients. The researcher decided to pursue this study to assess the nurses' implementation of the National Tuberculosis Program. The possible results will serve as enlightenment for nurses in preventing the spread of infection.

Theoretical/Conceptual Framework

This study utilized The Health Belief Model (HBM). It was inspired by a study of reasons people expressed for seeking or declining X-ray examinations for tuberculosis. Initially the model included four constructs: (1) perceived susceptibility (a person’s subjective assessment of their risk of getting the condition, as contrasted with the statistical risk), (2) perceived severity (the seriousness of the condition and its consequences), (3) perceived barriers (both those that interfere

with and facilitate adoption of a behavior such as side effects, time, and inconvenience), and, (4) perceived costs of adhering to the proposed intervention. Factors related to motivation were subsumed under susceptibility and fear of the disease.

II. Methodology

Research Design and Strategy

The descriptive method of research was employed in the conduct of this study, where the results of the instruments used in gathering information from the subjects were collected and interpreted.

Descriptive-correlational research was used to determine the management practices of nurses in dealing with TB patients. Correlational research, on the other hand, determines if there is a relationship or correlated variation between the two variables, a similarity between them, not a difference between their means.

Population and Locale of the Study

The respondents of this study were the TB DOTS Nurses in the different Rural Health Units, Community Hospital, and District hospital within the Urdaneta District Interlocal Health Zone. The researcher utilized purposive sampling to choose the respondents since they are personnel who were trained for the National Tuberculosis Program by the Department of Health (DOH). The selected Municipality are namely Asingan, Binalonan, Laoac, Manaoag, Pozorrobio, San Manuel, Sison, Villasis, and Urdaneta City. Respondents were identified through a list extracted from the selected municipality with both the approval and consent of the administration.

Similar to the study of Roxas EA, et al. (2023), which their study aimed to describe a quality study on the implementation of the workplace TB program in the Philippines: Challenges and Way Forward. The study was conducted in two cities and two municipalities in the Eastern Philippines. The population includes representatives from relevant government agencies (i.e., DOH and DOLE) at the national and regional levels, concerned LGUs, and pilot companies involved in the implementation of the workplace TB Program.

Data Gathering Tool

The instrument for collecting the data is based on the NTP Manual of the DOH to assess the level of implementation by putting a check mark in the appropriate column that suits their answers.

The first part of the questionnaire inquiries about the profile of the TB DOTS Nurses, such as age, gender, civil status, highest educational attainment, position, number of years in service, and number of relevant trainings attended on Tuberculosis.

The second part of the questionnaire is the management practices of TB DOTS nurses in dealing with tuberculosis patients in selected Municipalities in Pangasinan, namely Asingan, Binalonan, Laoac, Manaoag, Pozorrobio, San Manuel, Sison, Villasis, and Urdaneta City.

Data Gathering Procedure

Initially, the researcher sought permission from the Chief of the Hospital and Municipal Health Officer of the different municipalities within the Urdanera District InterLocal Health zones, namely Asingan, Binalonan, Laoac, Manaoag, Pozorrobio, San Manuel, Sison, Villasis, and Urdaneta City.

After getting permission from the respondent, the researcher prepared a written consent where they are assured of the highest anonymity of all their identities and responses related to the study.

The researcher introduced his topic to the respondents and explained its purpose and objectives. The questionnaire was administered to gather the profile of the nurses on the management practices of nurses in dealing with tuberculosis patients. Finally, the researcher personally retrieved all the questionnaires and analyzed the data using statistical software.

Validation of Instrument

The researcher formulated a questionnaire based on the Manual of Procedure by the Department of Health and presented it to the research expert; their comments and suggestions were noted to enhance and determine the validity of the questionnaire.

The researcher prepared a legend to determine the validity of the checklist. Hence, the combined rating was highly valid with average weighted mean of 4.92.

Treatment of Data

The data from the self-survey questionnaire, which was administered to the respondents, was collated, tallied, analyzed, and interpreted using the appropriate statistical treatment for each problem.

For specific problem number one (1) which inquire about the profile of the Nurses in terms of age, gender, civil status, highest educational attainment, position, number of years in the national tuberculosis program, and number of relevant trainings attended on national tuberculosis program, frequency count and valid percentage was used.

where:

$\% = \frac{f}{N} X100$ Where: % = Percent

f = Frequency

N = Number of cases

For specific problem number 2 on the management practices of nurses in dealing with tuberculosis patients along Case Finding, Case Holding, Recording and Reporting, Diagnosis Supply, Referral System, Advocacy communication, monitoring, supervision, and evaluation, the weighted mean with a five-point Likert scale was used

where:

$X=\frac{\Sigma fx}{n}$ where: x – weighted mean

Σfx = the sum of all the predicts of f and x of being the frequency of each operation as the weight of each operation

n = number of respondents

Literal Value	Statistical Limit	Descriptive Equivalent	Transmuted Rating
5	4.50 – 5.00	Always	Highly Practiced
4	3.50 – 4.49	Often	Practiced
3	2.50 – 3.49	Sometimes	Moderately Practiced
2	1.50 – 2.49	Seldom	Slightly Practiced
1	1.00 – 1.49	Never	Not Practiced

Ethical Consideration

The researcher ensures the confidentiality of the respondent by keeping them anonymous, which is to prevent the identity of the respondent. The researcher emphasizes treating individuals involved in research with respect and dignity. It includes respecting their autonomy and recognizing their rights.

The researcher protecting the identity of participants and maintaining the confidentiality of their data are crucial ethical considerations. This involves using pseudonyms, aggregated data, and secure storage to safeguard participant privacy.

III. Results and Discussion

Part 1. Respondents' Profile

Table 1 presents the profile of the respondents in terms of their age, sex, civil status, highest educational attainment position, number of years in service, and number of relevant seminars/ trainings.

Age. It can be gleaned from the table that majority of the respondents are in the age bracket of 41-50 years old with a frequency of 15 or 42.9 percent followed by 31-40 years old with a frequency of 14 or 40 percent, and those 51 years old and above and 21-30 years old with a

frequency of 3 or 8.6 percent. It revealed that the respondents belong to the middle ages as specified in Erikson's stages of development.

Civil status. The majority of the respondents were married, with a frequency of 23 or 65.7 percent, followed by singles with a frequency of 12 or 34.3 percent. It revealed that the respondents were in marital relationships and had their own families.

Highest educational attainment. It revealed that the majority of the respondents were bachelor's degree holders with a frequency of 31 or 88.6 percent, followed by those with masteral units with a frequency of 4 or 11.4 percent. It showed that the majority did not pursue a higher level of learning. This might be related to the fact that their salaries are not competitive, so some nurses fail to enroll in the masteral or doctoral program.

Table 1
Distribution of Respondents in terms of their Profile Variables
n=35

Profile Variables	Frequency	Percentage
Age (in years)		
21 – 30	3	8.6
31 – 40	14	40.0
41 – 50	15	42.9
51 and above	3	8.6
Civil Status		
Single	12	34.3
Married	23	65.7
Highest Educational Attainment		
Bachelor's Degree	31	88.6
With Master's units	4	11.4
Position		
NTP Nurse	32	91.4
Nurse Coordinator	3	8.6
Number of Years in Service		
1 – 2	2	5.7
3 – 4	23	65.7
5 and above	10	28.6
Number of Relevant Seminars on NTP		
1 – 2	3	8.6
3 – 4	23	65.7
5 or more	9	25.7

Position. It can be gleaned from the table that the majority of the respondents were National Tuberculosis Program (NTP) nurses with a frequency of 32 or 91.4 percent, and nurse coordinators with a frequency of 3 or 8.6 percent. It showed that most respondents were nurses assigned to the National TB Program. They are the ones in charge of the different aspects of the TB program.

Number of years in service. It showed that most respondents were in the service for 3-4 years, with a frequency of 23 or 65.7 percent, 5 years and above, with a frequency of 10 or 28.6 percent, and 1- 2 years, with a frequency of 2 or 5.7 percent. It revealed that the respondents had

been in the service for different numbers of years, and most had been in the service for a few years, gaining their experiences on the NTP program.

Number of relevant training/seminars attended. It revealed that most of the respondents had attended 3-4 trainings/seminars with a frequency of 23 or 65.7 percent, 5 times or more with a frequency of 9 or 25.7 percent, and 1-2 with a frequency of 3 or 8.6 percent. It showed that the respondents had attended many seminars or trainings related to the TB program.

Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along with Case Finding

Table 2 presents the level of management practices of TB DOTS nurses in dealing with TB patients during case finding. It revealed that all the indicators were rated "Highly Practiced" and item 1, 2, and 7 are the highest" I identify TB cases in the community, "I follow the contact tracing procedure," and "I prepare lists of suspected cases for proper recording," with a weighted mean of 5.0 or "Highly Practiced." It reflects that the nurses go out in their areas of assignment to find new cases of TB patients with proper documentation. This is confirmed by Guevarra et al. (2021) that **Contact Tracing is important to identify contacts and prevent transmission.**

Table 2
Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along with Case Finding
n=35

Indicators	**WM**	**DE**
As a Nurse, I		
1. identified TB cases in the community	5.00	HP
2. followed the contact tracing procedure	5.00	HP
3. had a purposive effort to find TB cases in the community	4.69	HP
4. provided the education/treatment on tuberculosis infection	4.71	HP
5. am aware on the high risk group	4.94	HP
6. invited suspected TB patient for laboratory/ diagnostic examination	4.97	HP
7. prepared lists of suspected cases for proper recording	5.00	HP
Average Weighted Mean	**4.90**	**HP**

The lowest item is number 3, "had a purposive effort to find TB cases in the community," with a weighted mean of 4.69 or "Highly Practiced." It showed that the nurses perform their job by looking for TB cases in a particular place, for they to do the proper recording and reporting of cases. As mentioned by Guevarra et al. (2021), in case **finding, nurses** identify TB cases through active (screening high-risk groups) or passive (identifying patients with symptoms) methods.

Overall, management practices of the nurses assigned in the NTP program, along with case finding, got an average weighted mean of 4.90 or "highly Practiced." It showed that the nurses perform their responsibilities well in the case finding to make sure that TB patients are identified and included in their roster of cases for follow-up and treatment. This is confirmed in the article

of the World Health Organization (WHO) (2024) that case finding requires that affected patients are aware of their symptoms, have access to health facilities, and are evaluated by health workers who recognize the symptoms of TB and have access to a reliable laboratory.

Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along with Case Holding

Table 3 presents the level of management practices of TB DOTS nurses in dealing with TB patients along with case holding. It revealed that all the indicators were rated "Highly Practiced" and item 1, 4, 5, and 7 are the highest "am aware of the registration group," "conducted laboratory examinations (DSSM) every 2nd, 5th and 6th month of treatment," and " conducted follow-up on the interrupter patient," and provided them the schedules of their laboratory examinations,"" with a weighted mean of 5.0 or "Highly Practiced." It reflects that the TB DOTS nurses are aware of the activities to be done in case holding. As cited by Guevarra et al. (2021), case holding refers to the processes and practices implemented to ensure patients with TB receive appropriate care and treatment, including diagnosis, treatment adherence, and follow-up, to prevent transmission and improve outcomes.

The lowest item is number 6, "organized meetings to give them updates on the program," with a weighted mean of 4.40 or "Moderately Practiced." It showed that the nurses conduct assemblies with the participants for them to be updated on the program and to give them health education on TB patients. Providing patients with information about TB, treatment, and the importance of adherence can be discussed with them during meetings for them to know about updates in the program and their status (WHO, 2023).

Table 3
Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along Case Holdings
n=35

Indicators	**WM**	**DE**
As a Nurse I		
1. am aware of the registration group	5.00	HP
2. am aware of the Adverse Drug Reaction and each management	4.71	HP
3. monitored patient's adherence to the treatment regimen.	4.71	HP
4. conducted laboratory examinations (DSSM) every 2nd, 5th and 6th month of treatment.	5.00	HP
5. conducted follow-up on the interrupter patient	5.00	HP
6. organized meetings to give them updates on the program	4.40	MP
7. provided them the schedules of their laboratory examinations	5.00	HP
Average Weighted Mean	**4.83**	**HP**

Overall, management practices of the TB DOTS nurses assigned in the NTP program, along with case holding, got an average weighted mean of 4.83 or "Highly Practiced." It showed that the TB DOTS nurses properly informed the patients about the different laboratories and

instructions about their treatment, and their adherence to their treatment. According to Guevarra et al. (2021), once a patient has been diagnosed, he/she is enrolled in a partner TB DOTS facility which also provides anti-TB drugs. Medicines are administered by the TB DOTS nurses inside the facility using the direct observation approach.

Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients, along with Recording and Reporting

Table 4 presents the level of management practices of TB DOTS nurses in dealing with TB patients, including recording and reporting. It revealed that all the indicators were rated "Highly Practiced" and item 1, 2. 3, 4, and 6, 7 are the highest "documented all the information gathered on ITIS" "reported any adverse drug effect on medication," "reported those interrupted PTB patient," " updated the PTB master list," "kept an inventory of active cases of TB," and "followed up inactive patients in their homes," with a weighted mean of 5.0 or "Highly Practiced." It reflects that the TB DOTS nurses update their records of the recipients of the NTP, inventories, their TB drugs, and even go for visits to their homes. According to WHO, good recording practices are necessary for effective patient management. Assessment of program performance and epidemiological trends provides the basis for programmatic and policy development. Effective monitoring depends on appropriate recording and reporting systems.

The lowest item is number 5, "conducted Data Quality Check quarterly," with a weighted mean of 4.71 or "Highly Practiced." It showed that the TB DOTS nurses do the monitoring of their records and reports. The WHO TB recording and reporting system is part of the general health information system. It consists of detailed patient forms that are filled out at the point of care and summarized in laboratory and medical registers. These data are aggregated to prepare quarterly reports on activities and results as well as annual management reports.

Table 4
Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients, along with Recording and Reporting
n=35

Indicators	WM	DE
As a Nurse, I		
1. documented all the information gathered on ITIS (integrated Tuberculosis Information System)	5.00	HP
2. reported any adverse drug effect on medication	5.00	HP
3. reported those interrupted PTB patient	5.00	HP
4. updated the PTB master list	5.00	HP
5. conducted Data Quality Check quarterly	4.71	HP
6. kept an inventory of active cases of TB	5.00	HP
7. followed up inactive patients in their homes	5.00	HP
Average Weighted Mean	4.96	HP

Overall, management practices of the TB DOTS nurses assigned in the NTP program, along with recording and reporting, got an average weighted mean of 4.96 or "Highly Practiced."

It showed that the TB DOTS nurses are responsible for all the recording of information about the patients, medications, those with adverse reactions, and those patients who are not following their treatment regimen. According to WHO (2020) cited that the reporting system consists of: (i) quarterly reports on TB case registration, which summarize the numbers of TB patients started on treatment, laboratory tests performed and results obtained; (ii) quarterly reports, which detail treatment outcomes and TB/HIV activities after all patients in the cohort have completed their course of treatment; (iii) quarterly order forms, which specify the required anti-TB drugs.

Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along with Management of TB Drugs

Table 5 presents the level of management practices of TB DOTS nurses in dealing with TB patients along management of TB drugs. It revealed that almost all the indicators were rated "Highly Practiced" however the highest are numbers 1, 2, 5, 6, and 7, "I maintain the required temperature for the medication" "maintained the 3 months buffer medication supply", "performed monthly inventory on drugs and supplies." "provided patients with schedules of TB drugs release "and "oriented the people on the proper use of the TB drugs," with a weighted mean of 5.0 or "Highly Practiced." It reflects that the TB DOTS nurses made sure that the drugs were properly inventoried and the supply would be given to each of the recipients of TB drugs. According to the Centers for Disease Control (2024), health care providers can choose and give the appropriate TB treatment regimen based on drug-susceptibility results, coexisting medical conditions (e.g., HIV, diabetes), and potential for drug-drug interactions.

The lowest item is number 3, "requested the PPD (Purified Protein Derivative) for the exposed children" with a weighted mean of 3.91 or "Moderately Practiced." It showed that the TB DOTS nurses not only cater to adults but also to children who are affected by the disease. In the report published by the Benioff Childrens' Hospital (2025), they cited that in children, a positive PPD (purified protein derivative) skin test, also known as a tuberculin skin test, indicates potential TB infection, requiring further evaluation, including a chest X-ray and assessment of risk factors, to determine if active TB disease or latent TB infection is present. An abnormal (positive) result means you have been infected with the bacteria that cause TB. You may need treatment to lower the risk of the disease coming back (reactivation of the disease or relapse). A positive skin test does not mean that a person has active TB. More tests must be done to check whether there is active disease.

Table 5
Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along with Management of TB Drugs
n=35

Indicators	WM	DE
As a Nurse, I		
1. maintained the required temperature for the medication	5.00	HP
2. maintained the 3 months buffer medication supply	5.00	HP
3. requested the PPD(Purified Protein Derivative) for the exposed children	3.91	MP
4. am aware the first expiry first out medications	4.97	HP
5. performed monthly inventory on drugs and supplies	5.00	HP
6. provided patients with schedules of TB drugs release	5.00	HP
7. oriented the people on the proper use of the TB drugs	5.00	HP
Average Weighted Mean	4.84	HP

The lowest item is number 3, "requested the PPD (Purified Protein Derivative) for the exposed children" with a weighted mean of 3.91 or "Moderately Practiced." It showed that the TB DOTS nurses not only cater to adults but also to children who are affected by the disease. In the report published by the Benioff Childrens' Hospital (2025), they cited that in children, a positive PPD (purified protein derivative) skin test, also known as a tuberculin skin test, indicates potential TB infection, requiring further evaluation, including a chest X-ray and assessment of risk factors, to determine if active TB disease or latent TB infection is present. An abnormal (positive) result means you have been infected with the bacteria that cause TB. You may need treatment to lower the risk of the disease coming back (reactivation of the disease or relapse). A positive skin test does not mean that a person has active TB. More tests must be done to check whether there is an active disease.

Overall, management practices of the TB DOTS nurses assigned in the NTP program, along with management of TB drugs, got an average weighted mean of 4.84 or "Highly Practiced." It shows that the TB Nurses have a proper inventory of medication and supplies to allocate to their TB Patients and have enough buffer for the newly registered TB Patients. According to the Centers for Disease Control (2024), TB Drug Management has a two-phase approach, which includes the intensive phase and continuation phase. In this approach, the TB DOTS Nurse will anticipate the allocated medication per TB patient until the treatment is completed.

Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along the Referral System

Table 6 presents the level of management practices of TB DOTS nurses in dealing with TB patients along the referral system. It revealed that almost all the indicators were rated "Highly Practiced"; however, the highest are numbers 4 and 5, "am knowledgeable on the internal and external referral system" and "maximized the use of technology on the referral system," with a weighted mean of 5.00. It clearly showed that if TB patients are referred, then it must be coordinated with the healthcare institution that will accept the patient. The TB referral system

involves identifying potential TB cases, referring them to microscopy centers for diagnosis, and ensuring they receive appropriate treatment and follow-up, often through DOTS (Directly Observed Treatment, Short-course).

Table 6
Level of Management Practices of Nurses in Dealing with Tuberculosis Patients along Referral System
n=35

Indicators	Weighted Mean	DE
As a Nurse, I		
1. am knowledgeable on referral system	4.71	HP
2. followed up the referred patient to other TB DOTS facility	4.51	HP
3. provided feedback on the status of the referring facility	4.66	HP
4. am knowledgeable on the internal and external referral system	5.00	HP
5. maximized the use of technology on referral system	5.00	HP
6. provided them with the necessary contact numbers and emails of referral hospitals	4.40	MP
7. made sure that transport is readily available when needed	4.49	HP
Average Weighted Mean	4.68	HP

The lowest item is number 6, "provided them the necessary contact numbers and emails of referral hospitals," with a weighted mean of 4.40 or "Moderately Practiced." It showed that the nurses take charge of preparing the documents for the referral system to another health facility. According to WHO (2025), the TB referral system involves identifying potential TB cases, referring them to microscopy centers for diagnosis, and ensuring they receive appropriate treatment and follow-up, often through DOTS (Directly Observed Treatment, Short-course).

Overall, management practices of the TB DOTS nurses assigned in the NTP program along referral system got an average weighted mean of 4.68 or "Highly Practiced." It showed that the nurses practiced the referral system to a higher facility for further management. After discharge from the hospital, if treatment is continued at a PHC facility, vice versa, or the TB Patient chooses another PHC facility that is more accessible to the TB Patient dosages recommended by the referral center must be followed. Clear communication is established between the hospital and the PHC facility (WHO, 2025).

Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along Advocacy Communication

Table 7 presents the level of management practices of TB DOTS nurses in dealing with TB patients through advocacy communication. It revealed that almost all the indicators were rated "Highly Practiced"; however, the highest is number 4, "empowered community action on advocacy and education to undergo sputum examination," with a weighted mean of 5.00. It reflects that the nurses used communication to inform people in the community about some tests or examinations to be done for the TB patients. As cited by WHO (2025), advocacy, communication, and social mobilization (ACSM) are crucial for tuberculosis (TB) control, involving raising

awareness, influencing policy, and mobilizing communities to improve TB case detection, treatment adherence, and combat stigma.

The lowest item is number 3, 5 and 6 “combated stigma and discrimination among patients,” “provided IEC materials,” and “explained to the people contents of the IEC materials” to the community people” with a weighted mean of 4.34, and 4.11 or “Moderately Practiced.” It showed that the nurses need to intensify their campaign so that those diagnosed with TB would not be discriminated against or stigmatized because of their disease. Anyway, nurses are good at giving health education to their clients.

Table 7
Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along Advocacy Communication
n=35

Indicators	WM	DE
As a Nurse, I		
1. advocated for support from policy and decision makers and other influential people at the national and local level.	4.69	HP
2. provided interpersonal communication to PTB patients and relatives	4.91	HP
3. combated stigma and discrimination among patients.	4.34	MP
4. empowered community action on advocacy and education to undergo sputum examination	5.00	HP
5. provided IEC materials (Information, Educations and Communication) to the community people	4.11	MP
6. explained to the people the contents of the IEC materials	4.11	MP
7. conducted community classes to update them about the disease	4.69	HP
Average Weighted Mean	4.55	HP

Overall, management practices of the TB DOTS nurses assigned in the NTP program, along with advocacy communication, got an average weighted mean of 4.55 or “Highly Practiced.” It showed that the nurses practiced their best in the implementation of the program, along with advocacy and communication. As mentioned by the WHO (2025), communication aims to improve knowledge about TB and TB services and focuses on changing attitudes and practices to encourage people to seek care and complete TB treatment. Communication can help challenge negative attitudes and beliefs about TB, which can prevent people from seeking help, help people affected by TB to take control of their health and advocate for their rights, and help raise awareness of the TB epidemic and advocate for greater investment in TB control programs.

Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along Monitoring, Supervision, and Evaluation

Table 8 presents the level of management practices of TB DOTS nurses in dealing with TB patients, along with monitoring, supervision, and evaluation.

It revealed that almost all the indicators were rated “Highly Practiced”; however, the highest are numbers 2 and 6, “carefully collected information about the program,” and

"documented the progress of the TB program" with a weighted mean of 5.00 or "Highly Practiced.". As cited in the WHO Stop TB Strategy, monitoring and evaluating the performance of TB control programs involves assessing activities, monitoring costs and expenditure, determining the extent of program coverage, and evaluating treatment outcomes.

The lowest items are numbers 5 and 7, "as part of the Local Government Unit supported in monitoring, supervision and evaluation activities," and "provided the community schedules of visits" with a weighted mean of 4.54 and 4.51, or "Highly Practiced." It showed that in the monitoring and supervision of the program, it also needs the cooperation of the local government units in the provision of support to the program.

Table 8
Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients along Monitoring Supervision and Evaluation
n=35

Indicators	WM	DE
As a Nurse, I		
1. increased and develop knowledge and skills, improve my work attitude and increasing motivation.	4.71	HP
2. carefully collected information about the program.	5.00	HP
3. monitored regular, systematic and purposeful observation of the program performance.	4.71	HP
4. conducted of monitoring and supervisory visit in the area	4.69	HP
5. as part of the Local Government Unit supported monitoring, supervision and evaluation activities.	4.51	HP
6. documented the progress of the TB program	5.00	HP
7. provided the community schedules of visits	4.54	HP
Average Weighted Mean	4.74	HP

Overall, management practices of the TB DOTS nurses assigned in the NTP program, along with monitoring, supervision, and evaluation, got an average weighted mean of 4.74 or "Highly Practiced." It showed that the monitoring and evaluation practices of the nurses were properly implemented. As per the WHO Stop TB Strategy, in a TB program, monitoring, supervision, and evaluation are crucial for ensuring effective control and measuring progress. This involves tracking program activities, data quality, and treatment outcomes, while also identifying and addressing challenges to improve patient care and program performance.

ANOVA Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Age Groups

Table 10 presents the difference in the level of management practices of TB DOTS nurses in dealing with TB patients across age.

Table 10
ANOVA Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Age Groups

Aspect	Source of Variation	Sum of Squares	df	Mean Squares	F-value	Sig	Remarks
Case Finding	Between Groups	.031	3	.010	.589	.627	Not Significant
	Within Groups	.546	31	.018			
	Total	.577	34				
Case Holding	Between Groups	.226	3	.075	1.127	.353	Not Significant
	Within Groups	2.069	31	.067			
	Total	2.294	34				
Recording and Reporting	Between Groups	.015	3	.005	1.234	.314	Not Significant
	Within Groups	.125	31	.004			
	Total	.140	34				
Management of TB Drugs	Between Groups	.004	3	.001	.188	.903	Not Significant
	Within Groups	.242	31	.008			
	Total	.247	34				
Referral System	Between Groups	.246	3	.082	.724	.545	Not Significant
	Within Groups	3.511	31	.113			
	Total	3.757	34				
Advocacy Communication	Between Groups	.079	3	.026	.558	.647	Not Significant
	Within Groups	1.460	31	.047			
	Total	1.539	34				
Monitoring, Supervision and Evaluation	Between Groups	.159	3	.053	.756	.527	Not Significant
	Within Groups	2.173	31	.070			
	Total	2.332	34				
Overall Level of Management Practices	Between Groups	.059	3	.020	.574	.636	Not Significant
	Within Groups	1.063	31	.034			
	Total	1.122	34				

The computed F-values generated significance values which are higher than the set .05 level of significance. This indicates that the results are not significant and suggests acceptance of the null hypothesis. Therefore, the age of the TB DOTS nurses dealing with TB patients does not affect the level of management practices of the TB DOTS nurses. It therefore revealed that the respondents did not differ in their practices among TB patients.

t-Test Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Civil Status

Table 11 shows the difference in the level of management practices of TB DOTS nurses in dealing with tuberculosis patients across civil status

Table 11
t-Test Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Civil Status

Aspect	Civil Status	n	Mean	Mean Difference	Standard Error Difference	df	t-value	Sig	Remarks
Case Finding	Single	12	4.90	.005	.047	33	.098	.923	Not Significant
	Married	23	4.90						
Case Holding	Single	12	4.85	.019	.094	33	.206	.838	Not Significant
	Married	23	4.83						
Recording and Reporting	Single	12	4.97	.008	.023	33	.329	.745	Not Significant
	Married	23	4.96						
Management of TB Drugs	Single	12	4.82	-.029	.030	33	-.963	.343	Not Significant
	Married	23	4.85						
Referral System	Single	12	4.69	.014	.120	33	.115	.909	Not Significant
	Married	23	4.68						
Advocacy Communication	Single	12	4.52	-.042	.077	33	-.547	.588	Not Significant
	Married	23	4.57						
Monitoring, Supervision and Evaluation	Single	12	4.76	.035	.094	33	.371	.713	Not Significant
	Married	23	4.73						
Overall Level of Management Practices	Single	12	4.79	.002	.066	33	.027	.979	Not Significant
	Married	23	4.79						

The computed t-values suggest insignificant results as indicated in the computed significance values which are higher than the set .05 level of significance. Results imply that single and married nurses have the same level of management practices in dealing with TB patients. It revealed that the practices of those married or single did not vary in their practices in the TB program.

t-Test Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Highest Educational Attainment

Table 12 displays the difference in the level of management practices of TB DOTS nurses in dealing with TB patients across highest educational attainment.

Table 12
t-Test Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Highest Educational Attainment

Aspect	Civil Status	n	Mean	Mean Difference	Standard Error Difference	df	t-value	Sig	Remarks
Case Finding	Bachelor's Degree	31	4.90	.010	.070	33	.139	.890	Not Significant
	With MA units	4	4.89						
Case Holding	Bachelor's Degree	31	4.83	-.028	.140	33	-.196	.845	Not Significant
	With MA units	4	4.86						
Recording and Reporting	Bachelor's Degree	31	4.96	-.006	.035	33	-.163	.871	Not Significant
	With MA units	4	4.97						
Management of TB Drugs	Bachelor's Degree	31	4.84	-.018	.046	33	-.389	.700	Not Significant
	With MA units	4	4.86						
Referral System	Bachelor's Degree	31	4.67	-.076	.179	33	-.426	.673	Not Significant
	With MA units	4	4.75						
Advocacy Communication	Bachelor's Degree	31	4.54	-.064	.114	33	-.560	.579	Not Significant
	With MA units	4	4.61						
Monitoring, Supervision and Evaluation	Bachelor's Degree	31	4.74	-.052	.141	33	-.371	.713	Not Significant
	With MA units	4	4.79						
Overall Level of Management Practices	Bachelor's Degree	31	4.78	-.033	.098	33	-.341	.736	Not Significant
	With MA units	4	4.82						

The computed t-values generated significance values which are higher than the set 05 level of significance leading to the acceptance of the null hypothesis. This means that TB DOTS nurses share the same level of management practices in dealing with TB patients regardless of their highest educational attainment. It connotes that the nurses had been equipped with the knowledge on the management practices of TB patients.

t-Test Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Position

Table 13 shows the difference in the level of management practices of TB DOTS nurses in dealing with TB patients across position.

Table 13
t-Test Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Position

Aspect	Civil Status	n	Mean	Mean Difference	Standard Error Difference	df	t-value	Sig	Remarks
Case Finding	NTP Nurse	32	4.90	-.006	.080	33	-.076	.940	Not Significant
	NTP Coordinator	3	4.91						
Case Holding	NTP Nurse	32	4.82	-.183	.156	33	-1.170	.250	Not Significant
	NTP Coordinator	3	5.00						
Recording and Reporting	NTP Nurse	32	4.96	-.044	.039	33	-1.134	.265	Not Significant
	NTP Coordinator	3	5.00						
Management of TB Drugs	NTP Nurse	32	4.84	-.071	.051	33	-1.401	.171	Not Significant
	NTP Coordinator	3	4.91						
Referral System	NTP Nurse	32	4.65	-.347	.195	33	-1.784	.084	Not Significant
	NTP Coordinator	3	5.00						
Advocacy Communication	NTP Nurse	32	4.54	-.178	.127	33	-1.403	.170	Not Significant
	NTP Coordinator	3	4.71						
Monitoring, Supervision and Evaluation	NTP Nurse	32	4.72	-.283	.153	33	-1.854	.073	Not Significant
	NTP Coordinator	3	5.00						
Overall Level Management Practices	NTP Nurse	32	4.77	-.159	.108	33	-1.474	.150	Not Significant
	NTP Coordinator	3	4.93						

T-test results suggest acceptance of the null hypothesis as indicated in the computed t-values and significance values. Hence, TB DOTS nurses and TB DOTS coordinators provide the same level of management practices in dealing with TB patients. It revealed that both groups of nurses had the knowledge and thereby they knew what they are doing in the management of TB patients.

ANOVA Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Number of Years in Service

Table 14 provides the data on the difference in the level of management practices of TB DOTS nurses in dealing with tuberculosis patients across number of years in service.

Table 14
ANOVA Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Number of Years in Service

Aspect	Source of Variation	Sum of Squares	df	Mean Squares	F-value	Sig	Remarks
Case Finding	Between Groups	.069	2	.035	2.179	.130	Not Significant
	Within Groups	.508	32	.016			
	Total	.577	34				
Case Holding	Between Groups	.255	2	.127	2.000	.152	Not Significant
	Within Groups	2.039	32	.064			
	Total	2.294	34				
Recording and Reporting	Between Groups	.016	2	.008	2.128	.136	Not Significant
	Within Groups	.124	32	.004			
	Total	.140	34				
Management of TB Drugs	Between Groups	.014	2	.007	.960	.394	Not Significant
	Within Groups	.233	32	.007			
	Total	.247	34				
Referral System	Between Groups	.282	2	.141	1.299	.287	Not Significant
	Within Groups	3.475	32	.109			
	Total	3.757	34				
Advocacy Communication	Between Groups	.061	2	.030	.658	.525	Not Significant
	Within Groups	1.478	32	.046			
	Total	1.539	34				
Monitoring, Supervision and Evaluation	Between Groups	.181	2	.090	1.343	.275	Not Significant
	Within Groups	2.151	32	.067			
	Total	2.332	34				
Overall Level of Management Practices	Between Groups	.048	2	.024	.722	.494	Not Significant
	Within Groups	1.074	32	.034			
	Total	1.122	34				

The analysis of variance reveals computed F-values with significance values which are higher than the set .05 level of significance. This suggests that the null hypothesis needs to be accepted. Hence, the length of service of the nurses does not cause any variation in their level of management practices in dealing with TB patients. It implied that the nurses old and new in the service share the same practices in the TB program.

ANOVA Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Number of Relevant Seminars on NTP

Table 15 displays the difference in the level of management practices of nurses in dealing with tuberculosis patients across number of seminars on NTP.

Table 15

ANOVA Results on the Difference in the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients across Number of Relevant Seminars on NTP

Aspect	Source of Variation	Sum of Squares	df	Mean Squares	F-value	Sig	Remarks
Case Finding	Between Groups	.021	2	.011	.608	.551	Not Significant
	Within Groups	.556	32	.017			
	Total	.577	34				
Case Holding	Between Groups	.100	2	.050	.730	.490	Not Significant
	Within Groups	2.194	32	.069			
	Total	2.294	34				
Recording and Reporting	Between Groups	.007	2	.003	.802	.457	Not Significant
	Within Groups	.133	32	.004			
	Total	.140	34				
Management of TB Drugs	Between Groups	.031	2	.016	2.302	.116	Not Significant
	Within Groups	.216	32	.007			
	Total	.247	34				
Referral System	Between Groups	.085	2	.042	.369	.694	Not Significant
	Within Groups	3.672	32	.115			
	Total	3.757	34				
Advocacy Communication	Between Groups	.125	2	.062	1.411	.259	Not Significant
	Within Groups	1.414	32	.044			
	Total	1.539	34				
Monitoring, Supervision and Evaluation	Between Groups	.063	2	.032	.446	.644	Not Significant
	Within Groups	2.268	32	.071			
	Total	2.332	34				
Overall Level of Management Practices	Between Groups	.007	2	.003	.096	.909	Not Significant
	Within Groups	1.116	32	.035			
	Total	1.122	34				

The computed F-values generated significance values which are higher than the set .05 level of significance. The results suggest acceptance of the null hypothesis, hence, there exists no significance differences. The number of seminars attended by the nurses does not affect their level of management practices in dealing with TB patients.

Relationship Between the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients and their Profile Variables

Table 16
Relationship Between the Level of Management Practices of TB DOTS Nurses in Dealing with Tuberculosis Patients and their Profile Variables

Profile Variable	A		B		C		D		E		F		G		Overall	
	r-value	sig	r-value	sig	r-value	sig	r-value	sig	r-value	sig	r-value	sig	r-value	sig	r-value	sig
Age	.095	.586	.022	.899	.012	.947	.123	.480	.000	.998	.219	.207	-.002	.993	.059	.735
Civil Status	-.017	.923	-.036	.838	-.057	.745	.165	.343	-.020	.909	.095	.588	-.064	.713	-.005	.979
Highest Educational Attainment	-.024	.890	.034	.845	.028	.871	.068	.700	.074	.673	.097	.579	.065	.713	.059	.736
Position	.013	.940	.200	.250	.194	.265	.237	.171	.297	.084	.237	.170	.307	.073	.248	.150
Number of Years in Service	-.095	.589	-.196	.260	-.201	.247	.162	.353	-.168	.334	.190	.273	-.215	.214	-.108	.538
Number of Relevant Seminars on NTP	-.054	.756	-.141	.418	-.145	.405	.225	.194	-.105	.548	.242	.161	-.142	.417	-.045	.797

***Significant at .05 level**

Legend:
A - Case Finding
B - Case Holding
C - Recording and Reporting
D - Management of TB Drugs
E - Referral System
F - Advocacy Communication
G - Monitoring, Supervision and Evaluation

Table 16 displays the relationship between the level of management practices of TB DOTS nurses in dealing with tuberculosis patients and their profile variables.

All the computed r-values have provided significance values which are higher than the set .05 level of significance. This indicates acceptance of the null hypothesis. There exists no significant relationship between the level of management practices and profile variables of the TB DOTS nurses. It implies that the nurses perform similarly with the other nurses in their management practices in the NTP program. Since they had been working with the program, the nurses had learned the different activities in the program.

PROPOSED INTERVENTION PROGRAM TO ENHANCE TUBERCULOSIS PROGRAM

Title: HEALTHIER LIFE WITHOUT TB

Strategies	Person Involved	Time Frame	Expected Outcome
Area: Case finding Objectives: To locate people suspected to be with TB To conduct laboratory examination to identified suspects			
House to house visits and screen family members in collaboration with the Barangay Health workers Collect sputum for examination Submit them for chest x-ray	TB DOTS Nurse BHW Barangay officials	Every 6 six months	Prospects will be identified Those found positive would be referred for treatment

Area: Case Holding Objectives: To ensure TB patients to complete their prescribed treatment regimen To properly guide the patients the importance of their medications and nutrition			
Directly observe treatment Patient counseling, motivation for adherence, nutritional support, and linking patients with local TB-DOTS facilities	Barangay health workers Barangay officials TB DOTS nurse	Weekly visits with TB patient for observation	Patient intake of medicine is supervised. Well advised patients
Area: Recording and reporting Objectives: To properly record and report patients' progress			
Provision of internet connection for easier transmission of repots Provision of computer to store files	Management information system Administration	Immediate provision of computers and internet connection	Up to date transmission of records and reports
Area: Medicine management Objectives: To evaluate the effectiveness of daily supervised short course chemotherapy To provide adequate supply of medicines to TB patients			
Patients will be monitored in taking the medicines Proper inventory of Tb patients for allocation of monthly medicines	TB DOTS Nurse BHW Barangay officials	Weekly visit of TB patient for monitoring	Strict adherence to treatment Completion of treatment
Area: Referral system Objectives: To intensify the referral system			

Creation of links to the different health facilities To update facilities for the referral	Administration TB DOTS coordinator	Immediate update of referral facilities	Smooth conduct of referral system Easier flow of communication
Area: Advocacy communication Objectives: To improve the communication facilities for easier referral and reporting To train personnel on the use of equipment for communication			
Procurement of communication equipment Training of personnel	TB DOTS nurse Administration Management Information system	Immediate procurement of communication equipment and training of personnel	Cleanliness of communication Trained in the use of equipment
Area: Monitoring supervision and evaluation Objectives: To check the progress of the program To evaluate the conduct of the program			
Checking submitted reports Proper action on the reports Getting feedback from patients	TB DOTS nurse TB DOTS coordinator	Immediate submission of reports. Monthly compliance of reports,	Compilation of reports and its proper solutions to problems identified Strengths and weaknesses of the program will be identified

IV. Conclusion

The nurse respondents were mostly middle adults, married, Bachelors' degree holder, NTP nurses, had been in the service for few years, and had undergone few numbers of trainings. The management practices of the nurses were perceived to be highest along recording and reporting, case finding, management of TB drugs and case finding and perceived that the other areas need to be improved particularly in advance communication, referral system and monitoring supervision and evaluation. The was no significant differences and relationship noted in all the profile variables which suggests the acceptance of the null hypothesis.

The proposed program is prepared to enhance the management practices among the NTP nurses to improve the NTP program.

V. Recommendations

Based on the conclusions formulated, the following are hereby recommended:

The respondents must pursue higher level of learning to be more abreast with the trends and updates on the NTP program. They must also undergo more training on the different aspects of the NTP program. Since there are many people still affected by the disease, then health education must be enhanced to prevent the incidence of more cases and thereby end the TB

incidence of the country. They must enhance their performance so that the implementation would be more a successful one. Intensify their campaign on the Stop TB strategy.

The proposed intervention program can be reinforced to further improve the NTP implementation.

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