

A REVIEW OF THE NIGERIAN NATIONAL HEALTH POLICY ON INJECTION SAFETY AND HEALTHCARE WASTE MANAGEMENT

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ABSTRACT

BACKGROUND:

Exposure to healthcare wastes increases the risk of transmission of blood-borne infections. Nigeria previously lacked an enabling environment for healthcare waste management, as it did not have a national healthcare waste management policy. Thus, the National policy on injection safety and healthcare waste management in Nigeria was developed to ensure infectious diseases being transmitted through unsterile injections, and improper healthcare waste are eradicated or minimized to the lowest minimum.

AIM:

This study is aimed at reviewing the level of implementation and challenges of the Nigerian National Policy on injection safety and healthcare waste management.

METHODOLOGY:

This review focused on the policy document, its implementation, successes and challenges.

RESULTS:

The areas of focus of the policy are communication and behavioral change, healthcare waste management, logistics, management (human resource development) as well as monitoring and evaluation. Implementation of this policy cut across the tiers of government, public institutions in addition to private stakeholders. The policy has been able to achieve training of healthcare workers on safe injection and behavioural change, better waste management practice, advocacy programs, development of guidelines for injection and healthcare waste management practices, construction and installation of waste facilities and mobilization of resources.

CONCLUSION:

In spite of the achievements of the policy, inadequate training, ineffective legislature and absence of data were challenges facing this policy implementation despite the resources allocated to its implementation. Moreover, stated guidelines were not strictly followed and adhered to in all healthcare facilities. For the efficient and productive

implementation of the policy, there should be continuous training of health workers, enforcement of guidelines and procedures, proper data collection and provision of necessary consumables.

KEYWORDS

injection safety, healthcare waste, waste management, safety and policy, Nigeria.

INTRODUCTION

The Federal Ministry of Health, as well as the Federal Ministry of Environment of Nigeria and other stakeholders, have decided to prioritize the issue of safe practice of healthcare waste management and injection safety in health institutions across the country. Even though a few international treaties like the Basel Convention were signed by the Nigerian Government, there was no specific legal framework or regulations for injection safety and healthcare waste management practices in Nigeria before 2013 [3]. This made safe healthcare waste management accomplishment difficult.

The aim of formulating the National Policy on Injection Safety and Healthcare Waste Management was to ensure that patients, healthcare workers, communities and the environment are protected from risks associated with unnecessary and unsafe injections, as well as improper treatment and disposal of injection materials and other healthcare waste [1]. Exposure to used injection devices, contaminated sharp objects and other healthcare wastes increase the risk of transmission of blood-borne infections such as Human Immunodeficiency Virus (HIV), Hepatitis B and Hepatitis C viruses among others.

The World Health Organization (WHO) describes healthcare waste as all by product of healthcare produced from healthcare activities. The management of waste involves waste segregation, collection, storage, treatment, transportation, safe disposal and monitoring of these activities. The standard for injection safety as described by the WHO states that safe injections do not harm their recipients, do not expose the healthcare workers to any avoidable risk and do not result in waste that is dangerous to the community [2]. The 1999 Revised National Policy on Environment and the 2007 National Policy on Injection Safety and Healthcare Waste Management provide the basis for the development of a National Healthcare Waste Management Policy in Nigeria [1,3]. This article, therefore, reviewed this Policy highlighting the level of implementation, achievements, challenges to implementation and made necessary recommendations.

BRIEF HISTORY

Prior to the development of the policy in 2007, Nigeria as a country did not have a policy that is particular to injection safety and healthcare waste management, although policies are on ground for immunization with a chapter on injection safety with respect to immunization. Moreover, there was also a National Policy on Environment and Solid Waste Management Master Plan which briefly touched on medical waste management. Subsequently, the Federal Ministry of Health through the National Injection Safety Forum conducted an assessment of injection practices and healthcare waste management practices in Nigeria [4].

The United States Agency for International Development's (USAID)/President's Emergency Plan for AIDS Relief (PEPFAR) in 2004 implemented the Making Medical Injection Safer (MMIS) project in Nigeria over five years from 2004 to 2009. The project distributed over seven million safe injection commodities such as color-coded containers and sharp containers worth over 104 million Naira (\$USD 700,000) for proper disposal of healthcare waste and trained over 10,000 healthcare workers in Nigeria on injection safety [5]. However, proper management of healthcare waste only occurred in states that had healthcare waste management projects and remained unsatisfactory in other states in Nigeria [6]. The report of this project shows low implementation because there was not much support from the relevant government agencies as there was no law or policy on national healthcare waste management [5].

As a result, in 2007, the Federal Ministry of Health and Federal Ministry of Environment collaborated with the MMIS project and other partners to develop the National Injection Safety Policy and the draft National Healthcare Waste Management

Policy. Although the National Injection Safety Policy was developed in 2007, the National Healthcare Waste Management Policy remained in draft form due to long bureaucratic delays in approval and was finally approved in September 2013 [5]. Following approval, the national healthcare waste management policy 2013 became available for implementation.

DESCRIPTION OF THE POLICY

The National Policy on Injection Safety and Healthcare Waste Management in Nigeria was developed to ensure infectious diseases being transmitted through unsterile injections and improper healthcare waste are eradicated or minimized to the lowest minimum [6]. In time past, concerns have been raised on the transmission of blood-borne pathogens which are life threatening, such as HIV, Hepatitis B and Hepatitis C viruses to healthcare workers, patients and communities due to the use of unsterilized medical equipment including injections, and the incorrect disposal of healthcare wastes [4]. Lassa virus, with high morbidity and mortality in Nigeria, poses a threat to healthcare workers and the general public if waste generated from infected persons is handled improperly [7].

The safety of injections and proper disposal of waste in this policy is a primary concern in ensuring the well-being of people receiving therapeutic injections, immunization injections and injections for other purposes, and equally a concern for both the public and private healthcare institutions [8]. The policy was developed to ensure that injections given in both public and private health institutions for any purpose are safe and that every injection must be given using a sterile needle and syringe (Auto-Disable syringe) combination and that both are safely disposed of after every use according to laid down regulations. The policy document was made to provide guiding principles for safe injection practices and proper management of all healthcare wastes [9].

AREAS OF FOCUS

The National Policy on Injection Safety and Healthcare Waste Management focuses on providing an enabling environment to ensure injection safety practices and appropriate management of waste [10]. The aim is to protect and minimize the risks due to unsafe injection and healthcare waste management practices to the healthcare workers, patients, community and the environment from hazardous healthcare waste disposal practices, which were expected to be achieved through appropriate procurement, distribution, monitoring of equipment/supplies, improved injection and healthcare waste management practices and increased awareness. Strategic thrust was placed on the following areas including communication and behavioral change, healthcare waste management, logistics, management, human resource development, as well as monitoring and evaluation.

LEVEL OF IMPLEMENTATION

Implementation of this policy requires the coordination of the efforts of all stakeholders in its implementation [11], and as stated in the policy document this cut across the three tiers of government, public as well as private institutions. Implementation from top-down encompasses the Federal Ministry of Health in collaboration with other line ministries, the State Ministry of Health, Local Government Areas (LGAs), Healthcare Facilities, Civil Society Organizations (Non-Governmental Organizations and Community Based Organizations), Organized Private Sectors, Professional Regulatory Bodies and the Academia. The 2013 National Healthcare Waste Management policy also outlined how the government aimed to manage waste generated in health facilities to protect the public and the environment.

Moreover, resources have been allocated for the implementation of this policy. USAID/PEPFAR spent over US\$2 million in eight states through the AIDS Free Project in Nigeria from 2015 - 2016 to address weaknesses in healthcare waste management. The project trained 112 master trainers in healthcare waste management who in turn trained a total of 13,673 health workers and waste handlers [6]. They also assisted health facility staff in developing healthcare waste management plans as well as provided healthcare waste management supplies such as bins and liners, protective equipment for waste handlers, and sharps safety boxes to help health facilities initiate appropriate healthcare waste management activities.

Also, in 2015, the Institute of Human Virology Nigeria (IHVN) trained around 40 doctors and nurses from different health facilities in ten states on healthcare waste management and distributed incinerators in 19 tertiary health facilities in the country [10]. The Federal Government of Nigeria also provided high-temperature incinerators at tertiary health facilities. The World Bank second HIV/AIDS Program Development Project (HPDP2) 2013–2015 conducted routine visits to World Bank-supported health facilities in all the 36 states in Nigeria to monitor and supervise waste management processes [8].

Given the level of investment in injection safety and healthcare waste management, an environmental safeguard audit was done in 2015 by the National Agency for the Control of AIDS, Nigeria (NACA) through the World Bank second HIV/AIDS Program Development Project to assess the level of implementation of the national healthcare waste policies and guidelines in the 36 states and Federal Capital Territory [8].

ACHIEVEMENTS OF THE POLICY SO FAR

Due to the enactment of legislation by the Federal Government in developing the policy, reviewing, support from the State, enforcement from the LGAs and collaboration from other bodies both public and private, internationally and locally, the following were achieved:

- 1) The development of the policy on injection safety and healthcare waste management was followed by a series of training on safe injections and behavioral change.
- 2) Better waste management practices in tertiary, secondary and primary health facilities although with the greatest impact on tertiary facilities
- 3) Advocacy programs for communities to seek treatment only from qualified personnel
- 4) Development of guidelines for injection and healthcare waste management practices
- 5) Construction and installation of waste disposal destructive facilities such as incinerators
- 6) Mobilized resources internally and externally to achieve the aimed goals
- 7) Training healthcare workers on injection safety and appropriate healthcare waste disposal.

CHALLENGES OF PROPER POLICY IMPLEMENTATION

Despite the resources pumped into the implementation of the policy, there is still a high burden of unsafe injections reported in many parts of the country. Regardless of injection safety training, inadequate knowledge of poor injection practice was found among surveyed healthcare workers as reported in some studies [12-14]. In Benin City, South-south Nigeria, a study on injection safety practices among nursing staff of a mission hospital revealed that knowledge of injection safety was poor among them although their practice of injection safety was encouraging [12].

According to another study [13], in Ibadan, Southwest Nigeria, nurses have heard about injection safety however, only 70.4% had knowledge associated with unsafe injection with blood-borne infection, 55.9% had information that recapping with both hands was not a safe injection practice, 84.4% claimed that contaminated sharps predisposed the community to bio-hazards and 76.1% had information that used syringes and needles should be discarded in a sharp waste box. This study reported that high knowledge did not translate to practice as about half of the nurses (50.4%) were seen to have sustained needle stick injury.

In the University of Calabar Teaching Hospital, Southeast Nigeria, about a third (35.6%) of the healthcare workers have fair knowledge of injection safety while 4.7% have poor knowledge [14]. The practice of injection safety can never be overemphasized among healthcare workers, this is because even a 1% lack of knowledge puts patients and the health community at risk. [14]. Healthcare waste still has a hazardous and infectious effect on the environment and the people because the stated guidelines are not strictly followed and adhered to in all healthcare facilities, although the level of adherence differs, and there is no full compliance [15].

Inadequate training, ineffective legislature and absence of data are also imminent challenges facing this policy implementation. Studies showed that the level of knowledge of Post-Exposure Prophylaxis and Needle-prick injury

accident management (NPIAM) protocol and register for post-exposure prophylaxis was poor. Also, the practice of injection safety standards was low except for routine use of hand gloves [9, 14].

CONCLUSION AND RECOMMENDATION

This policy provides the legal framework to ensure injection safety and appropriate healthcare waste management practices in Nigeria. The development of the policy has been followed by several achievements including advocacy programs, training, guideline development, infrastructural development and resource mobilization. However, poor knowledge of healthcare workers and the absence of data were some of the imminent challenges impeding full implementation.

In view of these the following recommendations were made: the need to train and re-train healthcare workers on knowledge of injection safety and the dangers that can ensue due to negligence. Also, enforcement of the guidelines and procedures on healthcare waste disposal in health facilities which includes generation, segregation, collection, storage, transportation, treatment, and disposal is necessary at all levels of healthcare in the country. Moreover, the hospital management needs to enshrine the practice of injection safety standards by providing the necessary consumables, including color-coded waste bins and liners, auto-retractable syringes and needles, safety boxes among others. Conclusively, there is also need for proper data collection for effective supervision, monitoring and evaluation of the policy implementation and impact.

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