JOURNAL OF INTERNATIONAL CRISIS AND RISK COMMUNICATION RESEARCH
ISSN: 2576-0017
2024, VOL 7, NO S11

Activating infection control in hospitals and health centers: a field study

Hamad Mohammed Hussain Almuhamidh[1], Dr. Khalid Nahar Almohammedi[2], Amal Ahmad Abdrabalredha[3], Rabab Ibrahim Abbas Almiraj[4], Rakan Khalifah Rakan Al jafar[5], Saeed Mohammed Ali Lesloom[6], Naser Mahdi Ali Alsallum[7], Saleh Ali Saedan Al Mansour[8], Nasser Ali Saedan Al Mansour[9], Hamad Ali Saedan Al Mansour[10], Hussain Ali Shlan Aldweis[11], Naji Mushabbab Mohammed Alalhareth[12], Salem Saud Saleh Al Harith[13], Talal Saud Saleh Al Harith[14], Muhammad Salem Hamad Al Mansour[15], Rawabi Ali Jarallah Alyami[16]

1 Emergency Medical Technician Aseer Health Cluster, Emergency and Disaster Management Ambulance Center 2, haalmuhamidh@moh.gov.sa
2 General Directories of Health Affairs Eastern Province, Saudi Arabia kalmohammedi@MOH.GOV.SA, Physician
3 Nurse,Primary health care centers in Dammam, aalabdrabalradha@moh.gov.sa
4 ralmiraj@moh.gov.sa, Primary health care centers in Dammam
5 anesthesia technician, Al Amal PSYCHIATRIC CENTER,ralgafar@moh.gov.sa
6 Emergency medical services,smlesloom@moh.gov.sa,Bisha's health
7 Emergency medical,nalsallum@moh.gov.sa,Bisha's health,Tabalah Hospital
8 Epidemiology technician,Najran,Prince Sultan Center,saalalmansour@moh.gov.sa
9 Epidemiology technician,Najran,Al Amal PSYCHIATRIC CENTER Naalalmansour@moh.gov.sa
10 Emergency medical technician, Najran, New Najran General Hospital halmansour18@moh.gov.sa
11 physical therapy, King Khalid Hospital in Najran,Haaldwais@moh.gov.sa
12 Complex of will and mental health, Health informatics technician
13 Complex of will and mental health, Health informatics technician
14 Complex of will and mental health, Physical therapy technician
15 Emergency medical technician, mental health hospital, Najran malyami53@moh.gov.sa
16 NURSING, KKH, Najran RAlyami6@moh.gov.sa

Abstracts

This field study worked in hospitals and health centers to activate infection control standards in health facilities, and the importance of applying them to workers in health facilities even after health centers obtained the accreditation certificate for quality standards in health facilities (CPAHI). The questionnaire was created and sent electronically via social media, where 700 social questionnaires were distributed to people aged (23-58 years), men and women in the city Of Riyadh, and responses from 450 people were obtained via Google Drive.it is concluded the rate Of application Of infection control standards is high.

Keywords: evaluation, of the effectiveness, of infection control application, in health facilities.

1. Introduction

Infection control indicate the arranging for the prevention of nosocomial contagion or infections linked with the provision of healthcare services. Such procedures and measures are practical (rather than academically specialized) sub-measures of pathology. Hence, it is part of the healthcare infrastructure (although small is known about it, and down is backup for it). the case of infection control heads the agent linked with the expansion of infection within healthcare settings (whether from one patient to another patient, from patients to hospital crew, or vice versa from staff to patients, or among organs of the same staff), including prevention (whether through hygienic measures for hand hygiene/hand

washing, cleaning/disinfection/sterilization, vaccination, and surveillance), as well as actions to control/investigate the spread of suspected infection within a health care delivery area (infection oversight and outbreaks), as well as administration (county outbreaks of infection). Hence the title commonly used within the field
Evduatim of IEEffecttvass of Infecttn Cmtrd Aplicatim in &alth FaditÉs
of health care here is "infection surveillance and protection." The aseptic method is the main complex of all infested medical procedures. like, infection control sizes are often more active when put globally due to the expansion of undiagnosed infections. freelance studies by Ignaz Semmelweis in 1847 in Vienna and Sir Oliver Wendell Holmes in 1843 in Boston discovered a bind between the hand hygiene of healthcare workers and the expansion of hospital-borne diseases (l). This made the Centers for Disease Control and Prevention expound in a report that it is "a well-documented case that the most serious measure to block the spread of pathogens or pathogens is impacted hand washing. "(2) Hence, hand washing has become a compulsory step in most healthcare facilities and is demand many states and local regulations (3). The drying operation is one of the most significant parts of the hand hygiene process. In November 2008, a non-peer-reviewed study was (4) attituded at a European Textile Symposium by the University of Westminster in London, which contrast bacterial rates after using a paper towel, hot air hand dryer, and modern air jet hand dryer (5). The study detected that, among these three methods, only paper towels decreased the total number of bacteria on the hand, as it is more efficient with "air drying". The sterilization operation's goal is to kill the microorganisms, in addition to that, it explains the highest level of the microbial killing process which produce it possible. Hence sterilizers may be heat only, steam, or running chemicals. The influence of the sterilizer (such as a "sealed" steam conductor) is specified by three methods. First: the mechanical indicators and scales on the machine itself referred to the proper operation of the machine. Second : temperaturesensitive index or strip on sterilization trap that modified color may indicate appropriate averages of heat or vapor. And third, (most important), is biological testing and screening, in which a chemically unwilling microorganism (mostly the endosperm of bacteria (endospores)) is chosen as a standard challenge. Disinfection is indicated by using runner chemicals on the face and at room temperature to kill microorganisms and pathogens. Here we remind that sanitization is less influential than sterilization because it does not kill bacterial pathogens as an outcome it does not kill bacterial spores. (6) Personal protective equipment (PPE) contains special clothing or supply that a worker dress to keep against any dangers. The hazard in healthcare facilities is exposure to blood, saliva, or other bodily fluids or airborne particles that may be catTYing infectious factors including hepatitis C, HIV, or other pathogens transmitted through blood or bodily fluids. Here, PPE blocks contact with infectious materials by making a barrier or buffer between the infectious substance (reason for infection) and the exposed healthcare worker. (7) Examples of personal protective equipment contain medical gloves, gowns, hoods, shoe covers, face masks, respirators, goggles, surgical masks, and a respirator. (8) Practitioners may have a diversity of educational practiced, as some start their careers as nurses, others begin their lives as medical technologists (especially in the field of medical microbiology), and others may be physicians (usual specialists in the part of infectious illness). Then the following professional organizations supply specialized training courses in the field of infection control and health care for epidemics. Physicians wishing to work in the field of epidemic control often express themselves as infection control practitioners in the case of an infectious illness togetherness. (9), Most of the health centers in the Kingdom have applied comprehensive quality standards in order to provide health services to the population and residents, and among these health centers in the city of Mecca, where these standards have been applied, including infection control standards in health facilities, and they have obtained the certificate of the Saudi Center for Accreditation of

Health Institutions(CBAHI) (a non-governmental and non-governmental institution (established in 2001) (10).

2. Material and Methods:

This study went on in (in the city of Riyadh in Saudi Arabia), and started writing the research and then writing the question and ended with data collection in July 2024. The examiner used the descriptive analytical approach that uses a quantitative or qualitative description of the cultural phenomenon, and

(evaluation of the effectiveness of infection control application in health facilities) the independent variable (the percentage of application of infection control standards in the health facility as a whole) and the dependent variable (the percentage of application of infection control standards in the laboratory and clinics) . This type of study is described by analysis, cause, topicality, and certainly, as it is worried about personals and communities, as it learns the changeable and their impacts on the health of the personage culture, and consumer, the expand of illness and their bonds to demographic differentiable such as age, sex, nationality, and married status. Status, function (l l), and use of the Office Group 2010 pie chart for excel to rank the results by dragging them on the statistical software (12). A questionnaire is an important and useful device for raising a huge amount of data, However, researchers were not allowed to personally meet participants in the online research, they replied to the question electronically, it contains twelve closed questions.

3. Results and Discussion:

As For the first question, it was about do you have knowledge of infection control standards in health centers. The staffs answer was 100% yes. The second question was about whether the health center has clear standards for infection control. 94% of the workers answered yes and 5% answered no. The third question is about whether the workers of all categories apply infection control standards in the health center. 80% of them answered yes, while 20% answered no. The fourth question was whether all workers of all categories in the health center were trained to apply infection control standards. 94% answered yes, while 6% said no. The fifth question was whether all workers of all categories in the health center were trained on proper hand washing methods. 96% of the employees in health centers, while 6% said no, with regard to the sixth question about whether all workers of all categories in the health center were trained on how to sterilize hands? We find that 95% answered yes and 5% answered no. The seventh question was whether all workers of all categories in the health center were trained on how to wear and take off masks and gloves correctly and properly. 90% of them answered yes, while 10% said no. The eighth question is, have all the workers (technicians) in the health center been trained on how to sterilize and disinfect the tools used in the clinics? 87% answered yes, while 13% said no. The ninth question is, is there an infection control coordinator in the health center responsible for guiding, instructing, and enrolling technicians in infection control training courses? 96% answered yes and 4% said no, the tenth question about Does the health center has tools for spilled materials on the floor to be used in case of infection. 94.7% answered yes and 5.3% answered no. The eleventh question is whether the health center has a special room for medical waste. 90%

answered yes, and 10% b answered no. The twelfth question is: does the health center have special containers in which sharp tools such as needles and glass are placed? They all answered 100%. (Table no.l)(figure.no.l)

Table no.l: The extent to which health center staff are keen to a I infection control standards

Questions	Yes	No
Do you have knowledge of infection control standards in health centers?	100%	0%
whether the health center has clear standards for infection control	95%	5%
whether the workers of all cate riesa I infection control standards in the health center		20%
whether all workers of all categories in the health center were trained to apply infection co standards	95 %	5%
whether all workers of all categories in the health center were trained on proper handmethods	95 %	5%
whether all workers of all categories in the health center were trained on how to wear and off masks and oves correctl and	900/0	10%

have all the workers (technicians) in the health center been trained on how to sterilize disinfect the tools used in the clinics	85%	15%
is there an infection control coordinator in the health center responsible for guiding, instructin , and enrollin technicians in infection control trainin courses	95%	5%
Does the health center have tools for spilled materials on the floor to be used in case of infection?	94.7%	5.3%
whether the health center has a s ial room for medical waste.	900/0	100/0
Does the health center have special containers in which sharp tools such as needles and gla are laced?	100%	0%

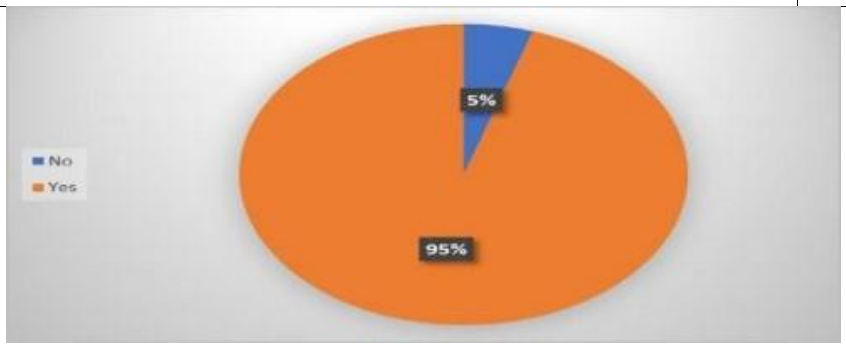

Figure.no.l; Training of all employees of all categories in the health center to apply infection control standards according to participates

4. **Conclusion:**

100. % knowledge of infection control standards in health center Clear infection control standards for the health center 95%, workers in all categories apply infection control standards in the health center 80%, all workers in all categories in the health center have been trained to apply infection control standards,
All employees of all categories in the health center have been trained in the correct methods of hand washing 95%, All workers of all categories in the health center have been trained on the correct methods of washing hands 90%, all workers of all categories in the health center have
been trained on how to wear and take off masks and gloves correctly and safely 85%, all workers (technicians) in the health center have been trained on how to sterilize And disinfection of tools used in clinics 95%. There is an infection control coordinator in the health center responsible for directing, advising and enrolling technicians in infection control training courses 94.7%. The health center has special tools for materials spilled on the floor to be used in case of injury 90%. The health center has a special room for medical waste 90%. The health center has special containers in which sharp tools such as needles and glass are placed 100%.

Acknowledgment:
To begin with, I would like to Praise God and thank and the researchers who make the project comes to light.

WORKS CITED

CDC Guideline for Hand Hygiene in Healthcare Settings, January 29, 2018, at the Wayback Machine, accessed on 20/11/2022.

CDC General information on Hand Hygiene, Archived July 03, 2017, at the Wayback Machine. Accessed on 20/11/2022.

Safechem Ltd Archived 02 September 2018 on the Wayback Machine. Accessed on 20/1112022.

According to p. 35 of the Redway/Fawdar presentation, "Note: this study has not been peer-reviewed but it is intended that the test methods described in this document are provided in sufficient detail to allow replication by those who wish to confirm the results.

Keith Redway and Shameem Fawdar (School of Biosciences, University of Westminster London) (November 2008), WI-JS Westminster University hygiene study, nov2008.pdf "A comparative study of three different hand drying methods: paper towel, warm air dryer, jet air dryer "' (PDF), Table 4, European Tissue Symposium, p. 13. Archived from the original (PDF) on August 29, 2017. Retrieved October 31, 2009. Accessed on 20/11/2022.

Miller, Chris H. Infection Control and Management of Hazardous Materials for the Dental Team, 4th Edition. Mosby Elsevier Health Science, 2010. chpt 11) Accessed on 20/1112022.

OSHA Bloodborne Pathogens Regulations 1910.1030(d)(2)(i) Archived June 29, 2018, at the Wayback Machine. Accessed on 20/1112022.

OSHA 1910.1030(d)(3)(vii) Copy preserved June 29, 2018, on the Wayback Machine. Accessed on 20/11/2022.

https://web.archive.org/web/20160305050836/http://apic.org/am[template.cfm?section=education , archived from the original on March 5, 2016, Accessed on 20/1112022.

https://portal.cbahi.gov.sa/arabic/administrative-body-introduction, 4 November 2022, Accessed on 20/11/2022.

Alserahy, Hassan Awad, et al (2008), The thinking and scientific research, Scientific Publishing Center, King Abdul-Aziz University in Jeddah, the first edition.

Al Zoghbi, Muhammad and AITalvah, Abas (2000), Statistical system understanding and analysis of statistical data, first edition, Jordon-