ATTITUDE AND PRACTICING BEHAVIOUR AMONG HEALTHCARE PROFESSIONALS REGARDING HANDWASHING: A TOOL TO PREVENT EMERGING AND RE-EMERGING INFECTIONS.

Community Medicine

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ABSTRACT

Background: Hand hygiene is one of the most effective ways to control health care related infection. Every year millions of patients around the world are affected by infections that are transmitted by the health-care professionals (HCPs).

Rationale: Nurses and physicians are the main health care workers contacting with patients, representing the vector in the chain of infection. Thus, assessing their knowledge, attitude and practice regarding hand hygiene is very important to decrease the incidence of health care related infection and to improve quality of care.

Objective: The objective of our study was to assess the knowledge, attitude and practices of handwashing among healthcare professionals of Kashmir Division.

Methods: This study was an institutional based cross sectional study, conducted in various healthcare institutions of Kashmir Division which were selected randomly. A predesigned questionnaire was used to collect the data from the participants. The questionnaires contained questions about four different parts which included sociodemographic characteristics, knowledge of hand washing, attitude and practice of hand washing among healthcare professionals. The questionnaires were distributed to various healthcare professionals working in wards, emergency department, laboratories, outpatient departments, injection and dressing rooms, EPI unit and others. The distributed questionnaires were then collected back.

Results: A total of 110 participants were included. Out of total 110 participants, 53% were male, 36% were nurses, 36% of health professionals were working in IPD (In Patient Department).

89% of the participants agreed that, direct or indirect contacts are the most important routes for transmission of hospital-acquired infections, 97% agreed that proper and consistent hand washing prevents infections in health facilities, 100% agreed that health professionals should always wash their hands immediately when they arrive at health institutions, 98% said that they knew steps of handwashing (WHO)/rules of hand hygiene, 91% agreed that hand washing is the single most effective mechanism to prevent spread of infection and 95% agreed that wearing jewellery, artificial fingernails, damaged skin and regular use of hand cream are associated with increased likelihood of colonisation of hands with harmful germs.

83% of the participants said that they are committed to the proper rules of hand hygiene all the time, 78% said they comply with rules of hand hygiene even in emergencies, 80% said that they think when they are wearing gloves it is not necessary to wash hands, 92% feel irritated when others don't follow hand hygiene rules, 95% advice others to follow the rules of hand hygiene and 97% said it is easy for you to follow rules of hand hygiene.

40% (each) of the participants said that they always and usually wash hands before touching a patient, 100% of the participants said that they always wash hands before performing aseptic and clean procedures, 100% of the participants said that they always wash hands after being at risk of exposure to body fluids and 95% of patients said that they wash hands after coming to and before leaving the hospital.

DISCUSSION

In this study we had a total of 110 participants. Health professionals had a satisfactory knowledge of hand hygiene but some lacunae are still there as is evident in the result part. Thus from this study we conclude adherence to handwashing is lacking among health professionals, so we need to have regular handwashing sessions for health professionals which will regularly sensitize them, also we need to address the reasons of this poor adherence both at the administrative and personal level. We also recommend to conduct more studies in this field so as to highlight the shortcomings in hand hygiene and then to improve upon them.

KEYWORDS

INTRODUCTION

Hand hygiene is one of the most effective ways to control health care related infection. World Health Organization (WHO) introduced "My five moments for hand washing" to minimize problems related to hand washing. These five moments that call for the use of hand washing include the moment before touching a patient, before performing aseptic and clean procedures, after being at risk of exposure to body fluids, after touching a patient, and after touching patient surroundings (1). Every year millions of patients around the world are affected by infections that are transmitted by the health-care professionals (HCPs). (2)(3). Most of these infections can be prevented through a simple precautionary measure of proper hand wash.

Unfortunately, compliance with the hand hygiene guidelines provided by the WHO is usually poor among the health-care professionals (HCPs), and the hand hygiene equipment is not up to standards. Nurses and physicians are the main health care workers contacting with patients, representing the vector in the chain of infection. Thus, assessing their knowledge, attitude and practice regarding hand hygiene is very important to decrease the incidence of health care related infection and to improve quality of care.

OBJECTIVE

The objective of our study was to assess the knowledge, attitude and practices of handwashing among healthcare professionals of

Kashmir Division.

METHODOLOGY

STUDY AREA: The study was conducted in various healthcare institutions viz Sub Centres, Primary Health Centres, Sub District Hospitals and Tertiary Care Hospitals of Kashmir Division.

STUDY DESIGN: It was an institution based cross sectional study.

STUDY POPULATION: The study included healthcare professionals working in various healthcare institutions viz Sub Centres, Primary Health Centres, Sub District Hospitals and Tertiary Care Hospitals of Kashmir Division.

ELIGIBILITY CRITERIA:

Inclusion Criteria Healthcare professionals of various healthcare institutions (Sub Centres, Primary Health Centres and Sub District Hospitals of Kashmir Division) who were available during data collection and interested in participating in the study were included.

Exclusion Criteria Health professionals who were not interested in participating in the study were excluded.

Sample Size It was an open sample.

Sampling Technique Simple random sampling technique was used to

select the study participants.

PROCEDURE

This study was an institutional based cross sectional study, conducted in various healthcare institutions of Kashmir Division which were selected randomly. A predesigned questionnaire was used to collect the data from the participants. The questionnaires contained questions about four different parts which included sociodemographic characteristics, knowledge of hand washing, attitude and practice of hand washing among healthcare professionals. The questionnaires were distributed to various healthcare professionals working in wards, emergency department, laboratories, outpatient departments, injection and dressing rooms, EPI unit and others. The distributed questionnaires were then collected back.

Data Analysis: Data analysis was done using SPSS version 23.

RESULTS

Table 1: Socio Demographic Characteristics

FACTOR		FREQUENCY	PERCENTAGE
SEX	Male	58	52.7
	Female	52	47.3
JOB TITLE	Doctors	22	20.0
	Pharmacists	10	9.0
	FMPHW	18	16.4
	Nurses	40	36.4
	Technicians	20	18.2
DEPARTMENT	Outpatient	38	34.5
	Inpatient	40	36.4
	Emergency	12	10.9
	Operation theatre	20	18.2

Table 1 shows the socio demographic characteristics of the study participants. Out of total 110 participants, 53% were male, 36% were nurses, 36% of health professionals were working in IPD (In Patient Department).

Table 2: Knowledge Of Handwashing Among The Participants

VARIABLE	Yes	No	I Don't Know
1. Direct or indirect contacts are the most important routes for transmission of hospital-acquired infections	98(89.0)	6(5.5)	6(5.5)
2. Proper and consistent hand washing prevents infections in health facilities	107(97.3)	1(0.9)	2(1.8)
3. There is no need for hand washing for those who perform their activity with caution	42(38.2)	67(60.9)	1(0.9)
4. There is no need of hand washing if gloves are properly worn	51(46.4)	57(51.8)	2(1.8)
5. Health professionals should always wash their hands immediately when they arrive at health institutions	110(100)	0(0)	0(0)
6. Do you know steps of handwashing(WHO)/rules of hand hygiene	108(98.2)	2(1.8)	0(0)
7. Hands should be washed at least for 10-15 seconds	39(35.5)	59(53.6)	12(10.9)
8. Using disinfectants during hand washing decreases bacterial load on hands	62(56.4)	47(42.7)	1(0.9)
9. Alcohol has the ability to eradicate micro-organisms compared to water	68(61.8)	39(35.5)	3(2.7)
10. Hand washing is the single most effective mechanism to prevent spread of infection	100(90.9)	7(6.4)	3(2.7)
11. Wearing jewellery, artificial fingernails, damaged skin and regular use of hand cream are associated with increased likelihood of colonisation of hands with harmful germs	104(94.6)	4(3.6)	2(1.8)

Table 2 Shows knowledge of handwashing among the participants. 89% of the participants agreed that, direct or indirect contacts are the

most important routes for transmission of hospital-acquired infections, 97% agreed that proper and consistent hand washing prevents infections in health facilities, 100% agreed that health professionals should always wash their hands immediately when they arrive at health institutions, 98% said that they knew steps of handwashing(WHO)/rules of hand hygiene, 91% agreed that hand washing is the single most effective mechanism to prevent spread of infection and 95% agreed that wearing jewellery, artificial fingernails, damaged skin and regular use of hand cream are associated with increased likelihood of colonisation of hands with harmful germs.

Table 3: Attitude Regarding Handwashing Among The Participants

Variable	Yes	No	Sometimes
1. Are you committed to the proper rules of hand hygiene all the time?	91(82.7)	0(0)	19(17.3)
2. Do you comply with rules of hand hygiene even in emergencies?	86(78.2)	0(0)	24(21.8)
3. Do you think when you are wearing gloves it is not necessary to wash your hands?	22(20)	88(80)	0(0)
4. Do you feel irritated when others don't follow hand hygiene rules?	101(91.9)	0(0)	9(8.1)
5. Do you advice others to follow the rules of hand hygiene?	104(94.5)	0(0)	6(5.5)
6. Is it easy for you to follow rules of hand hygiene?	107(97.3)	1(0.9)	2(1.8)

TABLE 3 shows attitude regarding handwashing among the participants. 83% of the participants said that they are committed to the proper rules of hand hygiene all the time, 78% said they comply with rules of hand hygiene even in emergencies, 80% said that they think when they are wearing gloves it is not necessary to wash hands, 92% feel irritated when others don't follow hand hygiene rules, 95% advice others to follow the rules of hand hygiene and 97% said it is easy for you to follow rules of hand hygiene.

Table 4: Practice Of Handwashing Among The Participants

Variable	Response	Frequency
1. Wash hands before touching a patient	Always	44(40)
	Usually	44(40)
	Often	0(0)
	Sometimes	22(20)
	Never	0(0)
2. Wash hands before performing aseptic and clean procedures	Always	110(100)
	Usually	0(0)
	Often	0(0)
	Sometimes	0(0)
	Never	0(0)
3. Wash hands after being at risk of exposure to body fluids	Always	110(100)
	Usually	0(0)
	Often	0(0)
	Sometimes	0(0)
	Never	0(0)
4. Wash hands after touching a patient	Always	46(41.8)
	Usually	62(56.4)
	Often	0(0)
	Sometimes	2(1.8)
	Never	0(0)
5. Wash hands after touching patients surroundings	Always	62(56.4)
	Usually	42(38.2)
	Often	2(1.8)
	Sometimes	4(3.6)
	Never	0(0)
6. Use alcohol based hand rub for hand hygiene	Always	24(21.8)
	Usually	46(41.8)
	Often	40(36.4)
	Sometimes	0(0)
	Never	0(0)
7. Wash hands after coming to and before leaving the hospital	Always	104(94.5)
	Usually	0(0)
	Often	0(0)
	Sometimes	6(5.5)
	Never	0(0)

TABLE 4 shows practice of handwashing among the participants. 40%(each) of the participants said that they always and usually wash hands before touching a patient, 100% of the participants said that they always wash hands before performing aseptic and clean procedures, 100% of the participants said that they always wash hands after being at risk of exposure to body fluids and 95% of patients said that they wash hands after coming to and before leaving the hospital.

DISCUSSION

In this study we had 110 participants. In the knowledge part, 61% of the participants said there is no need for hand washing for those who perform their activity with caution and 52% of the participants said that there is no need of hand washing if gloves are properly worn. In other domains of knowledge part the answers were quite satisfactory as is already shown in results, but from these responses we see that there is a need to impart more knowledge to health professionals about handwashing. In attitude part the responses were quite satisfactory except for that 80% of participants said that it is not necessary to wash hands when we are wearing gloves, so there is a need to increase their knowledge regarding handwashing which will bring a change in their attitudes towards handwashing. In the practise part again the responses are quite satisfactory but some lacunae are still there as is evident in the result part. Thus from this study we conclude adherence to handwashing is lacking among health professionals, so we need to have regular handwashing sessions for health professionals which will regularly sensitize them, also we need to address the reasons of this poor adherence both at the administrative and personal level. We also recommend to conduct more studies in this field so as to highlight the shortcomings in hand hygiene and then to improve upon them.

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