ASSESSMENT OF IMPLEMENTATION OF INTEGRATED DISEASE SURVEILLANCE AND RESPONSE IN AKWAIBOM STATE NIGERIA

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ABSTRACT

Introduction

Resulting from the problems associated with previous disease surveillance in Nigeria and by extension Africa, Integrated Disease Surveillance and Response (IDSR) was adopted in 1998 for the purpose of strengthening the surveillance system and for efficient use of resources. Since its commencement, the implementation of the strategy has not been assessed in the State. The purpose of the study was to assess the implementation of IDSR in selected local governments of AkwaIbom State

Materials and Methods

A cross sectional descriptive study was carried out in six Midwife Service Scheme sites in 3 selected LGAs of the State, using interviewer administered questionnaires adapted from the IDSR guideline from January to March 2014. Data was analysed using Microsoft excel.

Results

All the facilities had no laboratory to confirm any of the priority diseases, they all lack reporting tools and the skilled to use them. There was no form of data analysis in all the facilities, only 50% of the facilities had calculator, none has a computer. No standard case definition in all the facilities except for measles and poliomyelitis. All the LGAs had designated officers for IDSR and nonfunctional preparedness committees. Two out of the three LGAs had trend analysis of the facilities in the12 months preceding the study. Feedback from the State to LGA is verbal

Conclusion

Implementation of IDSR in the State is suboptimal. Health workers need to be specifically trained on IDSR and resources committed for the implementation and monitoring of the strategy, to ensure effective disease control in the State. It is equally paramount that states; capacity on IDSR is strengthened to enable them monitor and evaluate their performance using established indicators

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INTRODUCTION

The yellow fever outbreak of 1988 in Nigeria was attributed to poor surveillance system. Sequel to that disease notification and surveillance (DSN) system was established but several problems were identified with its implementation such as incomplete and untimely reporting, inadequate laboratory facilities, and poor feedback among others. In order to address these challenges Nigeria and other African countries adopted the Integrated Disease surveillance and Response (IDSR) in 1998[1,2]. In 2000 Nigeria began full implementation of the strategy and in 2009 the strategy was reviewed in line with International Health Regulation (IHR 2005) and the list of priority diseases was increased from 22 to 40 to include non-communicable diseases which were not considered in the previous surveillance systems as well as other emerging and re-emerging diseases.[3]

Control of diseases and epidemics is easier where there effective surveillance system is established.[4]World Health Organization defined Surveillance as the process of systematic collection, collation, and an analysis of data with prompt dissemination to those who need to know for relevant action to be taken.[5] Priority diseases need to be reported completely and timely to elicit

appropriate response. The flow of information is from health facilities where the data are generated to the local governments and to the Federal Ministry of Health (epidemiology unit) through the state ministry of health. At each level data have to be analyzed and appropriate feedback given.[3]

The goal of IDSR is to improve the ability of LGAs to detect and respond to diseases appropriately and on time.[6] IDSR is the basis of epidemic preparedness necessary to reduce morbidity and mortality.[3] Since the assessment of implementation strategy of IDSR, has not been regular at the federal level after the last assessment in 2009. No IDSR assessment has been reported in the State,[7] This study therefore assessed the implementation of IDSR at the facility and local government levels in three selected local governments of the state with the aim of identifying the gaps in its implementation and proffer practical solution from the lesson learnt from this study to strengthen the strategy in the State.

The Goal of IDSR is to improve the ability of wards to detect, and respond to diseases and conditions that cause high level of illness disability and death

Box 1

Materials and Methods

The study was done in AkwaIbom State one of the oil producing states of the Niger delta with a population of about 3.1 million based on 2006 census.[8] The state has 31 local governments with three main ethnic groupsviz; Ibibio, Annang and Oron. There are also three Senatorial zones.

Data generated from the facilities in each local government collates data and sends to the IDSR designated officer whose office is at the local government secretariat from January to March 2014

We carried out a descriptive cross sectional study to achieve the objectives. Multi stage sampling technique was used to select one local government from each senatorial zone first, and then two health facilities that offer Midwives Service Scheme (MSS) were selected purposively from the selected local governments.

Data was collected using interviewer's administered structured questionnaire to the Community Health officers in charge of the health facilities and to the IDSR designed officers at the Local Governments. The tools used were adapted from-LGA level indicators for monitoring quality surveillance and response at the health facility and indicators for monitoring the quality of LGA level surveillance activities respectively culled from the National Technical Guidelines on IDSR.[3]

Data was cleared,entered, double checked and analyzed using into Microsoft excel and proportion were calculated for each response at both the facility and local government levels

RESULTS

Six health facilities were assessed across the three senatorial zones. All the health facilities had standard case definition for only measles and poliomyelitis and not for other diseases. There was no functioning laboratory in all the health facilities. None of the facilities had an up to date trend of the priority disease. IDSR forms were not available in all the facilities but they all reported priority diseases immediately in the six months preceding the study by phone calls. (Table 1)

No written feedback was given to the health facilities from the LG level but verbal feedback was occasionally received. All the facilities have access to telephone and 50% of them had calculator for data management. Only one-third of them had motorcycle for surveillance purposes, staff of the health facilities had not received any form of training on IDSR. (Table 1)

All the three local governments have preparedness committees but they have not met in the last six months, therefore the committees are not functional, one of the

Table 1: Assessment of IDSR implementation at the health facility level in selected LGAs in Akwa Ibom State

Domains of surveillance	Frequency (n=6)	Percentage
Confirmation of cases		
Functioning laboratory	0	0
Standard case definition(measles and polio)	6	100
Standard case definition (other diseases	0	0
Analysis and interpretation		
Up to date trend analysis	0	0
Report data		
Report case based information immediately	6	100
Reliable supply of forms	0	0
Submit report on time	6	100
Submitted required no. of report in the last 3 months	6	100
Respond to outbreak threshold	3	50
Feedback		
Received bulletin /report from LGA	0	0
Training		
Received training on IDSR	0	0
Resources		
Vehicle/motor cycle	2	33.
Calculator	3	50
Computer	0	0
Access to telephone	6	100

Table 1 showed that there is poor implementation in almost all the domains, except report data

Table 2: Assessment of IDSR implementation at LGA level in AkwaIbom State

Domain of surveillance	Frequency (n=3)	Percentage
Readiness for epidemic response		
Preparedness committee (functional)	3 (0)	100 (0)
Emergency stock in the last 12 months	1	33
Identify suspected cases		
Have a surveillance officer for the LGA	3	100
Public health lab in the LGA	0	0
Investigated an outbreak in the last 12 months	2	67
Reporting		
Have access to regular supply of forms	3	100
Reports all report to the next level on time in the last 6 months	3	100
Analyze data		
Perform trend analyzes by health facilities	2	67
Compare quarterly data	2	67
Feedback		
Provide a written report	0	0
Received a written report from SMOH	0	0
Received a verbal report/review meetings	3	100
Resources		
Vehicles/motor cycles	2	67
Access to telephone	3	100
computer	0	0

Table 2 showed that the implementation is fair, nut epidemic preparedness is poor

local governments received emergency stock in the last 12 months inform of intravenous fluids and antibiotics. Two of the local government had measles outbreak in the last 12 months, all the LGAs have access to all the IDSR forms and cases are reported to the next level promptly in the last six months, two of the local governments have up to date trend analysis of the priority diseases and compare quarterly report.

Feedback from the state level is in form of review meetings done monthly, two of the three local governments have motorcycle for surveillance activities and lap tops to help in data Management. (Table2)

DISCUSSION

A good surveillance system depends on prompt reporting, and for effective reporting there has to be standard case definition in place for all the priority diseases to assist the health workers in early detection of cases. The study showed that in all the facilities there, were case definitions only for measles and poliomyelitis not for other priority diseases, this is because of the active surveillance for poliomyelitis and sponsored by WHO, whereas in Kaduna state only 62% of the health facilities had at least one standard case definition for the diseases.[9] This however showed improvement over the 2001 nationwide assessment where no health facilities had a case definition and in 2009 only 30% has at least one case definition. The implication of this is that other epidemic prone diseases will not be detected promptly and will tend to spread fast in the community

The IDSR tools were not available at all the facilities. Cases for immediate notification were done by phone calls to the designated officers who filled the forms and investigate appropriately this further explain why none of the health facilities had any form of analysis in place, this is worse compared to the 19% and 17% reported in Kaduna state and the national survey respectively.[7,9,10] The evaluations of IDSR done in Tanzania also showed data were not analysed at the facility level.[11,12] For the three local governments, data were well analyzed and presented in the office of the IDSR focal person as it is expected. Resources necessary for data management were not available, no health facilities had a computer, only 50% of the facilities in our study had a calculator but the health workers were not trained on IDSR

Fifty percent of the health facilities had responded to a measles outbreak in the last six month, cases were reported and were investigated with appropriate response instituted

There were no feedbacks from the local government to the health facilities this may demotivate the health workers however verbal feedback is occasionally given when the result of investigation turns out positive. Kaduna state reported that 13% of the health facilities received feedback from the LG but the nature of feedback (written or verbal) and the frequency of the feedback was not stated in the study.[9] In this study feedback to the local government is in form of review meetings done on monthly basis

The level of preparedness is poor in all the LGAs. Even though they all have epidemic preparedness committees, none of the committee was functional. About 70% of the LG has no emergency stock while the similar study done in Kaduna showed that all the LG had no emergency stock as well as the national survey of 2001.[7,9,13]

In conclusion the implementation of IDSR at the level of both health facilities and LGAs is suboptimal in AkwaIbom State. There is a need to train all health workers on IDSR strategy in all the health facilities in the state and equip them with resources such as computer, reporting tool and vehicles. Access to functional public health laboratory should be provided for effective surveillance and response

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