

Annex 1: study instrument questionnaire on the effect of training on knowledge and practices of injection safety: a comparative study among primary health care workers in the rural and urban local government areas in cross River State

Instruction: this questionnaire is divided into sections A-E. The respondent will be interviewed by the researcher. The researcher will then record the answers supplied by the respondent on this questionnaire. The respondent should please be sincere in answering the questions

SECTION A: SOCIO-DEMOGRAPHIC DATA

A1	Age (Years)		
A2	Sex	Male Female	
A3	Educational Status		
A4	Cadre of Health worker	1. Nurse/Midwife 2. CHO 3. SCHEW 4. JCHEW 5. Other (specify).....	
A5	Years of experience		
A6	Marital Status		
A7	Religion		
A8	Ethnicity		

SECTION B: KNOWLEDGE OF INJECTION SAFETY (Tick as appropriate)

	Questions	Response	Instruction
B1	Do you know what injection safety is?	Yes No	
B2	Are you aware of injection safety Policy issued by the State Ministry of Health?	Yes No	If No, go to question B4.
B3	Do you have a copy?	Yes No	
B4	Do you know if unsafe injection practices can transmit some diseases?	Yes No	If No, go to question B6
B5	List at least three diseases that can be transmitted by unsafe injection practices	
B6	Do you know what a safety box is?	Yes No	If No, go to question B9

B7	What is it used for?	
B8	At what level should a safety box be filled before disposal?	Full ½ ¾	
B9	What is the best method of disposal of waste injection equipment?		
B10	Do you know the FMOH policy and procedure regarding needle-stick injuries?	Yes No Don't know	If No or don't know, go to question B12
B11	Which of the following are the major consideration under this policy and procedure? (B11a – B11h)		
B11a	Does it require report writing?	Yes No Don't know	
B11b	Is there need for pre-test and post-test counseling of the injured person in this policy and procedure?	Yes No Don't know	
B11c	Does it specify the need to order HIV testing of the injured person?	Yes No Don't know	
B11d	Does it specify the need to order Hepatitis B testing of the injured person?	Yes No Don't know	
B11e	Does it specify the need to order Hepatitis C testing of the injured person?	Yes No Don't know	
B11f	Does it recommend the need for the injured person to be on post exposure HIV prophylaxis?	Yes No Don't know	
B11g	Does it recommend the need for the injured person to be vaccinated with Hepatitis B vaccine (if the individual is not already vaccinated)?	Yes No Don't know	
B11h	Does it stress the need to specifically follow up on all results?	Yes No Don't know	
B12	Have you ever had an accidental needle-stick injury?	Yes No	If No, go to question B14
B13	If yes, what immediate action did you take/should be taken after having the needle-stick injury? (B13a –B13c)		
B13a	Encourage free bleeding of the wound?	Yes No	
B13b	Wash the wound with soap and water (at least with water if soap is not available)?	Yes No	

B13c	Clean the wound with methylated spirits after washing with soap and water?	Yes No	
B14	Do you know if there are health risks associated with unsafe injection practices?	Yes No Don't know	If No or don't know, go to question B16
B15	List at least three of some of these health risks	
B16	What is the alternative to injection administration?	

SECTION C: PRACTICE OF INJECTION SAFETY

	Questions	Response	Instructions
C1	Do your patients provide their own injection equipment for treatment services?	Always Sometimes Never	Tick as appropriate
C2	Do your clients provide their own injection equipment for immunization services?	Always Sometimes Never	
C3	Do you use the recommended diluents to reconstitute drugs?	Yes No	
C4	Do you use the recommended diluents to reconstitute vaccines?	Yes No	
C5	Do you use new syringes for drugs reconstitution?	Yes No	
C6	Do you use new syringes for vaccines reconstitution?	Yes No	
C7	Do you re-use syringe for drug withdrawal?	Yes No	
C8	Do you re-use syringe for vaccine withdrawal?	Yes No	
C9	In this facility, do you sterilize syringes and needles for re-use?	Yes No	If No, go to question C11.
C10	Which equipment do you use?	Steam sterilizer Stove and pot Other(specify)	Tick as many responses as are possible
C11	Do you wash your hands before administering injection to each patient?	Yes No	
C12	Do you wash your hands when administering injection in between patients?	Yes No	
C13	Do you wash your hands before administering injection to each client?	Yes No	

C14	Do you wash your hands when administering injection in between clients?	Yes No	
C15	Do you wash your hands after administering injection to each patient?	Yes No	
C 16	Do you wash your hands after administering injection to each client?	Yes No	
C 17	Do you recap needles before disposal?	Yes No	
C 18	Have you ever had an accidental needle-stick injury?	Yes No	If No, go to question C20
C 19	What immediate action did you take/should be taken after having the needle-stick injury? (C19a – C19c)		Tick as many responses as are possible.
C19a	Encourage free bleeding of the wound?	Yes No	
C19b	Wash the wound with soap and water (at least with water if soap is not available)?	Yes No	
C19c	Clean the wound with methylated spirit after washing with soap and water?	Yes No	
C20	Before giving a patient/client injection, which of the following do you check or confirm? (C20a – C20k)		Tick as many responses as are possible.
C20a	Do you check if he/she is the right patient/client?	Yes No	
C20b	Do you confirm if it is right drug you are about to give?	Yes No	
C20c	Do you check if it is the right drug formulation?	Yes No	
C20d	Do you use the right injection equipment?	Yes No	
C20e	Do you confirm if it is the right dosage you are giving to the patient/client?	Yes No	
C20f	Do you give the injection at the right time?	Yes No	
C20g	Do you give the injection through the right route of administration?	Yes No	
C20h	Do you store vaccines/drugs at the right storage temperature?	Yes No	

C20i	Do you use the right method of disposal to dispose of your waste injection equipment?	Yes No	
C20j	Do you give injections at the right anatomical site?	Yes No	
C20k	Are you trained to administer injections to patients	Yes No	
C21	What do you use in collecting used syringes and needles in this health facility?		
C22	After injection administration, what do you do to the needle?		

SECTION D

	Question	Response	Instructions
D1	Do you give injection to patients because they demand to have injections?	Yes No	
D2	Do you believe that injections are superior to oral medications?	Yes No	
D3	Do you give injections to patients because you can make more money from injection administration?	Yes No	
D4	Do you spend some time (during consultations with your patients), to tell them about the health risks associated with unsafe injection practices?	Yes No	
D5	Does your health facility have the following? (D5a - D5f)		
D5a	Infection control committee?	Yes No	
D5b	Quality assurance system?	Yes No	
D5c	Occupational safety standards?	Yes No	
D5d	Injection safety policy and procedure manual?	Yes No	
D5e	Adequate/reliable supply of water?	Yes No	
D5f	Adequate/reliable supply of electricity?	Yes No	
D6	Have you ever attended injection safety training workshop?	Yes No	

SECTION E

	Questions	Response	
E1	In the last 3 months, how long have you been out of syringes and needles?	

E2	In the last 3 months, how long have you been out of puncture-proof sharps containers (safety boxes)?	
E3	Are stocks of vaccines always delivered with matching quantities of injection equipment (i.e. syringe and needle)?	Yes No Don't know	
E4	Are stocks of vaccines always delivered with matching quantities of puncture-proof sharp containers (safety boxes)?	Yes No Don't know	
E5	How do you dispose of your waste injection equipment?	

APPENDIX 1B: STRUCTURED OBSERVATION CHECKLIST OF INJECTION ADMINISTRATION PROCEDURES AT THE HEALTH FACILITY. (For researchers use only).
 Instruction: Please tick the correct option as you observe the injection provider carry out injection procedures/services on the patient.

		Response	
1	Did the injection provider wash hands before attending to each patient ?	Yes No	
2	Did the injection provider wash hands when administering injection in between patients ?	Yes No	
3	Did the injection provider wash hands after attending to each patient ?	Yes No	
4	Did the injection provider wash hands before attending to each client ?	Yes No	
5	Did the injection provider wash hands when administering injection in between clients ?	Yes No	
6	Did the injection provider wash hands after attending to each client ?	Yes No	
7	Were the vaccines prepared on a clean designated table or tray, where blood or body fluid contaminations are unlikely ^a ?	Yes No	
8	Were the drugs prepared on a clean designated table or tray, where blood or body fluid contaminations are unlikely ^a ?	Yes No	
9	Were there swabs used for skin preparation that were dirty, bloodstained littered on the floor?	Yes No	
10	What type(s) of syringes did the injection provider use in this facility?		

11	Did patients bring their own syringe and needle for the injection administration?	Yes No	
12	Did clients bring their own syringe and needle for the injection administration?	Yes No	
13	<u>For each injection</u> , did the injection provider use syringe from sterile packet or fitted with 2 caps (disposable or auto-disable syringes) ^b ?	Yes No	
14	<u>For each injection</u> , did the injection provider use needle from sterile packet or fitted with a cap (disposable or auto-disable syringes) ^b ?	Yes No	
15	Did the injection provider remove all needles from the vaccine vial between injections administration?	Yes No	
16	Did the injection provider remove all needles from the medication vial between injections administration?	Yes No	
17	Was a clean barrier (e.g. small gauze pad) used to protect fingers when breaking the top of glass ampoule?	Yes No	
18	Was a sterile syringe and needle (from sealed packet, fitted with 2 caps, or taken out of a sterilizer) used for each reconstitution of vaccine/drug?	Yes No	
19	Were lyophilized vaccines reconstituted with the correct volume of diluent from the same manufacturer?	Yes No	
20	Were powdered medications reconstituted with diluent from a single-dose diluent vial?	Yes No	
21	Were vaccines and drugs stored in the same refrigerator?	Yes No	
22	Were there needles left on the rubber cap of vial (for multi-dose vials)	Yes No	
23	Did the injection provider re-cap the needle after the injection administration?	Yes No	
24	Did the injection provider administer injection at the correct anatomical site?	Yes No	
25	Did the injection provider observe aseptic technique of injection administration?	Yes No	
26	Did the injection provider carry about needle and syringe before disposal?	Yes No	
27	Was the syringe and needle disposed of in a puncture-proof safety container immediately after the injection administration?	Yes No	
28	Did the injection provider reach into a container of used syringes and needles?	Yes No	

29	Did the injection provider load a syringe with multiple doses of medications before administration?	Yes No
30	Did the injection provider re-use a syringe and needle for multiple patients?	Yes No
31	Did the injection provider manipulating used sharps (cleaning, bending breaking or cutting) before disposal?	Yes No
32	Did the injection providers pass on sharps from one health worker to another before disposal?	Yes No
33	Were the safety boxes overfilled?	Yes No
34	Did the injection provider administer injection on an agitated patient without assistance?	Yes No
35	Did the injection provider administer injection on an agitated client without assistance?	Yes No

Note: ^aQuestion 1 - Not an area used for procedures that may lead to blood contamination (e.g. blood sampling, wound dressing, etc.)

^bQuestions 4 & 5 - If reuse of injection equipment is about to occur without sterilization, intervene to interrupt the procedure as tactfully as possible and a "No" should be written in the space provided.