

Northern Mindanao Medical Center Nurses and Precautionary Measures to Prevent Transmission of Hepatitis B

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ABSTRACT

The study determines the practice of taking precautionary measures by fifty NMMC staff nurses to prevent transmission of Hepatitis B. In relation to this, the study also tries to determine the clinical experience and the seminars on prevention of transmission of Hepatitis B attended by same nurses. For this research, the research team utilized a descriptive research design, purposive sampling was used, and questionnaire was used based on the theory of Nightingale on Environment, and the other on Hepatitis B Management of the Department of Health. Study results include clinical experience of between 1 – 5 years and attendance of 1 – 5 seminars on Hepatitis B Prevention. Practice of precautionary measures specifically in the administration of medication through injection is done 'sometimes' in terms of recapping the needle after injecting, 'most of the time' dispose syringes and needles and 'always' in terms of maintaining sterility in Immunization. However the same nursing staffs in NMMC 'always' practice precautionary measures especially in the disposal of waste and in handling patients with Hepatitis B in the ward sections. The research team recommended for the government to implement and promote massive immunization program so that Hepatitis B infection can be fully prevented. The team also urged the city government to conduct periodic check and monitoring of the implementation of precautionary measures in both private and government hospitals operating in Cagayan de Oro City.

Keywords: Precautionary Measures, Prevent Transmission of Hepatitis B

INTRODUCTION

Hepatitis B virus (HBV) lives in blood and other body fluids transmitted from person to person through unprotected sexual intercourse with an infected person, or through the sharing of infected needles or other sharp instruments that break the skin (Encarta, 2003). HBV has been found in blood, saliva, semen, and vaginal secretions and can be transmitted through mucous membranes and breaks in the skin (Smeltzer and Bare, 2004) and health care workers are at a high risk for acquiring Hepatitis B because of their close contact with the blood of carriers (Black et.al,2002) and will become carriers of the virus and can transmit the disease to others(Relaya, 2002) .

Health care workers are at high risk in acquiring hepatitis B because of their close contact with the blood of carriers thus precautionary measures must be strictly followed.

Precautionary measures are work practices required for the basic level of infection control. This includes good hygiene practices particularly washing and drying of hands before and after patients contact, the use of protective barrier that may include gowns, gloves, masks, and plastic aprons, appropriate handling and disposal of sharps and other contaminated waste and the use of aseptic techniques. Nurses and other health care workers must follow standard precautions that include hand washing, wearing of gloves, masks, gowns , and good hygiene (www.cdc.gov/nip/vacsafe/concerns/hepb/q&a.htm#4).

Nurses should also used isolation precautions to protect the hosts normal defense mechanism by preventing the transmission of pathogens (nosocomial infections) (Delaune and Ladner, 2002).

The main purpose of the study is to determine the precautionary measures done by nurses in Northern Mindanao Medical Center (NMMC) in preventing the transmission of Hepatitis B. The researchers also looked into the respondents' length of clinical exposure and number of seminars attended on Hepatitis B and nursing intervention that should be done by the researchers based on the data gathered.

STATEMENT OF THE PROBLEM

This study aimed to determine the precautionary measures done by nurses in NMMC in preventing the transmission of Hepatitis B.

Specifically, this study sought to answer the following questions:

1. What is the profile of the respondents in terms of : length of clinical exposure; number of seminars attended on Hepatitis B
2. How do nurses in NMMC practice precautionary measures in preventing the transmission of Hepatitis B on the following areas: Administration of medication through injection; disposal of patients; waste; and Handling of clients
3. What intervention can be done based from the result of the study.

METHODOLOGY

Descriptive method was being used in this study since it describes with emphasis what actually exist such as current conditions, practices, situations or any phenomena(Gillis and Jackson, 2002). This was conducted in Northern Mindanao Medical Center (NMMC), a 300 bed capacity tertiary hospital for in-patient and outpatient and is located in an 11,000 sq. meter lot of the provincial capitol compound in Cagayan de Oro City.

The researcher utilized purposive sampling, which is a non-probability sampling procedure that is chosen for some attributes that is possesses. The respondents are selected based on the judgment of who best qualify the objectives of the research. Fifty (50) respondents were selected with at least one year clinical experience as a nurse and prone to patients with hepatitis B. The researchers made use of adopted questionnaire based on the theory on environmental approach to nursing by Florence Nightingale and Hepatitis B Management questionnaire from the Department of Health (DOH). This was pilot tested and face validity was done. The research instrument consisted of two parts. The first part solicited information on the respondents' profile namely the length of clinical exposure and the number of seminars attended on Hepatitis B. The second part determines the precautionary measures done by nurses to prevent transmission of Hepatitis B in terms of administration of medications through injections, disposal of used syringes and needles, and handling of clients with hepatitis B. The respondents then checked from among the four options namely; always, most of the time, sometimes and never by putting a check of their choices based from their learning from seminars and clinical exposures. A letter of permission was sought from the chief of the hospital and chief nurse of NMMC then questionnaires was floated, retrieved, tallied and used percentage on profiling and weighted mean for the precautionary measures done.

RESULTS AND DISCUSSION

Problem One: *What is the profile of the respondents in terms of length of clinical exposure, and number of seminars attended on Hepatitis B.*

Table 1. Distribution of respondents in terms of length of clinical exposure

Length of Clinical Exposure	Frequency	Percentage
1-5 years	28	56%
6-10 years	11	22%
11-15 years	3	6 %
16 and above	8	16%
Total	50	100%

Table 1 presents that out of fifty (50) respondents twenty eight (28) nurses have one to five years clinical exposure and only three (3) have eleven to fifteen years of experience. This means that most of the nurses are not that seasoned in terms of clinical exposure.

Table 2. Distribution of respondents in terms of number of seminars attended

Number of Seminars Attended on Hepatitis B	Frequency	Percentage
1-5 seminars	43	86
6-10 seminars	4	8
11 and above seminars	3	6
Total	50	100

Table 2 tells us that most of the respondents have attended one to five seminars on hepatitis B which comprises forty three (43) out of fifty (50) and only three (3) have attended eleven and above seminars on hepatitis B. This means that the hospital administrators did their best to expose their nurses to trainings and seminars on Hepatitis B so that proper precautionary measures shall be done when in a situation.

Problem Two: *How do nurses in NMMC practice precautionary measures in preventing the transmission of Hepatitis B on the following areas; administration of medication through injection, disposal of patients’ waste, and handling of clients.*

Table 3. Implementation of the precautionary measure in terms of administration of medication through injection by recapping the needle after injecting

1. Recapping of the needle after Injecting	Weighted Mean	Description
a. I hold the cap and insert the needle?	3.06	Most of the time
b. I place the cap freely on the tray and insert the needle?	2.06	Most of the time
c. Is recapping not needed?	2.02	Sometimes
d. I let the patient hold the cap and insert the needle?	1.02	Never
Overall Mean	2.04	Sometimes

Table 3 reveals that the respondents hold the cap and insert the needle most of the time, place the cap freely on the tray and insert the needle most of the time , sometimes need not recap the needle after injecting and never let the patient hold the cap and insert the needle. The overall mean is 2.04 which tells us that nurses sometimes recap the needle after injecting.

Table 4. Implementation of the precautionary measure in terms of administration of medication through injection by disposing syringes and needles

2. Disposing syringes and needles	Weighted Mean	Description
a. I collect the used syringes and needles in a puncture proof container before final disposal?	3.02	Most of the time
b. I carry the container to the health facility for final disposal?	2.16	Sometimes
Overall Mean	2.59	Most of the time

Table 4 presents that in terms of disposing syringes and needles, nurses most of the time collect the used syringes and needles in a puncture proof container before final disposal and sometimes carry the container to the health facility for final disposal with an overall mean of 2.59 which means most of the time nurses dispose syringes and needles.

Table 5. Implementation of the precautionary measure in terms of administration of medication through injection by maintaining sterility in immunization

3. I maintain sterility in immunization by using	Weighted Mean	Description
a. one needle and one syringe for each person	3.92	Always
b. alcohol swabs or sterile water in disinfecting the site	3.96	Always
Overall Mean	3.94	Always

Table 5 shows that in terms of maintaining sterility in Immunization, nurses used always used one needle and one syringe for each person, used

always alcohol swabs or sterile water in disinfecting the site. The overall mean is 3.94 which means that nurses always maintain sterility in immunization.

Table 6. Implementation of the precautionary measure in terms of disposal of patients’ waste

Disposal of Waste	Weighted Mean	Description
a. The hospital disposes the patient’s waste material in the proper landfill?	3.74	Always
b. The hospital has special boxes for the patient’s waste?	3.74	Always
c. The Hospital has concrete sealed containers for patient’s waste	2.66	Most of the Time
Overall Mean	3.38	Always

Table 6 tells us that in implementing precautionary measures in terms of disposing patients waste, the hospital disposes always the patients’ waste material in the proper landfill and always had a special boxes for the patient’s waste. Most of the time the hospital has concrete sealed containers for patients waste. The overall mean which is 3.38 reveals that the hospital always dispose patients waste.

Table 7. Implementation of the precautionary measure in terms of handling of patients with hepatitis b in the ward

Handling of Patients with Hepatitis B in the Ward	Weighted Mean	Description
a. I isolate the patient immediately prior to admission	3.42	Always
b. I label the chart with Hepatitis B caution sign	3.7	Always
c. I perform medical hand washing before and after handling clients.	3.88	Always
d. I use gloves when taking blood samples from the client	3.7	Always
Overall Mean	3.68	Always

Table 7 presents how the nurses handle the patients with Hepatitis B in the Ward. The nurses always isolate the patient immediately prior to admission, always label the chart with Hepatitis B caution sign, always perform medical hand washing before and after handling clients and use gloves when taking blood samples from the client.

Problem Three: *What intervention can be done based from the result of the study?*

The nurses were knowledgeable in handling patients with Hepatitis B but still there is a need to remind them as to how valuable it is to practice precautionary measures and apply it as a routine and to refresh their knowledge on Hepatitis B emphasizing their responsibility in the prevention and control of the disease. An instructional material was designed by the researchers to be used for health teaching for patients and for the community as well to be aware of the disease Hepatitis B.

CONCLUSIONS

The respondents' length of clinical exposure has a significant bearing in the implementation of the precautionary measures on Hepatitis B as well as seminars attended. Generally, the respondents' have a high degree of implementation on the precautionary measures on Hepatitis B. NMMC therefore is strong and firm in the practice of preventing the transmission of the disease Hepatitis B.

RECOMMENDATIONS

It is recommended to the city government through the City Health Department to conduct periodic check up and monitoring on the implementation of the precautionary measures on Hepatitis B among public and private hospitals to minimize if not eliminate the risk factors associated with the virus and should implement and promote massive immunization program so that diseases is fully preventable and future cases may decreased.

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