Health Personal Behavior in Implementing Universal Precaution for HIV/AIDS Disease Prevention in Meatega Hospital Tripoli

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Abstract – Since the emergence of infectious diseases and rampant in the world and in developing countries to identify, turned the World Organization (WHO). In providing global trends and research in the field of awareness and control of infectious diseases and blood-borne problems caused by. In August 1987, CDC published a document titled “Recommendations for the prevention of HIV transmission in health care facilities.” The document recommended the continued use of fluid precautions in the blood and body for all patients regardless of their blood-borne infection. There is little in terms of accurate data on the prevalence of HIV and AIDS in the Libyan Arab Jamahiriya, adult HIV prevalence is And reported to be low, at less than 0.2%. According to a study the spread of national series-in 2004-2005 conducted by the National Center for the Prevention of communicable diseases among 65,000 people, using a random cluster sample, the prevalence of HIV in Libya 0.13% (90 cases) 1. In 2008, according to the National Anti-infectious diseases center that the cumulative number of cases of HIV in the Libyan Arab Jamahiriya 11,152, including 8,654 Libyan nationals. May move hospitals for HIV (HIV) infection from patients to staff in the field of health care. The security problems that unit in immunodeficiency disease outbreaks in Libya and liver virus HCV, HBV. And particularly in hospitals, which suffer from a lack of information and expertise and outreach in the field of UNIVERSAL PRECAUTION. This study was conducted to determine the use of UP within hospitals Libya, and select Mitiga Tripoli hospital. To see how used hedges scientific diet nursing, doctors, and the two works and non-transmission of diseases outside the hospital.

Keywords. To see how scientific precautions used in hospitals in Libya and the extent of knowledge workers from Doctors and nursing.

Introduction

Health workers are exposed to blood and other body fluids in the course of their work. Consequently, they are at risk of infection with Blood-borne viruses including human immunodeficiency virus (HIV), hepatitis B virus (HBV) and hepatitis C virus (HCV). The risk of infection for health workers depends on the prevalence of disease in the patient population and the nature and frequency of exposures. Occupational exposure to blood can result from percutaneous injury (needle-stick or other sharps), mucocutaneous injury (splash of blood or other body fluids in the eyes, nose or mouth) or blood contact with non-intact skin. The most common form of occupational exposure to blood and the most likely to result in infection is needle stick injury.

The most common causes of needle-stick injury are two-handed recapping and the unsafe collection and disposal of sharps waste. Health workers in areas such as operating, delivery and emergency rooms and laboratories have a higher risk of exposure. Cleaners, waste collectors and others whose duties involve handling blood-contaminated items are also at risk.

Among the 35 million health workers worldwide, about 3 million experience percutaneous exposures to blood-borne pathogens each year; two million of those with HBV, 0.9 million to HCV and 170,000 to HIV. These injuries may result in 15,000 HCV, 70,000 HBV and 1,000 HIV infections. More than 90% of these infections occur in developing countries (1). In August 1987, CDC published a document entitled “Recommendations for Prevention of HIV Transmission in Healthcare Settings”. The document recommended that blood and body fluid precautions be consistently used for all patients regardless of their blood-borne infection status. This extension of blood and body fluid precautions to all patients is referred to as "Universal Blood and Body Fluid Precautions" or "Universal Precautions." Under universal precautions, blood and certain body fluids of all patients are considered potentially infectious for human immunodeficiency virus (HIV), hepatitis B virus (HBV), changes in instrument design and techniques for performing surgical procedures and modified personal barriers have been shown to reduce blood contacts.

Despite adherence to standard precautions and implementation of some new techniques and devices, percutaneous injuries continue to occur. This is of concern because percutaneous injuries represent the greatest risk of transmission of blood-borne pathogens to health care personnel (5). Recent studies have shown that compliance with these precautions in the high-risk setting of emergency wards, operation theatres and critical care units is less than optimal.

UNAIDS estimates in 2005 regarding the AIDS Epidemic in the Middle East point to approximately 720,000 people living with HIV in the region with up to 210,000 newly infected adults and children in 2006 alone. While there is little in terms of accurate data on the extent of HIV and AIDS in the Libyan ArabJamahiriya, adult HIV prevalence is Reported to be low, at less than 0.2%. According to a national sera-prevalence study in 2004-2005 conducted by the National Center for Infectious Diseases Prevention and Control among 65,000 persons, using random cluster sampling, HIV prevalence in Libya was 0.13% overall (90 cases) 1. In 2008, the National Infectious Diseases Control Center reported that the cumulative number of HIV cases in the Libyan Arab Jamahiriya was 11,152, out of which 8,654 were Libyan nationals.
Nosocomial transmission of human immunodeficiency virus (HIV) infection from patients to health care personnel may occur after percutaneous or, infrequently, mucocutaneous exposure to blood or body fluids containing blood (3). If precautions are not followed healthcare workers may be at risk of HIV infection as a result of their work. The main cause of infection in occupational settings is exposure to HIV-infected blood via a percutaneous injury (i.e. From needles, instruments, bites which break the skin, etc.). The average risk for HIV transmission after such exposure to infected blood is low - about 3 per 1,000 injuries. Nevertheless, this is still understandably an area of considerable concern for many health care workers.

Nurses are particularly more at risk because they are in the Frontline in delivering treatment to patients. A study to assess the knowledge and compliance with universal precautions (UP) for the labor wards, delivery and operating rooms by Doctors, Nurses and Technicians by Dhalwal et al. in Chandigarh, India in 2011 showed that one hundred percent of doctors had knowledge about UP whereas it was 80% in staff nurse and 82% in OT technician (6).

A cross-sectional survey Jeong et al. With 158 operating room scrub nurses from 7 general hospitals that each had 500 beds or more in Busan, South Korea, from April to May 2006, on nurse's behavior in connection with compliance with double gloving, using protective Eyewear, and no recapping of needles; showed that only twelve percent (19/158) of the participants always used double gloving, 2% (3/158) always used protective Eyewear, and 10% (15/158) always practiced not recapping used needles. Furthermore, all hospitals investigated in the study only had regular educational programs lasting less than 1 hour on the control of hospital infection for new employees. Only 1 hospital has provided on the job training on the infection control for current operating room nurses. This means that operating room nurses in this study very rarely complied with standard precautions, especially with using protective Eyewear.

Problem Statement

Due to the risk of acquiring life-threatening blood-borne pathogens such as HIV, In the short term, the Libya has requested UNAIDS to support the procurement of antiretroviral (ARV) treatment drugs for around 3000 people living with HIV while working in parallel to reestablish the ARV supply and procurement system that has been interrupted for more than six months. The ARVs is now being shipped to the country it would be reasonable to expect that the health care workers working in the potentially hazardous environment at the hospital would have sufficient knowledge about universal precaution and adhere to strict precautions against such exposures to protect themselves and the patients from infection.

However, recent studies have shown that compliance with these precautions in the high-risk setting of emergency wards, operation theatres and critical care units is less than optimal. Hence, compliance with universal precautions is an important issue and it is important to know the knowledge, attitude and level of compliance of the health care workers with these precautions.

Specific Research Objectives

1. To identify the demographic of the respondents, which consist of age, sex and education at the Meatega Hospital in Tripoli, Libya.
2. To identify the knowledge of respondents in terms of the use of universal precaution at Meatega Hospital in Tripoli, Libya.
3. To identify the attitude of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
4. To identify the availability of universal precaution at Meatega Hospital in Tripoli, Libya.
5. To identify the supporting behavior of peers in using universal precaution at Meatega Hospital in Tripoli, Libya.
6. To identify the supporting behavior from supervisors in using universal precaution at Meatega Hospital in Tripoli, Libya.
7. To analyze the relationship between the demographic of respondents and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
8. To analyze the relationship between the knowledge of universal precaution and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
9. To analyze the relationship between attitude of universal precaution and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
10. To analyze the relationship between availability of universal precaution equipments and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
11. To analyze the relationship between the supporting behavior from peers and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
12. To analyze the relationship between supporting behavior from supervisors and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
13. To analyze factors influencing the behavior of health personnel in using universal precaution at Meatega Hospital in Tripoli, Libya.

Scope of Research

A-Place.
This research will be conducted Hospital MEATEGA in Tripoli, Libya.
Standard Precautions: Key Components

**Hand washing (or using an antiseptic hand rub)**
- After touching blood, body fluids, secretions, excretions and Contaminated Items
- Immediately after removing gloves
- Between patient contact

**Gloves**
- For contact with blood, body fluids, secretions and contaminated Items
- For contact with mucous membranes and no intact skin

**Masks, goggles, face masks**
- Protect mucous membranes of eyes, nose and mouth when contact With blood and body fluids is likely

**Gowns**
- Protect skin from blood or body fluid contact
- Prevent soiling of clothing during procedures that may involve Contact with Blood or body fluids.

**Linen**
- Handle soiled linen to prevent touching skin or mucous membranes
- Do not pre-rinse soiled linens in patient care areas

**Patient care equipment**
- Handle soiled equipment in a manner to prevent contact with skin or Mucous membranes and to prevent contamination of clothing or the Environment
- Clean reusable equipment prior to reuse

**Environmental cleaning**
- Routinely care, clean and disinfect equipment and furnishings in Patient care areas

**Sharps**
- Avoid recapping used needles
- Avoid removing used needles from disposable syringes
- Avoid bending, breaking or manipulating used needles by hand
- Place used sharps in puncture-resistant containers

**Patient Resuscitation**
- Use mouthpieces, resuscitation bags or other ventilation devices to Avoid mouth- to-mouth resuscitation

**Patient Placement**
- Place patients who contaminate the environment or cannot maintain Appropriate hygiene in private rooms.

HIV Infection

HIV infection is caused by one of several related retroviruses that become incorporated in the host cell DNA and result in a wide range of clinical presentations varying from asymptomatic carrier states to severely debilitating and fatal disorders. HIV infects a major subset of T cells defined as helper/inducer cells. Their function is to protect the immune system. These cells are systematically destroyed during the course of HIV disease, making the individual susceptible to a number of illnesses.

Most people infected with HIV develop detectable antibodies within 6-12 weeks after infection; occasionally, there is a delayed response. During this phase called “seroconverting” people are capable of transmitting the virus to others.

The Spread of HIV Infection

There are several ways that HIV is spread and those include:

1. From infected person to an uninfected person during unprotected anal, vaginal, or oral sexual intercourse;
2. Infected intravenous drug users when they share needles and syringes contaminated with their blood.
3. Women infected with HIV may pass the virus to their unborn child. As the virus may be passed through breast milk of the infected woman, breastfeeding is not recommended for infants of infected mothers.
4. Blood-to-blood transmission can occur when the infected blood of an individual enters the bloodstream of another through blood transfusions, breaks in the skin, mucous membranes, or through needle sticks.

Detection and Diagnosis of HIV Infection

After initial primary infection with HIV, there is a window period prior to the development of detectable antibody. In persons with known exposure dates, the estimated median time from initial infection to the development of detectable antibody is 2.4 months; 95% of individuals develop antibodies within 6 months of infection.

The Spread of Communicable Diseases

Health care professionals need to be knowledgeable about infectious diseases that can be transmitted in the hospital, including those spread through contact with blood and other potentially infectious body fluids.

1. **Airborne or the respiratory route**
   These germs are spread when infected droplets from the nose, mouth, sinuses, throat, lungs or contaminated tissues or fabric are inhaled when we breathe.

2. **Direct contact route**
   This type of germ contact occurs by directly touching an infected area or body fluid such as saliva, mucus, eye discharge, pus or spit.

3. **Fecal-oral route**
   These germs enter the body from hands, food, mouthed toys, toilet, diapers, etc., That have been unintentionally infected with germs from the stool.

4. **Blood contact route.**
   Meaning that an individual must come into contact with the infected blood or infected body fluids or another in order to “catch” the disease.
HIV (and Other Blood-borne Pathogens) Transmission in Health- Care Settings.

Blood-borne pathogens

Blood-borne pathogens are disease-causing germs that are found in infected human blood and certain other body fluids, particularly semen and vaginal secretions. A pathogen is a disease-causing "germ". In the case of blood-borne pathogens, these germs are spread through the blood-borne route. The word pathogen means to cause suffering.

1. These pathogens may be passed from person-to-person with any exposure to infected blood or inflected body fluid.
2. Pathogens of significance are Hepatitis B Virus (HBV), Hepatitis C and Human Immunodeficiency Virus (HIV).

Pathogen Transmission Pathways

Blood-borne pathogens constitute a variety of infectious agents that can be transmitted via blood and sometimes other body fluids and tissues. Although HIV transmission has received the greatest amount of recent attention, transmission of blood-borne pathogens have been described in many different health care settings and has been reported from patient to patient, patient to health care worker, and rarely, from health care worker to patient.

Cases of Blood Contact

Blood is the single most important source of exposure to HBV, HCV, and HIV in healthcare settings. Percutaneous exposures (e.g., Needle sticks and punctures or cuts with other sharp objects) are most frequently sustained by those occupational groups that handle sharps, including surgeons, but are also sustained by others, including downstream workers such as housekeepers and those disposing of waste. The greatest risk of infection transmission is associated with percutaneous exposure to blood, followed by exposure of a mucous membrane to blood, and the least risk with exposure to no intact skin.

Percutaneous Exposure

Needle sticks and sharp injuries have been recognized as one of the occupational hazards among health care workers. An estimated 600,000 to 800,000 needle stick and other percutaneous injuries are reported annually among U.S.

The Risk for HIV Transmission after Percutaneous Exposure

The risk for HIV transmission after percutaneous exposure to infected blood is approximately 0.3% or about 3 out of 1,000 000. Several factors increase the risk of infection associated with an exposure. An increased risk of seroconversion is associated with a deep injury, the injection of a large quantity of blood, an injury with a hollow needle, or injury while inserting a needle into a vein or artery. The patient’s stage of infection may also play a role. Since there is a higher titer of HIV in the blood of a person in the advanced stages of AIDS, there may be a greater risk of seroconversion after an exposure to the blood of a patient with advanced disease.

Universal Precaution for Preventing HIV / AIDs

Universal Precautions are a simple set of effective practices designed to protect health workers and patients from infection with a range of pathogens including blood-borne viruses. These practices are used when caring for all patients regardless of diagnosis. They are applied universally. It is not feasible, effective or cost-effective to test all patients for all pathogens prior to giving care in order to identify those who are infected and take precautions only with them. Knowing a patient is infected does not prevent occupational exposure to blood. Thus, decisions regarding the level of precautions to use are based on the nature of the procedure and not on the actual or assumed serological status of the patient. It is not safe to take precautions only with those from so-called risk groups for infection with blood-borne pathogens as many people belonging to risk groups are not infected and many infected people do not belong to risk groups.

Universal Precautions for Health Care Workers.

The following are several precautions issued by the CDC for all health care workers to follow:

1. All workers should routinely use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or other body fluids is anticipated. Gloves should be worn for touching blood and body fluids, mucous membranes, or non-intact skin of all patients, for handling items or surfaces soiled with blood or body fluids, and for performing venipuncture and other vascular access procedures. Gloves should be changed after contact with each patient. Masks and protective Eyewear or face shields should be worn during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure of mucous membranes of the mouth, nose, and eyes. Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other body fluids.

2. Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after gloves are removed.

3. All health care workers should take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during procedures; when cleaning used instruments; during disposal of used needles; and when handling sharp instruments after procedures.

4. Pregnant healthcare workers are not known to be at greater risk of contracting HIV infection than healthcare workers who are not pregnant; however, if a health care worker develops HIV infection during pregnancy, the infant is at risk of infection resulting from perinatal transmission.
Knowledge, Attitude and Compliance of Universal Precaution among Health Care Workers

1. Knowledge. Knowledge of blood-borne illnesses and universal precautions should be the foundation of any safe-practice methods in the hospital. Providing a regular and systematic educational program may improve knowledge among health care workers. There may be a need to systematically evaluate health care worker knowledge on a periodic basis, rather than on a one-off basis during the nursing training curriculum. An ongoing educational program regarding blood-borne illnesses and universal precautions should be created and considered part of a yearly exercise for staff at the hospital. Seminars and group sessions involving all levels of staff at the hospital should be held, since this will help the staff discuss misunderstandings pertaining to correct knowledge and practices. This is important as continuing misconceptions may lead to perpetuation of incorrect information among patients and others.

2. Attitude. The practice of universal precautions has an attitudinal influence or is related to personal opinions or feelings. There is a general positive attitude towards professional duty to care for patients with blood and body fluid infections. Only a small proportion showed negative attitude towards patients with blood and body fluid-borne pathogens.

An education program on nosocomial infections and its prevention will help in the retention of knowledge, attitudes and practices among the various categories of HCWs. This will help in better adherence to barrier protection such as hand washing, use of gloves and hand disinfection.

3. Compliance. Comply with infection control precautions is internationally suboptimal. The evidence confirms that compliance with specific aspects of standard/UPS varies, and practitioners are selective in their application of recommended practice. Compliance does improve following a structured intervention; however, research fails to indicate for how long the intervention affects practitioner compliance, or whether compliance after a period of time returns to the norm. Several reasons for non-compliance are discussed, and recommendations for future research are suggested.

Relevance to clinical practice. Suboptimal compliance has significant implications for staff safety, patient protection and the care environment. Infection control teams and researchers need to consider the reasons for non-compliance and provide a supportive environment that is conducive to the routine, long-term application of standard precautions.

Conceptual Framework

There are many factors influencing Predisposing factors like characteristic of responsiveness, knowledge of health personnel of universal precaution, attitude of health personnel for using universal precaution. Enabling factor influencing such as availability of the universal precaution for health personnel, Reinforcing factor: Support from peers, Support from supervisors, plays a great role in this level.
Hypothesis

The research hypotheses in this study are:

1. There is the relationship between the characteristic of respondents and nurse’s behavior in universal precaution practice at the Meatega Hospital in Tripoli, Libya.
2. There is the relationship between the knowledge and nurse’s behavior in universal precaution practice at the Meatega Hospital in Tripoli, Libya.
3. There is the relationship between the attitude and nurse’s behavior in universal precaution practice at the Meatega Hospital in Tripoli, Libya.
4. There is the relationship between the availability of universal precaution equipments and nurse’s behavior in universal precaution practice at the Meatega Hospital in Tripoli, Libya.
5. There is the relationship between the supporting behavior of peers and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
6. There is a relationship between supporting behavior from supervisors and the behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.

Research Design

This study will use quantitative research. This research aims to understand the application of universal precaution for combating diseases in hospitals, educating health care workers and how to protect them from the dangers of viruses from the corrupt blood.

Population and Samples

The study population is the nurse and doctors at the Meatega Hospital in Tripoli. Simple random sampling technique using table of random number will be used to select the respondents the number of respondent nursing 86.

Primary Data

The primary data collected in this study will be gathered by giving questionnaire to the health personnel who belong to the study samples. After getting information from these health personnel, the researcher will conduct a personal approach to get more additional information required.

Secondary Data

Secondary data are used as supporting data and supplementary of primary data. These data are relevant to the purposes of research in the form of previous studies on the subjects studied in this research as well as the documents, letters and other records at Meatega Hospital.

Analysis and Management data

1. Management data
   Data processing by SPSS 16.00 according to:
   Editing, coding, tabulating, and presented data narration table.

2. Analysis data
   a. Univariate, father has data collecting to make the distribution of each variable, and then for exploration to table distribute frequency. Analysis variable to;
      1. Characteristic (age, long work)
      2. Sex
      3. Education
      4. Knowledge behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
      5. Attitudes towards practicing up behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
      6. Availability behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
      7. The health personnel behavior of respondents in using universal precaution in Meatega Hospital in Tripoli, Libya.
      8. Support from peers’ behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
      9. Support from the supervisor’s behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
     10. Practicing up profession behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.

Bivariate

This analysis to have data relationships between the practicing and behaviors respondent in use universal precaution at Meatega Hospital.

1. Characteristic (age, sexology work)
2. Sex
3. Education
4. Knowledge behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
5. Attitudes towards practicing up behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
6. Availability behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
7. The health personnel behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
8. Support from peers’ behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
9. Support from the supervisor’s behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.
10. Practicing up profession behavior of respondents in using universal precaution at Meatega Hospital in Tripoli, Libya.

**Multivariate.** For analysis multivariate will use regression logistic that for independent variable with the dependent variable.

**Description of Research Location**

Hospital MEATEGA one important hospitals in Tripoli, Tripoli is the capital and largest Libyan cities with a population of (1.8) million in 2011, located in the north-west of Libya. This city is located on top of the desert overlooking the Mediterranean Sea compared to the southern tip of the island of Sicily. Bordered to the east TAJOURA area, JANZOUR West and south of the Ben - GHASHIR area, and the Mediterranean Sea to the north. In the middle SHUHADA Square. Description of the city of Tripoli, “Mediterranean Mermaid”, and the beauty of the gardens and white buildings. Away from the hospital MEATEGA air base is 11 km from the city center. Enjoy the hospital before the fall of the regime of Colonel Muammar Gaddafi 20-08-2011, which was under the management system and military affairs and Special Forces has all the advantage. The hospital is located in a market area ALGOMET.

The hospital contains a collection which sections.

- Department of Ophthalmology.
- Department of the ear, nose throat.
- Orthopedic ward.
- Department of Internal Medicine.
- Department of Urology.
- Department of nerves and veins of two evils.
- The Endoscopy Unit and emergency unit and ambulance unit.

**Results treatment with Multivariate Analysis**

From the results of chi square test for bivariate analysis with the dependent variable personelle’s behavior and demography variable, knowledge variable, attitude, availability, peer support, supervisor’s supporters there are five variables that have a relationship that is the variable knowledge, availability, attitude, peer’s supporting, supervisor’s supporting so that the five these variables can be entered into the multivariate logistic regression analysis to determine its effect together.

**Behavioral HIV/Aids disease prevention of universal precaution for health professional and HIV/AIDS disease prevention**

Behaviors, knowledge, and practice of universal precautions, the spread of hepatitis B and HIV in hospitals because of behavior and not fully comprehend. Did not find any significant change in the frequency of use of universal precautions. Look at the pros and cons is clear from the results that the ratios of 52.3% of the respondents have good behavior, And 47.7% and this figure shows the ratio’s bad behaviors respondents. Based on survey results revealed that most respondents have HIV/AIDS prevention behaviors are good to use universal precautions HIV/AIDS good behavior prevention can reduce the risk of contracting HIV and vice versa, if the bad behavior it will prevent it creates an increased risk for contracting HIV.

**Relationship between knowledge of universal precaution for health professional and HIV/AIDS disease prevention**

Knowledge of blood-borne illnesses and universal precautions should be the foundation of any safe-practice methods in the hospital. Providing a regular and systematic educational program may improve knowledge among health care workers. Produced from the analysis and the results found by the respondents, the percentage of respondents who have a good knowledge of 70.5%, and respondents who have a poor knowledge of 25.0%. Bauer and Kenney (1993) similarly showed a misuse of UP guidelines, resulting in selective rather than universal precautions. Wasting of resources could also be likely due to improper application of UP (Danchaivijitr, 1997). Hand-washing was practiced appropriately by most respondents (86.6%), unlike reports in the literature that this practice is followed by only 40~60% of nurses (Heenan, 1992). Further, the knowledge score obtained was less than optimal, and this may be related to the lack of post-registration education in issues of UP in the sample, as two-thirds of the sample had not attended such programs. Previous studies by Turner (1993), Gruber et al (1989), and Talan and Baraff (1990) support the current results that there is no relationship between knowledge of UP and compliance with UP.

**The relationship between an attitude of universal precaution for health professional and HIV/AIDS disease prevention**

The practice of universal precautions has an attitudinal influence or is related to personal opinions or feelings. There is a general positive attitude towards professional duty to care for patients with blood and body fluid infections. Only a small proportion showed negative attitude towards patients with blood and body fluid-borne pathogens. During the results shows that the percentage of respondents good in 62.5%. Universal precautions, and the small percentage of 37.5%. An education program on nosocomial infections and its prevention will help in the retention of knowledge, attitudes and practices among the various categories. This will help in better adherence to barrier protection such as hand washing, use of gloves and hand disinfection.

**Relationship between Available of universal precaution for health professional and HIV/AIDS disease prevention**

Guidelines recommended by the Centers for Disease Control and Prevention for reducing the risk of transmission of blood-borne and other pathogens in hospitals. The standard precautions synthesize the major features of universal precautions (designed to reduce the risk of transmission of blood borne pathogens) and body substance isolation (designed to reduce the risk of pathogens from moist body substances) and apply them to all patients receiving care in hospitals regardless of their diagnosis or presumed infection status.
Relationship between peer supporting of universal precaution for health professional and HIV/Aids disease prevention

Peer support can also increase compliance through knowledge sharing. A study by Jere et al. in Malawi (2011) show that health workers can contribute to HIV prevention by minimizing HIV transmission in health facilities and increasing client teaching. Of the questions that have been distributed to the respondents were analyzed describes the ratio equal to 50%.

Relationship between Supervisor supporting of universal precaution for health professional and HIV/Aids disease prevention

The role of supervisors in ensuring compliance is critical. According to The Occupational Safety and Health Administration (OSHA) in the USA, the supervisors must:

Ensure all personnel with occupational exposure receive training, are provided and use the appropriate personal protective equipment, and adhere to "Universal Precautions". Results equal among respondents by supervisor it: 50%.

Conclusions’

1. Respondents have average of age 36 years old, more female (58, 0%) than male (37%, 0), formal education most respondents were university’s (38,6%), specialist diploma 23, 9% and specialist 23.9%.
2. More respondent has good behaviour for implementing universal precaution (52.3%) and we’re Poor behaviour 47.7%.
3. Respondents have good knowledge implementing universal precaution (75%) and who has poor knowledge is 25%.
4. More than respondents have positive attitudes for implementing universal precautions (62.5%) and negative in attitude 37.5%.
5. Based on result of the research, respondents said if availability for implementing universal precaution is positive ( complete) 54.4% and 45.5% it is negative (not complete)
6. Respondents have better peer supporting 50%
7. Respondent has good supervisors supporting 50%
8. Have relationship between knowledge of respondents with personal behaviour about universal precautions
9. Have relationship between attitudes of respondents with personal behaviour about universal precautions.
10. Have a relationship between availability of universal precautions with personal behaviour about universal precautions.
11. Have relationship between lengths of work with personal behaviour about universal precautions.
12. Have relationship between peer’s supporting with personal behaviour about universal precautions.
13. Have two independent variable that influence personal behaviour in universal precaution variables namely available (significance of 0.010 ) and peer’s supporting shown by the significance of 0.004 (p <0.05)

B. Suggestions’

Based on the finding in this study that the proposal is given as follows:

1. The need to improve the delivery of complete and accurate information about how global reserves, in a hospital in Tripoli, using the right media programs, and can also include a wide target audience.
2. The need to design programs that educators and learners and specialists in the field of global reserves, of all the communities in a Tripoli hospital, such as poor educators for workers in the field of cleaning units, and specialized courses. Visitors among patients, in the hospital and others. Provide accurate and complete information existing diseases of the study and the problems faced by the implementing universal precautions.
3. The need to conduct training for health care providers with respect to the global knowledge about precautions and how to connect the information well and true for nursing and patients and staff in hospitals, the public and local communities in any health services in hospitals.

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