

# Annex I: Information Sheet

## Introduction

My name is ..... I am working as a data collector for a master of Public Health student project at Addis Ababa University. We are conducting research entitled “Infection Prevention Compliance and Associated Factors among Nurses Working at Dialysis Units for CKD patients in Addis Ababa, Ethiopia.

**Purpose of the Research Project:** to assess the level of compliance and factors associated with infection prevention compliance among nurses working in dialysis units for CKD patients in Addis Ababa.

**Risk-** It will take some time for you to complete the form; However, the information you provide will have paramount importance to conduct this research.

**Benefit:** There will be no direct benefit for the participants but, the results of the study enable us to identify factors that are linked to low infection prevention compliance among dialysis unit nurses, and once these factors are identified, it assists Ethiopian policy makers and planners in developing a plan on how to deal with the identified problems to improve the health of HCW, patient care quality and the health outcomes of patients receiving haemodialysis.

**Procedures:** - If you agree to participate in the study, you will answer some research-related questions about research related questions and yourself, and it will take 20 minutes.

**Confidentiality:** The information that you provide will be kept confidential by using codes and locking the data. The information is collected without revealing your name. No one will have access to the data except the principal investigator. The data will not be used for purposes other than the study.

**Autonomy:** your participation is voluntary, and you have the right to choose not to take part in this study. If you choose to take part, you have the right to stop at any time. If you are willing to participate or refuse, or decide to withdraw later, you will not be subjected to any ill-treatment.

**Person to contact:** if you want more information about the research, the following contact addresses are given to contact the investigator at any time.

Tigle Nadew, AAU University, College of Health Sciences, Department of Epidemiology and Biostatistics: Principal Investigator, Phone: 0929017489, Email: tige212009@gmail.com

## **Annex II: Informed Consent**

Addis Ababa University, School of Public Health

The study has been explained to me, and I have understood the provided information about the purpose of the study. I've had the chance to ask questions, and the answers I've received have satisfied me. I consent voluntarily to be part of the study and understand that I have the right to withdraw from the study at any time, without giving a reason and without cost. Even though it will take some time for me to complete the form, and there will be no direct benefit for me, the results of the study enable us to identify factors that are linked to low infection prevention compliance, which are important to measure and later improve the health of the nurses as a whole and patients receiving haemodialysis treatment. The information I provide will be kept confidential by using codes and locking the data, and the information is collected without revealing my name one will have access to the data except the principal investigator. The data will not be used for purposes other than the study.

Tigle Nadew, AAU University, College of Health Sciences, Department of Epidemiology and Biostatistics: Principal Investigator

Phone: 0929017489

Email: tige212009@gmail.com

### **Participant**

Signature\_\_\_\_\_ Date\_\_\_\_\_

### **Data collector**

Name\_\_\_\_\_ Signature\_\_\_\_\_

## Annex III: - Questionnaire

Date of data collection:    /    /    /DD/MM/YY

Name of the facility\_\_\_\_\_

Name of the data collector: \_\_\_\_\_ Signature\_\_\_\_\_

Name of the supervisor: Date \_\_\_\_\_Signature\_\_\_\_\_

Code \_\_\_\_\_

### Part 1: Questions to assess the Socio-demographic Characteristics of the Participant

1)	Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female
2)	Age	_____	
3)	Marital Status	<input type="checkbox"/> Married	<input type="checkbox"/> Single <input type="checkbox"/> Others
4)	What is your monthly salary?	_____ -	
5)	What is your nursing education level?	<input type="checkbox"/> Nursing diploma, <input type="checkbox"/> Bachelor's degree in Nursing, <input type="checkbox"/> Master's in Nursing	
		<input type="checkbox"/> If others specify_____	
6)	How many years of experience do you have in nursing?	_____	
7)	How many years of experience do you have in dialysis units?	_____	
8)	Have you participated in in-service training on infection prevention?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9)	Have you participated in in-service training on nurses' dialysis care?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

## Part 2: Nursing work schedule

S/N	Questions	
1	What is the average ratio of nurses to patients in your service delivery?	
2	What is the average ratio of doctors to patients in your service delivery?	
3	How frequently are you on duty/frequency of duty / per week?	
4	How many hours do you work in the office?	

## Part 3: Practice of the Standard Precaution/ Compliance, by head and direct observation

S/N	Question	Yes	No
	<b>Hand hygiene</b>		
1	Wash your hands with soap and water before and after patient care.		
2	Wash hands after touching blood, body fluids, secretions, excretions, and contaminated items (including the front of the hemodialysis machine)		
3	Wash your hands immediately after removal of gloves.		
4	Use an antiseptic hand rub to clean hands?		
	<b>PPE</b>		
5	Wearing gloves when giving patient care		
6	Wear goggles to protect the eyes during a procedure that generates a spray of blood or body fluids.		
7	Change gloves between patients.		
8	wear an apron or gown when performing operations/procedures that might induce spraying of blood, body fluid, secretions, and excretions		
	<b>Instrument processing</b>		
9	Don't soak contaminated items after any medical or surgical procedure in a 0.5% chlorine solution before you perform cleaning.		
10	Do not place contaminated items in the decontamination solution		

	for 10 minutes.		
11	Use a heavy-duty glove when handling, cleaning, and processing contaminated medical equipment.		
	<b>Injection safety</b>		
12	Preparation of injections involves using aseptic technique in a clean, well-ventilated, and illuminated area.		
13	Do not administer medications from single-dose or single-use vials, ampoules, bags, or bottles of intravenous solution to more than one patient.		
14	Never administer medications from the same syringe to multiple patients, even if the needle is changed or the injection is administered through an intervening length of intravenous tubing.		
15	Do not reuse a syringe to enter a medication vial or solution.		
16	Dispose of used syringes and needles at the point of use in a sharps container that is closable, puncture-resistant, and leak-proof.		
	<b>Environmental cleaning</b>		
17	clean the machine after every patient procedure?		
18	Rooms are well ventilated and illuminated.		
	<b>Waste management</b>		
19	Infectious and non-infectious wastes are properly segregated.		
20	There is no spilled solid or liquid waste in service areas.		
21	Dispose of no reusable sharp materials wastes in a safety box.		
22	Sharp waste segregation is separate and no mixing.		
	<b>Traffic flow</b>		
23	Limit traffic to authorized staff and patients at all times.		
24	Keep talking to a minimum in the presence of a sterile field.		
25	Keep the doors closed at all times, except during the movement of staff, patients, supplies, and equipment.		
26	Staff should wear clean and closed shoes that will protect their feet from fluids and dropped items.		
	<b>Vascular access care</b>		
27	Use of a surgical mask for staff and patients for all catheter systems connect, disconnect, and dressing procedures		
28	The catheter exit-site should be examined for proper position and		

	absence of infection before accessing the bloodstream at each hemodialysis session		
29	Catheter manipulation is kept to a minimum.		
30	To cleanse the skin, apply antiseptic solution before cannulation (alcohol-based chlorhexidine or 10% povidone iodine solution and/or 70% alcohol)		
31	Administer a Heparin bolus injection before the start of dialysis.		
32	Apply a Sterile dressing to the catheter site.		
	<b>Client education</b>		
33	Education on Signs and symptoms of infection		
34	Education on Basic infection control practices during catheter accessing process		
	<b>Occupational health</b>		
35	Don't recap the needle after injection.		

#### Part 4: Knowledge about Standard Precautions

S/N	Question	Yes	No
1	Have you heard about the infection prevention principle?		
2	Can gloves not provide complete protection against acquiring/transmitting infection?		
3	Can healthcare-associated pathogens be found on normal and intact patient skin?		
4	Does washing your hands with soap or alcohol-based antiseptic decrease the risk of transmission of hospital-acquired infection?		
5	use of an alcohol-based antiseptic for hand hygiene as effective as soap and water if hands are not visibly dirty?		
6	Gloves reduce the contamination of the hand but do not prevent it completely.		
7	Need to wash hands before doing procedures that do not involve bodily fluids?		
8	No need to wear the same pair of gloves for multiple patients as long as there is no visible contamination?		
9	TB is carried in airborne particles that are generated from patients with active pulmonary TB.		
10	Do you know to what level safety boxes should be filled before closing and sealing?		
11	Do you know specific waste disposal buckets according to the level of their contamination?		

12	All instruments should not be decontaminated first, thoroughly cleaned, and dried before being sterilized.		
13	After proper decontamination and cleaning 0.1% chlorine solution for 20 min doesn't provide HLD		
14	Replace the catheter site dressing every 7 days with a sterile semipermeable dressing or if the dressing becomes visibly soiled or loosened.		
15	Flush the CVC lumen with saline after the administration of medication or fluid?		
16	Do you know what actions you should take when a sharp injury occurs?		
17	Do you know the best period to take prophylaxis for HIV after exposure to contaminated items of an HIV patient?		

### Part 5: Attitude on Infection Prevention Standard Precautions

S/N	Questions	1. Strongly Disagree	2. Disagree	3. Indifferent	4. Agree	5. Strongly Agree
1	Do you believe that following standard operating procedures decreases the risk of contamination?					
2	Do you think ventilating the ward by opening windows and doors decreases infection transmission?					
3	Do you think using personal protective equipment (PPE) decreases HCAIs?					
4	Do you believe washing hands before and after contact with patients is important?					
5	Do you agree that hospital facilities can be the source of infection in the absence of universal precautions?					

6	Do you think separating needles and other types of waste is visible?					
7	Do you think using biohazard material is better for waste management?					
8	Do you think that a patient's awareness about the transmission of microorganisms decreases the risk of HCAIs?					
9	Do you agree that recapping is the cause of needle prick injury?					
10	Do you believe that nosocomial infection can pose a serious outcome?					
11	Do you believe the CLABSI prevention guidelines are useful?					
12	Do you believe hand hygiene before and after the replacement of dressings is important to reduce CLABSI?					
13	Is it necessary to establish an occupational protection training course in your opinion?					

## Part 6: Work Environment Factors

### Questionnaire for the head nurse

1. Do you have IPC guideline (1) Yes (2) No

S/N	Questions	Never	Rarely	Sometimes	Very often	Always
2	Do you have access to a continuous water supply?					



3	Do you have access to soap?					
4	Do you have alcohol-based hand rub access?					
5	Do you have access to disposable gloves?					
6	Do you have enough supply of IV sets?					
7	Do you have enough supply of IV fluid bags?					
8	Do you have enough access to an IV cannula of the required gauge?					
9	Do you have access to Haemodialysis Catheter, Fistula Needles, and transfusion set, water treatment,					
10	Do you have access to heparin					

### Part 7: Communication Skills

S/N	Questions	Never	Rarely	Sometimes	Very often	Always
1	Consistently delivers accurate, clear, and concise messages and effectively informs attendants about infection and its prevention.					
2	Consistently delivers accurate, clear, and concise messages and effectively informs runners about infection and its prevention.					
3	Encourages an open exchange of ideas and different points of view, with doctors					