



**International University of Africa
Deanship of Postgraduate Studies,
Research and Publication.
Faculty of Medicine
Master of community medicine**



**Health Workers Compliance to Infection Prevention and Control Measures at
public Hospitals, Khartoum, Sudan, 2019.**

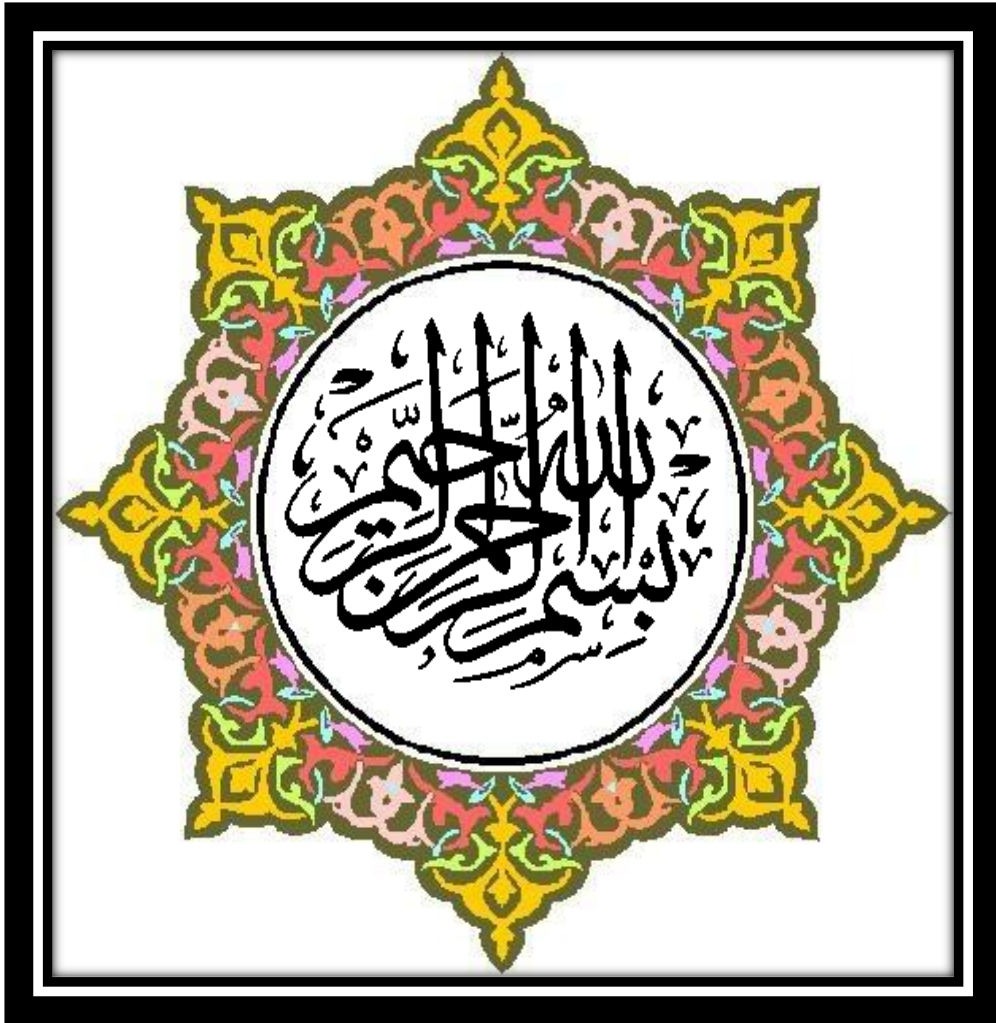
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{ وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ ۗ عَلَيْهِ تَوَكَّلْتُ وَإِلَيْهِ أُنِيبُ }

Dedication

To my beloved family members and everyone who always wish to see me achieving my dreams.

A special feeling of gratitude to my father and mother, who were and still are burning candles that lighten my path for success. I shall always appreciate and remember all they have done for me.

Also, to my brothers and sisters, thank you for your love and support.

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LIST OF ACRONYMS

BC	= Before Christmas.
NI	= Nosocomial infections.
HCAIs	= Health care associated infections.
WHO	= World health organization.
HBV	= Hepatitis B virus.
HCV	= Hepatitis C virus.
HIV	= Human Immunodeficiency virus.
HCWs	= Healthcare workers.
HACs	= Health-acquired conditions.
CVCs	= Central venous catheters.
ICPAC	= Infection Control Practices Advisory Committee.
CAUTIs	= Catheter-associated-urinary tract infections.
SSIs	= Surgical site infections.
CDI	= Clostridium difficile infections.
HELICS	= Hospital in Europe Link for Infection Control through Surveillance.
NNIS	= National Nosocomial Infection Surveillance.
ICU	= Intensive care unit.
NICU	= Neonatal intensive care unit.
ECMO	= Extracorporeal membrane oxygenation.
BSI	= Bloodstream infection.
CDC	= Centers for Disease Control.
TB	= Tuberculosis.

HAART = Highly active antiretroviral therapy.

BCG = Bacillus Calmette-Guerin.

MRSA = Methicillin-Resistance Staphylococcus Aureus.

EVD = Ebola Viral Disease.

SARS = Severe acute respiratory syndrome.

IPC = Infection prevention and control.

HH = Hand hygiene.

IUCs = In dwelling urinary catheters.

PPE = Personal protective equipment.

ABHR = Alcohol-based hand rubs.

PAPR = Powered Air-Purifying Respirator.

AIIR = Airborne Infection Isolation Room.

Abstract

Infection is defined as an invasion by multiplication of pathogenic microorganisms in a bodily part or tissue, which may produce subsequent tissue injury and progress to overt disease through a variety of cellular or toxic mechanisms. Hospital infection is known as Nosocomial infections (NI). The term derived from the Greek word "**Nosokomeion**" and that means "hospitals take care of its infections" which result from treatment in a hospital or a healthcare service unit. Hospital infection known as a health care associated infections (HCAIs), but not secondary to the patient's original condition. Infections are considered nosocomial if they appear 48 hours or more after hospital admission or within 30 days after discharge. The prevalence of HCAI varies widely across the globe. Worldwide it is estimated that almost 10% of the hospitalized patients acquire at least one HCAI. The prevalence of HCAI in developing countries can become as high as 30-50%.

The aim of the study is to determine the knowledge and identify attitude and practices of Health workers to infection prevention and control measures at Public hospitals in Khartoum state. This study is Descriptive, Cross-sectional, hospital-based study, conducted at public hospitals in Khartoum State, Sudan. Data was collected by a questionnaire distributed to 270 and 250 completed questionnaires were selected for analysis. Data was analyzed by SPSS program.

According to the impact of the most participants, the implementation level of infection control practices and standard precautions in this study were below standard to guarantee infection safety in health workers and patients.

Generally, the Health workers had medium average knowledge and attitude, and poor practice about HAI prevention and control, of the results of this study are determined the 62% (Figure 4.1) of Health workers had good knowledge and 38% had poor knowledge while the 62.8% (Figure 4.2) of HCWs had good attitude and 37.2% had bad attitude, also 42.8% (Figure 4.3) had good practices and 57.2% had bad practices.

Hand hygiene is the first initial step towards successful infection control in any healthcare setup. The researcher found that in health personnel set up knowledge regarding hand hygiene was high (86.3%) but the actual compliance was less (52.1%) as compared to their knowledge.

Finally, the workload is a barrier to the adequate implementation of infection control practices and the majority of health personnel at Public hospitals are not comfortable with their work.

يتم تعريف العدوى على أنها غزو عن طريق مضاعفة الكائنات الحية الدقيقة المسببة للأمراض في جزء أو نسيج جسدي ، مما قد ينتج عنه إصابة الأنسجة اللاحقة والتقدم في التغلب على الأمراض من خلال مجموعة متنوعة من الآليات الخلوية أو السامة.

عرف عدوى المستشفيات باسم الالتهابات المستشفوية (NI). المصطلح مشتق من الكلمة اليونانية "Nosokomeion" وهذا يعني "المستشفى تعنتي بالتهابات" الناتجة عن العلاج في المستشفى أو في وحدة خدمات الرعاية الصحية.

عدوى المستشفى المعروفة باسم العدوى المرتبطة بالرعاية الصحية (HCAIs) ، ولكنها ليست ثانوية للحالة الأصلية للمريض. تُعتبر الالتهابات "مستشفوية" إذا ظهرت بعد 48 ساعة أو أكثر من دخول المستشفى أو في غضون 30 يوماً بعد الخروج منه. يختلف انتشار HCAI على نطاق واسع في جميع أنحاء العالم.

عالمياً، يقدر أن ما يقرب من 10 ٪ من المرضى في المستشفى يكتسبون HCAI واحد على الأقل. يمكن أن يصل معدل انتشار HCAI في البلدان النامية إلى 30-50 ٪.

الهدف من هذه الدراسة هو تحديد المعرفة وتحديد موقف وممارسات العاملين في مجال الصحة لتدابير الوقاية من العدوى ومكافحتها في المستشفيات العامة في ولاية الخرطوم. الهدف من هذه الدراسة هو تحديد المعرفة وتحديد موقف وممارسات العاملين في مجال الصحة لتدابير الوقاية من العدوى ومكافحتها في المستشفيات العامة في ولاية الخرطوم. هذه الدراسة وصفية ، مستعرضة ، مستندة إلى دراسة ، أجريت في المستشفيات العامة في ولاية الخرطوم ، السودان. تم جمع البيانات عن طريق استبيان تم توزيعه على 270 و 250 استبيان تم استكمالها للتحليل. حيث تم تحليل البيانات بواسطة برنامج SPSS.

وفقاً لتأثير معظم المشاركين ، فإن مستوى تنفيذ ممارسات مكافحة العدوى والاحتياطات القياسية في هذه الدراسة كان مستوى دون المستوى القياسي لضمان سلامة العدوى في العاملين الصحيين والمرضى.

بشكل عام ، كان لدى العاملين في مجال الصحة معرفة وممارسات متوسطة ، وممارسات سيئة بشأن الوقاية من الفيروسات المرتبطة بالرعاية الصحية والسيطرة عليها، من نتائج هذه الدراسة يتم تحديد 62 ٪ (الشكل 4.1) من العاملين في مجال الصحة لديهم معرفة جيدة و 38 ٪ لديهم معرفة ضعيفة في حين أن كان 62.8 ٪ (الشكل 4.2) من العاملين في مجال صحة المرأة موافق جيد و 37.2 ٪ لديهم موقف سيئ ، وكذلك 42.8 ٪ (الشكل 4.3) لديهم ممارسات جيدة و 57.2 ٪ لديهم ممارسات سيئة.

عد نظافة اليدين الخطوة الأولى نحو النجاح في السيطرة على العدوى في أي مؤسسة للرعاية الصحية. لقد وجدت أنه في العاملين الصحيين ، كانت المعرفة المتعلقة بصحة اليدين مرتفعة (86.3%) لكن الالتزام الفعلي كان أقل (52.1%) مقارنة بمعرفتهم.

أخيراً ، يمثل عبء العمل عائقاً أمام التنفيذ الملائم لممارسات مكافحة العدوى ولا يشعر غالبية العاملين الصحيين في المستشفيات العامة بالارتياح لعملهم.