Health Care Waste Management

Baseline

NIGERIA

UNH4-CIDA FMOH PROJECT

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NIGERIA

- **Country:-** Federal Republic in West Africa
- **Population:**- 170 million
- **States:**- 36 plus a Federal Capital Territory
- **Local Government Authorities (LGA):-** 774
- **Wards(Political Division):-** Approximately 10 in each LGA
- **Number of Health Facilities: -** A multitude - At least one hospital in each LGA
- **Waste from homes , health facilities and Immunization campaigns:-** Enormous and therefore a great need for an effective Health Care Waste Management System.

The Problem: Health Care Waste

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- Every year
  - Unsafe medical injections are responsible for:
    - approximately 8 to 16 million cases of infection with the hepatitis B virus,
    - 2.3 to 4.7 million cases of infection with the hepatitis C virus and
    - 80,000 to 160,000 cases of HIV infection globally

    (WHO, 2009). **Global Figures**

- Information related to Health Care Waste in Nigeria not easily available.

- The question
  - What really happens to the needles, syringes, medicine bottles, lancets, Laboratory waste… Health facility waste?

General Objective

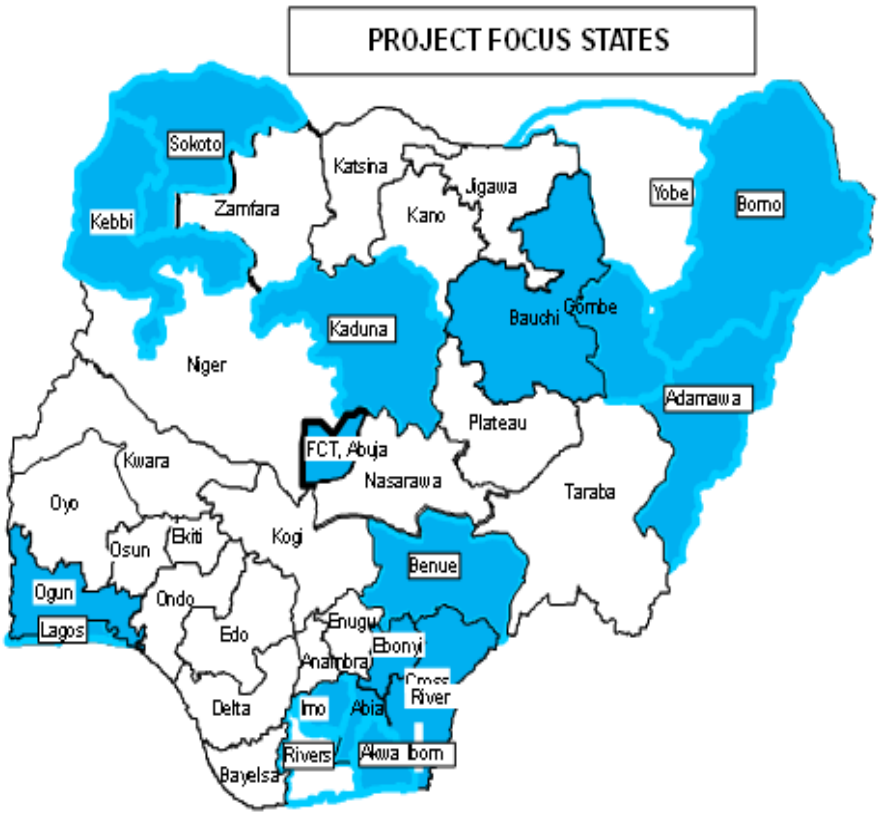
Undertake an assessment to gather information that would give an accurate situation nationally, using tools which are standardized and valid, to provide a platform for evidence-driven actions and interventions.

Objectives : Specific objectives

- Assess the injection safety and health care waste management practices of health facilities;
- Assess the level of environmental sanitation in the health facilities;
- Determine the status of implementation of injection safety and healthcare waste management policy in health facilities and
- Recommend a model of segregation, collection,, transportation, recycling, treatment and disposal of the waste appropriate to each type of health facility surveyed.

Methodology

- Cross sectional survey approach employing a mixed methodology of qualitative and quantitative techniques.
- The 15 states were Sokoto, Kebbi, Kaduna, Borno, Gumbo, Bache, Benue, FCT, Lagos, Ogun, Imo, Abia, Ebonyi, Cross River and Akwa Ibom PLUS the FCT.



Methodology

- **The MSS cluster** as defined by the National Primary Health Care Development Agency (NPHCDA) was used for the survey in each state. A two stage sampling technique was employed by stratifying each state into three senatorial zones and selecting a local government by simple random sampling from each senatorial zone.
- Thereafter, a secondary facility (SHF) was selected for each local government and then two (2) primary health care facilities (PHC) from the four (4) in the cluster were selected by simple random sampling.
- **Thus, in each state six (6) PHC facilities and three (3) secondary health care facilities were selected yielding 96 PHCs and 48 SHF in 15 states and FCT.**
- Any state that had a Federal Medical Centre (FMC) had the FMC included into the sample. A total of 10 FMCs were assessed.

Results

- A total of **153 health facilities were surveyed**
  - 99 primary health care facilities
  - 44 secondary health care facilities and
  - 10 Federal Medical Centres.
- L**ack of clean running water .**
- Less than **10% of facilities had the minimum package for health care waste management.**
- **39% of facilities practiced waste segregation at source**.
- **Safety boxes were available in 73%** of the facilities but not evenly distributed.

Results

- The **sharp boxes** were either pierced or over flowing in 15% of facilities assessed.
- 20% of the facilities had sharps and soiled swabs **littering the vicinity**.
- **Use of personal protective equipment** was poor in the sampled population with only 17% using overalls, 19% using aprons, 22% using boots and about a quarter using face masks and heavy duty gloves.
- **Post exposure prophylaxis** was only available in a **fifth of the facilities while**
- **Job aids on injection safety and health care waste management** were seen in less than a third of the facilities.

Results

- **Awareness of national policy** was low with only 42% being aware and
- Only 10% could produce a copy of the policy. Of those aware, only about 60% utilize the policy completely and 13% do not use it at all.
- A little over a quarter (26%) have **infection prevention and control committee in place.**
- About a third of the facilities have **trained staff on health care waste management.**
- A paltry **7%** reported that **budget was allocated** and released for health care waste management activities.
- The **annual work plan** was prepared by only 12% of respondents but only 2.3% could produce a copy while only 14% had annual reports of health care waste management activities.

Results

- The health facilities generate an **assortment of waste**; the most commonly reported being **sharps (98%),**
- followed by **general waste (86%)** and then infectious waste (83%).
- **Chemical waste and radioactive waste** were the least generated accounting for 32% and 20% respectively.
- The knowledge of **appropriate colour for different waste components** was poor as only 9% could correctly identify colour for infectious waste.
- **Weighing of waste** is not routinely practiced as only 1% of waste handlers weighed waste and almost all facilities had **waste storage containers** (99%).
- **Open burning** was the most reported form of waste disposal (72%) followed by **burial** (25%) and **dumping in unprotected pit** (18%) while only 14% used **incineration.**

Results

- **Standard disposable syringes** were still the most prevalent (71%) in facilities followed by **autodisable** (45%) and **retractable** (11%).
- Only 37% of the **health workers had been trained on universal precaution** and 38% had **experienced needle stick injury** in the past six months preceding the survey.
- Sequel to the needle stick injury, the **proportion that reported to the management** was 11% and only **5% had post exposure prophylaxis.**
- About half of the health workers had received **hepatitis B vaccination** and half of the health workers perceive themselves at high risk of getting infectious diseases through needle stick injuries.

Areas requiring special attention

- Policy – Dissemination and Implementation
- Establishment of more Infection Control Committees at HFs.
- Mainstreaming HCWM in the Operational Plans including Budget.
- Availability of Water
- Waste Segregation and safe disposal.
- Use and Distribution of Safety Boxes
- Use of Protective Clothing.
- Utilization of Post Exposure Prophylaxis
- Availability of Job AIDS and Guidelines
- Capacity building of health workers.

Conclusion

- The assessment provided **useful baseline information** on health care waste management practices in the health facilities.
- The results suggest that, health care providers, patients and the community are **continually at risk of infection from the waste.**
- There is need to improve several aspects of health care waste management including - create awareness, train health providers on Health Care Waste Management.
- This information will be very useful at the end of the five year UNH4-CIDA FMOH Project Evaluation.

Thank You

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