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Implementation of a Surveillance Health System in Monitoring Activities of Maternal and Infant Deaths Prevention in a Decentralized Health System: Feasibility Study Hospi-Community Based in DR Congo.

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Abstract:-

➢ ***Background***

In DR Congo, especially in North health division, about 104 children and 68 women died from a direct complication related to pregnancy out of 100000Live Births, 15 women have a disability due to childbirth out of 100000 Live Births during that particular time of the survey. This is a burden, an obligation of the state to provide the population with a minimum standard of living acceptable. The Democratic Republic of the Congo is not the first to engage in the surveillance of maternal and infant deaths. It had of maternal death audits, which are used to allow the National reproductive health program to determine the major causes of death. For example, in 2015 rates of bleeding (47.9%) and abortion (17%) were high. Among adolescents, complications such as anemia (16%), infections (12%) and eclampsia (8%) were also concerning. The issue is that demographic, social, economic, cultural, political, environmental, managerial, organizational and human health conditions are among crucial factors that influence in one way to another the feasibility of any given intervention. That is why an assessment of these aspects is needed before and during the implementation phases.

➢ ***Objectives***

To implement a permanent surveillance health system in order to promote an easy access opportunity to maternity healthcare services is the most important issue that this project want to emphasis on. The gendered health equity through some strategies implementation, policies, regulations and establishing clinical legal laws that gathering both maternal and child health and equity promotion. Community-based participatory research approaches should be the bench mark of community members and clinicians' commitment at all levels of the system.

➢ ***Design***

A clinical and community based analysis will precede a resources assessment (SWOT) during the implementation of maternity healthcare services provision. Community-based participatory research approaches will be deployed. Records on maternal and infant deaths will be major data. The settings are the 35 health facilities that will be selected randomly in the Karisimbi Health Zone where the previous study about test the CHFP model was piloted.

➢ ***Results***

The results are ought to show the effectiveness of the CHFP model. After five years in monitoring activities initiated and implemented to prevent maternal and infant death we should know that a change has occurred from a higher to low Maternal and infant rate. For the Health zone of Karisimbi in DR Congo the study shall revel that the Maternal Death Rate or 69% has changed in decreasing and an increase in couple antenatal consultation. The description should be prompt on the proportions of nurses' provision of maternity healthcare at pre-pregnancy stage followed by birth attendants, only biomedical or physician provided assistance to a pregnant woman during prenatal period and women who did not received assistance at prenatal stage. During delivery, biomedical or physician, followed by the assistance of nurse, and birth attendants, only community experienced woman provided care during delivery. At postnatal stage, biomedical or physician assistance, nurse assistance were provided, women who were not assisted.

➢ ***Conclusion***

The surveillance of maternity healthcare services is health system that generates sensitive data and strategic information that must follow a certain channel well maintained inside and outside products. Its sustainability and its success depend on it.

Keywords:- *DR Congo, North Kivu Health Division, Surveillance of Maternal and Infant Deaths, Surveillance Committee Structure, Maternity Healthcare, Clinical and Community Based Analysis, Feasibility Study, and Implementation.*

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I. INTRODUCTION

The rate of maternal deaths in Low income countries is 14 times higher than in developed countries (WHO, WB, 2018) (ARCH, 2019). It is estimated that around six million (600000) children die each year before reaching the age of 5 (WHO, 2018) (ARCH, 2019). In Republic Democratic of Congo (DRC), Life expectancy at birth is 51years for Males and 54 years for Females (MICS11/EDS-DRC, 2014). Maternal Death Rate is 693 of 100,000Life Births and Infant Death Rate: 68.2(1000) (EDS, 2014). The DRC's Maternal Mortality Rate is ranked 10th in the world for out of 188 countries (World statistics, 2019). The DRC is surrounded by 10 countries that impact every aspect of its development[1][2][3].

Map 1:- Democratic Republic of Congo, 2018, Google Map.

The aspiration of more or less 86 million Congolese are committed for building a country more beautiful than before and prosperous country on 2 345 million Km2 in Central Africa (WHO,WB,2018)(ARCH,2019). The DRC aspires to improve maternal health (SDG3) throughout the country to reduce maternal and neonatal mortality by monitoring equity in healthcare and maternal, neonatal and infant death prevention[4][5][6][7][8][9][10][11].

The Democratic Republic of the Congo is not the first to engage in the surveillance of maternal death. It had of maternal death audits, which are used to allow the National reproductive health program to determine the major causes of death. For example, in 2014 rates of bleeding (47.9%) and abortion (17%) were high. Among adolescents, complications such as anemia (16%), infections (12%) and eclampsia (8%) were also concerning (EDS, 2014, SNIS.2017)[12][13][14][15]. In 2014, in Freetown, Sierra Leone, the H4+ review session attracted the attention of countries on maternal death and highlighted the need for a series of strategies to be implemented to control maternal, neonatal and infant deaths at all levels (MINISANTÉ/MPLAN, 2016) (WHO, 2016)[16][17][18][19]. In DRC, the results of the 2010 Situation analysis of Obstetrical Emergency Healthcare, completed by the National Program of Reproductive Health

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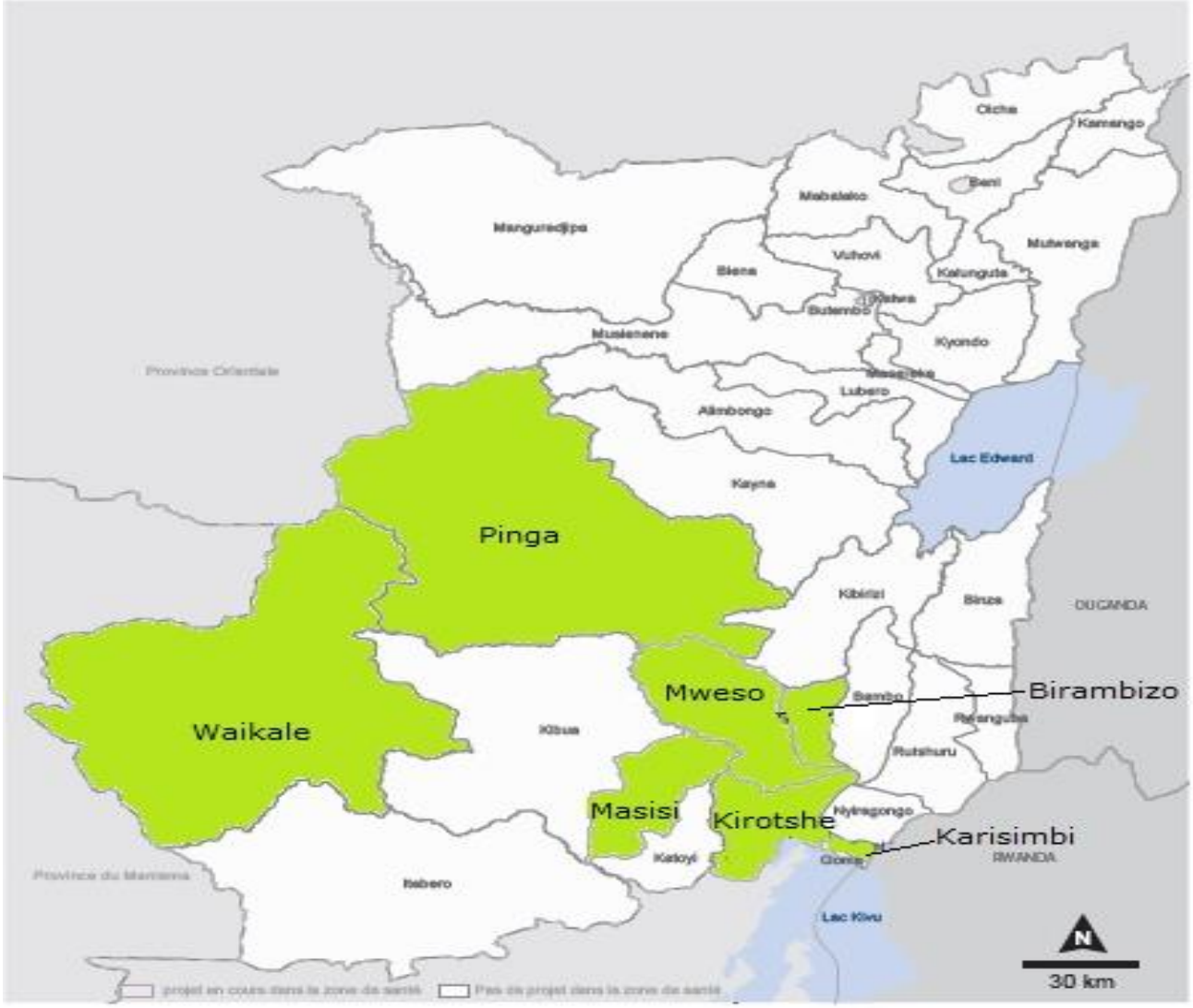
(PNSR) with the support of UNFPA and the H4+, showed that maternal deaths audits were carried out on a routine or non-systematic without rigorous supervision in health zones and often not followed by negative sanctions if mistakes are done conscientiously (MINISANTÉ/SDMR, 2017) (OMS, 2016)[20][21][22][23]. Furthermore, audits of maternal deaths had taken a connotation police, repressive and punitive with respect to healthcare providers, this pushed these last to develop attitudes and practices of workaround that caused the sub notification of death (MINISANTÉ/SDMR, 2016) (WHO, 2016).

The DRC has 26 health divisions, corresponding to the 26 provinces and 600 health zones in the area. Specifically, the North Kivu health division has 33 health zones, including Karisimbi.



Map 2:- North Kivu Health Division, Democratic Republic of Congo, 2018, Google Map.

The density of Karisimbi Health Zone is 561 048 habitants over 341.5Km2 that is 1642 Habitants per Km2. The density of the 15-19-year-old population is 231 115 habitants, which is 40% of the total population. For women aged 15 – 49 years-old, the population density is 127 113 habitants, or 21% of the total population. The overall average household size is 5 to 7 people.

II. RATIONAL

A number of reports and studies have been completed in the Karisimbi health zone, which have shown that around 290 of every 1,000,110 women become pregnant, and 290 of 1000 women conceive unwanted or unplanned pregnancy. Out of 1000 women, 110 women face disease related complications due to pregnancy, 70 women have abortions or stillbirths, 69 women die due to direct and indirect complications associated with pregnancy 1000 out of 100000 Life Births (North Kivu, Monography,2015)[24][25][26][27][28], and 15 women have mental or physical related to newborn deliveries 1000/100000 LB (Nyavanda, 2015)[29][30][31][32]

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(SNIS, 2018). An insufficient amount of appropriate and accurate information to guide health workers'services is available. An absence of a framework, a system of surveillance will be used for data collection, analysis, interpretation, and dissemination (SDMR, 2016)[33][34][35][36][37][38]. This will be conduction by the inclusion of the appropriate committees, and a review of maternal deaths and response integration at multiple levels (i.e. the provincial level, at the health zone level/Referral Hospital, the Referral health center/clinic and community level). There is an absence of specific assessment for tracking particular information from parturient, especially those who are in the community and need emergency service from medical personnel, but can only be found when they go to health facilities (DRC - DHS 2014) (2014 Nyavanda)[38][39][40][41][42][43][44]

The goal of this program is to ensure that mother and infant deaths are prevented by national and regional legislation, policies and frameworks which are coherent across the various health systems of the country. The program is further aimed at all levels of maternal healthcare services, ensuring that health equity is promoted in the entire country.

- *Objectives and Scope of the Assignment*

This activity is a situational analysis of the potential resources available for the better running of surveillance health zone system in monitoring activities linked to maternal and child death prevention in a decentralized health system. This is a baseline evaluation for the **monitoring activities of maternal and child deaths prevention** "MAMCDP" program, with the purpose of obtaining initial systematic feedback, aimed toward achieving the objectives and outcomes/impact of the one-year project. The principal objectives of this feasibility study is to identify potential resources that can contribute on the prevention of maternal and infant deaths in the DRC, in general, and the North Kivu and Karisimbi health zone in particular. Specifically the study is undertaken to (i) collect comprehensive data on maternity services and all cases of maternal deaths, their causes and favoring factors, (ii) analyze the collected data, (iii) use the data in creation of community health participatory activities for maternal and child deaths prevention, (iv) disseminate information to break the silence of unapplied standards principles of the health equity, (v) define the strategies of response on the maternal and child deaths within communities and clinics.

III. METHODS AND RESEARCH DESIGN

- *Desktop review:*

This study is undertaken to understand the structures of resources related to the promotion of maternity healthcare services. The consultants are referring to six main documents provided by the Provincial Health division and Karisimbi health zone namely: 1) the map road for reproductive health program, which included a mapping structure of the health maternity systems institutions supporting mothers and infants in community and clinic settings, capacities, 2) A review of the legislative framework on access to maternity healthcare services in DRC, 3) the provincial health division monitoring and evaluation operational framework, 4) management tools for assessing maternal and infants deaths (ICD10)[45][46][6], 5) Maternal and infants health promotion committee , 6) annual surveillance and response reports on activities promoting health equity and maternal and infants deaths prevention.

- *Individual Questionnaire:*

This questionnaire covers children, pregnant couples, midwives, diseased family members and other stakeholders. The consultants are interviewing independent members to collect a balanced view of the real situation on the ground. The questionnaire developed for the household survey is going under extensive review by ULPGL ethical committee and the consultant to ensure questions are relevant, culturally appropriate and the listed response codes are correct. After the draft has been reviewed by the ULPGL ethical committee, it will be then being pre-tested during the training, using actual household interviews. Careful notes will be taken during this exercise and appropriate adjustments to the questionnaire will be made in the final questionnaire. After the questionnaire has been reviewed, and changes made, the questionnaire will be finalized in French and English, and then administered in local languages to cater for the respective areas where the Health facilities have been selected.

- *Focus groups discussions:*

Focus group discussions will be conducted involving children, pregnant couples, midwives, diseased family members and other stakeholders, in order to obtain further detailed information addressing the study questions at hand.

- *Key informant interviews:*

Key informant interviews will be conducted to collect relevant information from individuals and organizations involved in the implementation of the mother and children health promotion within North Kivu health division and Karisimbi health zone settings.

- *Sample Selection:*

The survey team will obtain a list of all the health facilities that offer ANC services, parturient women and midwives within the North Kivu division and Karisimbi health zone.

IV. DATA ANALYSIS AND COLLATION

The Consultant will conduct the data collection and analysis. Data analysis will take place continuously, as data is collected, and will continue throughout the fieldwork process. Systematically reviewing and modifying the collected data will improve the collection and analysis process.

Stata (version 14) is the statistical package that will be used for analysis of the quantitative data. Descriptive statistics will be used to describe the sample, expressing the central tendency and variability within the data. Where

there are interesting findings, inferential statistics will be used to estimate the likelihood that there is statistically significance and whether this occurred by chance (e.g. due to sampling error).

NVivo software (version 11) will be used to organize qualitative data and assist with coding. The research team will use inductive and deductive analysis to derive codes, categories, sub-themes and themes from the interviews, focus group transcripts and qualitative text from the surveys. A thematic coding framework will be developed using an iterative analysis process. The process of how themes were identified and how the codebook was built and applied will be clearly outlined. In-depth description of cases will be developed including participant's age, gender, ethnicity, socio-economic and demographic characteristics. Data produced from the survey, interviews and focus groups will be used to investigate the feasibility learning questions.

➢ *Fieldwork*

The Consultants will handle all aspects of the fieldwork for the survey. In addition to the quality control measures to be implemented by the Consultants, RIPHE[1] will also hold supervisory roles. The consultants will make all appointments and initial contacts one month prior to data collection. RIPHE will also help in availing all program documents to the consultants for review. RIPHE reserves the right to conduct random field checks and checking how far the evaluation has gone.

❖ *Data Collection and Management Procedures*

Data collection will be conducted by the Consultants.

➢ *Training of moderators*

A team of researchers will train interviewers in conducting this evaluation research. Interviewing techniques and ethics will be observed to ensure adherence to ethical standards when conducting research with human subjects. Interviewers will be oriented to various RIPHE activities and how they will be implemented. The training will also highlight data collection techniques, including interviewing skills, consent procedures and other relevant information. Piloting of the questionnaires will be part of the training. The data collection team will be recruited based on competence in conducting mixed method research.

➢ *Quality control procedures*

Quality assurance and control will be conducted at several levels, including:

- Adequate training of field personnel to ensure they are knowledgeable regarding the administration of the questionnaires.
- Attention will be made to proper handling and protection of the data, consent forms and management of the participants.
- Constant field supervision, reviewing and editing of completed questionnaires will be exercised to ensure data quality.
- Close supervision of the data entry processes will be implemented.

V. RESULTS AND DISSEMINATION

Findings of this study will be shared with all respective responding groups, the Karismbi health zone and North Kivu health division, other stakeholders not only that may benefit from the knowledge obtained from the study results, and are part of the community participatory health committee.

❖ *Regulatory Requirements / Human Subjects Protection*

➢ *Human Subjects Ethical Consideration*

This study has been determined to be "research" and will be initiated only after receiving written approval or written exemption from the local Ethics Review Board. For this reason, the consultants will comply with all policies and procedures of the Research Ethics Board.

This study methodology has been designed to address the following ethical principles: respect for persons, beneficence and justice. Efforts are made to protect individual autonomy, minimize harm, maximize benefits, and equitably distribute risks and benefits by using procedures that are consistent with sound research designs.

Respect for Persons and Individual Autonomy

a) Potential Risks

Potential risks to subjects include:

1. **Breach of Confidentiality:** The most significant risk to the participant is a breach of confidentiality. In this study, a breach of confidentiality could occur if private and sensitive information of questionnaires is linked to an individual respondent and is obtained by person(s) outside of the health system maternity services.

Specific risks from a breach in confidentiality associated with this study include:

- **Psychological discomfort/stress:** This could be feelings of discomfort by respondents discussing personal experiences with the interviewers and distress if information about personal experiences were revealed to others in the community.

2. **Inconvenience Resulting from Participation in the Study**: Participation in this research study will require the respondent's time. For this reason, most respondents will need to take time from their day to take part in this evaluation, which could result in inconvenience to the respondent.

➢ *Strategies to Address Risks*

Steps will be taken to protect participants against potential risks posed by their participation in this research. Participants will be encouraged to contact Levis K. Nyavanda – Lead Consultant at any time to discuss any

[1] Research Impact Population Health and Equity Promotion (RIPHE) Organization.

concerns they might have. All data and other information will maintain all confidentially and anonymity to the greatest extent possible. The following steps will be taken to protect against risks.

a) Breaches of Confidentiality

1. **Identification on Data Sources**

a. There will be no identification of the respondent on the questionnaires. No personal identifying information will be collected, that is, name, initials, address, among others.
b. The respondent will be instructed not to use personal names during the interview. If names are mentioned they will not be included on the questionnaire.
c. Signed written consent forms will be stored separately from the data until 2022.

2. **Staff ethical training.** All research staff, including the moderators and supervisors, will be carefully trained in human subjects protection, especially the importance of protecting privacy and confidentiality. Training for moderators will include providing information about the three principles of ethical research (beneficence, justice and respect for persons) and will contain specific guidelines to adhere to ethical standards (including the proper use of recording devices, confidentiality, etc.)
3. **Participants' rights.** Research participants will be informed of all risks and protections in the written consent form. Participants will also be informed of their right to withdraw from the study at any time and their right to not answer any questions they feel uncomfortable with. Respondents will be provided contact information for RIPHE survey focal person, who will be available to answer any questions about the study.
4. **Data reporting.** All data based on this research will be reported in aggregate form. In particular, no individual respondents will be identified. But in general, collective respondents will be reported.
5. **Place of data collection.** To ensure privacy, confidentiality and comfort, respondents will be taken to a place convenient to them to ensure they are able to freely participate in the study.
6. **Data collection procedures.** To ensure privacy and confidentiality during data collection, moderators will be asked to sign a confidentiality agreement as part of their employment contract. Respondents will be instructed not to give their full names to the moderator at any time.
7. **Data collection and management supervision**. Data collectors will be closely supervised by the consultants throughout data collection.

b) Informed Consent/Assent

No participants will be interviewed without their informed consent. Prior to data collection, potential participants will be provided with study information and a written consent form which:

- Explains that they are being asked to participate in research;
- Explains the purpose of this research and the number of subjects involved;
- Clarifies the expected duration of the subject's participation and the procedure followed;
- Explains how the research will benefit the target groups and/or the participant, or society;
- Describes potential risks, if any are anticipated, or explains that there are no known risks;
- Explains that there will be no costs for participating;
- Describes compensation for participating or explains that there will be no compensation;
- Clarifies that the subject's participation is anonymous and that individual responses will be not be linked to identifying information;
- States that the subject's participation is voluntary and that refusal to participate will have no consequences;
- States that some questions may cause discomfort and that subjects may refuse to answer individual questions or desist from the interview at any time;
- Provides the name and telephone number of the RIPHE survey focal person who the subject may contact if they have any pertinent questions about the research, about the topics discussed;
- Explains how the participant should provide written consent by signature, writing Ok/fine, nodding the head, etc on the templet consent.

➢ *Beneficence (Maximizing Benefits and Minimizing Harm)*

a) Benefits of the Study

There is unlikely to be any direct benefit to participants themselves at the time of the study. However, the information gathered in this study will help RIPHE to implement the **surveillance system in monitoring activities of maternal and child deaths prevention**, its transparent and improved capacity to achieve desired results in the DRC North Kivu health division and Karisimbi Health Zone.

b) Risk and Benefit Ratio

The proposed study will result in knowledge generation, helping understand how the surveillance system in monitoring activities of maternal and child deaths prevention program will be managed and its impact on primary stakeholders. The potential benefits of receiving feedback from the clients of the RIPHE activities will be understanding how future community and clinical activities can be tailored during the implementation of the health equity program, to access maternal healthcare services and ensuring maximum benefit. There are no risks to the individual participants in this survey.

➢ *Work plan*

Activity	Inputs	Timeframe	Responsible person	Expected Outputs
Respondents selection	•Survey Coordinator •Research team	1 Months	Survey Coordinator/Research Team	Sample selected
Training of moderators and Questionnaire pre-testing	•Survey Coordinator •Research team	1 Month	Survey Coordinator/Research Team	Interviewers trained and Questionnaires pre-tested
Data collection	•Survey Coordinator •Research team	10 Months	Survey Coordinator/Research Team	Data collected
Data entry and cleaning	•Research assistants	2 Months	Survey Coordinator/Research Team	Data entered
Data analysis	•Survey Coordinator •Research team	2 Months	Survey Coordinator/Research Team	Data analyzed
Draft Report submitted to RIPHE	•Survey Coordinator •Research team	1 Month	Survey Coordinator/Research Team	Survey methodology report written
Final report Writing and Feedback	•Survey Coordinator •Research team	1 Month	Survey Coordinator/Research Team	Final Report written
Knowledge translation at all levels through communicative chains	•RIPHE and Collaborators	Continuously	RIPHE Coordination and supervision team network	CHFP capacity building trainings, Radio maternity healthcare programs, community participatory actions, midwife's workshops, community posters, video clips, website development, periodic maternal and infant's statistics data base
Community and clinical activities surveillance	•RIPHE and collaborators	Continuously	RIPHE Coordination and supervision team network	Community and clinical Records on maternal and infant's deaths and Initiation of activities of health equity promotion

Table 1:- Detailed Timeline

➢ *Feedback meeting:*

The consultants shall present the main findings and conclusions of the evaluation to all the respondents, stakeholders, North Kivu health division, Karisimbi health zone and the team and network of RIPHE organisation. These stakeholders will have the opportunity to provide input and feedback before implementing all activities on the maternal and infant prevention deaths and health equity promotion agenda of surveillance system.

➢ *INNOVATION*

Twelve phases have been conceptualized during the previous steps of the study. This is the main phases from the learning by doing model and community participatory appraisal approaches. The cycle of surveillance of maternal and child deaths incorporates phases of the monitoring and riposte that will apply to all level of the pyramid represented in the suite.

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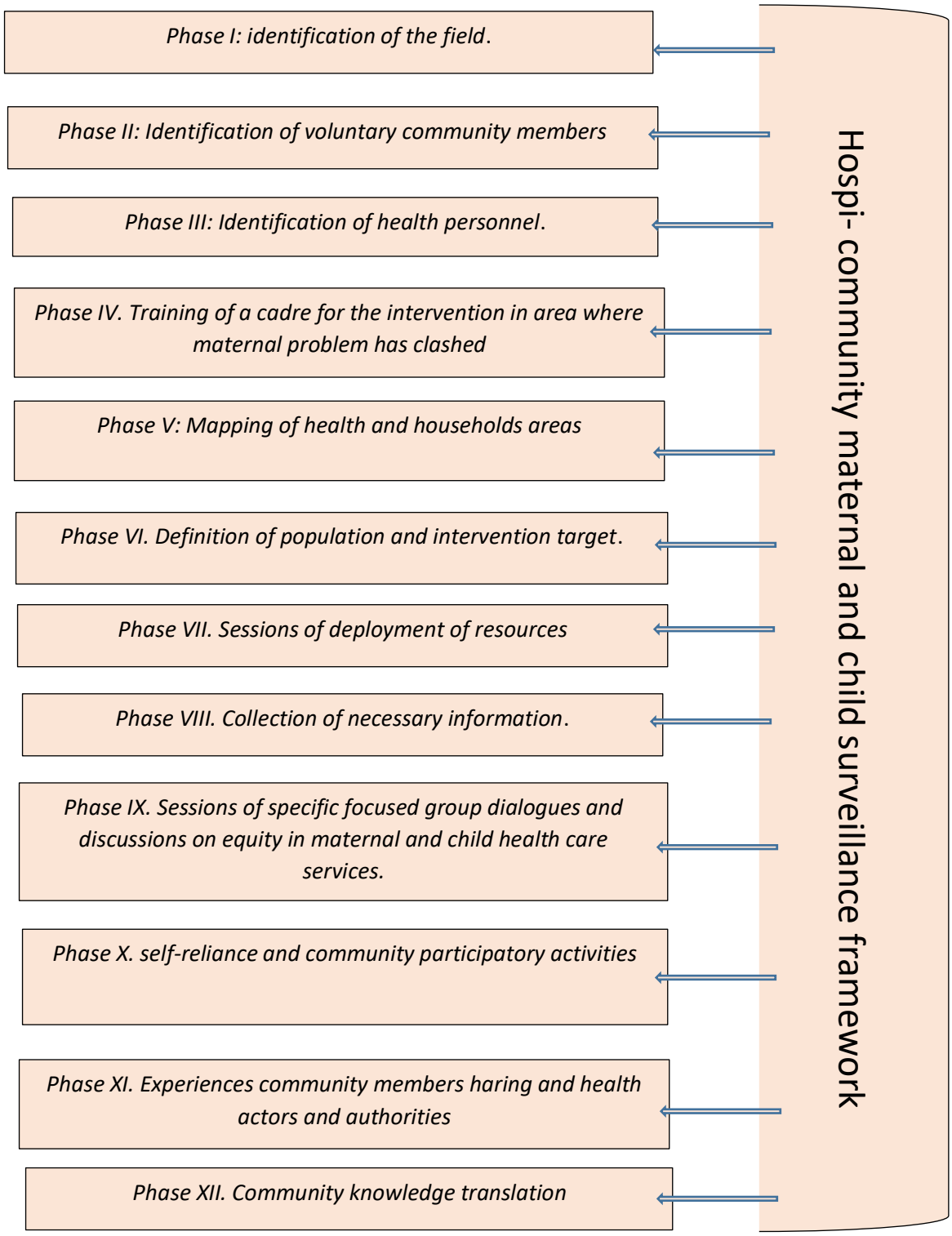

Fig. 1:- Illustration of the Surveillance cycle of Maternal and Infant deaths prevention by Levis K. Nyavanda, 2018

As part of this integration, the system of integrated disease surveillance and response will be used to parallel for surveillance and response maternal and child deaths to better assess of its impact not only on the health system but also and especially in the prevention of maternal and child deaths in communities and clinics.

- *Phase I: identification of the field.*

This stage explains the clinics, health area, health zone, district, division, and health region where permanent cases that influence maternal and child deaths are reported such as abortion, earlier adolescent pregnancy, home delivery, management of pregnancy by unqualified and unprofessional maternity health personnel. *Phase II: Identification of voluntary community members*: this is a stage where we should know that the problem is affecting a

good number of community people. The individual sensitised or experienced from the impact of a given matter is ever sensitive and motivated to play a role if an opportunity to confront this matter has come. It implies that most people who have been victimized play a greater role in the process of controlling that problem. This strategy is known advocacy and mobilisation of self-community resources. *Phase III: Identification of health personnel*. Who are qualified, professional, available, and committed to play a role during surveillance epidemic situation? Such as birth attendants, midwives, gynecologists, obstetricians, neonatal pediatrics and surgeons, anesthesiologists, community and health authorities. *Phase IV. Training of a cadre for the intervention in area where maternal problem has clashed*. This stage is concerned by recruitment of a cluster that will be composed by all individuals, health personnel, and community and health leaders willing to contribute during the surveillance period that health interventions are deployed to control or to stop the situation. For example stopping teenager's pregnancies in a given ethnic minority. This can involve parents, brother and elder sisters, neirgbourhood people or settlements, regions' leaders, school teachers, health personnel in charge of adolescents, community counselors, community birth attendants, midwives, gynecologists and others who can be in charge with maternity skills. *Phase V: Mapping of health and households areas*. This phase is concerned with localization of health area that the intervention should be implemented. It determines households' members in order to be prompt to respond on the problem. The stage facilities the planner to know where the problem is geographically situated, how many people are infected and affected. Resources mapping is also planned accordingly of the heath and household areas that have been locate par certain characteristics and previously demarked for the intervention program. *Phase VI. Definition of population and intervention target*. At this particular phase two steps emerge mainly the first is to define the general population infected and affected by the problem and the setting in order to assess properly the needs. Secondly the intervention has to answer on the problem directly and indirectly. Means definition of direct beneficiaries and indirect ones are supposed to be specified. The needs assessment emerge at this phase where vulnerability of problem is not percepted at the same level by people. Identifying specific people such number of women, men, children and especially pregnant women by households and child under five years old are crucial indicators for this phases. To identify also community health actors and appropriate maternity health facilities is concerned by the sixth phase. *Phase VII. Sessions of deployment of resources*. This is the period that concerns field community entry process, filed work activities preparation and specification, visiting door to door, health facility, community groups and institutions. Provision of sensitization messages, individuals' consultation, family education, group talks and practices, community dialogues and discussions, institution communications and appointment of groups' leaders to follow up some community participation and collective activities assigned during the implementation of the program. Example to organise women and pregnant women association for maternity health assistance. To set up a union of 10 households maternal constellation support. Form of 10 houses that put some amount of money and creating income generating activities in order to support economically the pregnant women within the constellation. *Phase VIII. Collection of necessary information*. This period is concerned by a process of getting necessary and accurate information that can help to know the level of the interventions impact in terms success. Information are data from different targeted people such as parturients, community members, households responsible, health actors and clinicians, institutions' leaders. This information is needed before the intervention or implementation of program activities because of well setting oriented goals and outcomes of the interventions. It is also collected at the end in order to measure the performance of resources in terms resulted indicators. These outcomes help to know if the problem has been controlled, eradicated, stopped, and eliminated or no and if the community vulnerable people have been satisfied at a given level. Information are collected from infected and affected people and this under methodological and technics applicable procedures. Responses should analysed logical and read to generate recommendable messages for improvement of mother and child health. *Phase IX. Sessions of specific focused group dialogues and discussions on equity in maternal and child health care services*. This particular phase is done in order to measure the individual satisfaction level, inputs versus outputs of the program and rate of the intervention impact. These specific focused groups discussions and table round analysis are organised in a systematic and logic way with purposes of knowing that opinions and suggestions that will be generated shall be used for future sustainability of the program. The strategy of getting opinions it help to implementer to take useful decision whether to stop or continue with the interventions activities. It may easier the work to be restructured. The FGDs are organised by consultant or health actors. The eligibility of participants shall be based characteristics such as direct and indirect beneficiaries, the implementer, sponsors and health and community authorities. *Phase X. self-reliance and community participatory activities*. This is phase where individual, groups or collective, institutional activities that are implemented by the members of the community for the collective interest and support in order to eradicate health vulnerabilities. Collective activities are organised and oriented towards community needs for it development. These activities are based up resilient capacity for each individual person or group members. This stage hopes that a pregnant woman or family have to be able to sponsor expenses related to pregnancy because the self-reliance activities are implemented in order to respond on any health issues. This shows that community members are able to copy with mechanisms that have been put in place in fighting against factors that made maternity health not being promoted. At particular phase individual, and collective activities are appraised in order to rewards the best individual people in the community. Thus community health participation appraisal (CHPA) in fighting epidemics situations. *Phase XI. Experiences community members*

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sharing with health actors and authorities. This is known as an intervention feedback community impact. It is concerning the information that can be established as key words to sensitise and mobilise resources. These informations are formulated as "health healing messages" formed by beneficiaries and others from the period of the outbreak clash, intervention, resilience period. These information or message initiate principles, regulations or rules and health norms in short-middle- and long term as longer as outbreaks are concerned. They generate also new perspectives for local institutions in terms of vision, mission, goals and values or norms that can constitute community or institutions' identities. In brief they constitute the major topics that will be used during diffusion of behavioural change dialogues, communication, education, and discussion and debates related to equity and maternal and child health promotion. Health experienced problem will be major narrative key point in mobilizing people for community healing activities. *Phase XII. Community knowledge translation.* Diffusion of information for behavioural change is phase that impact a lot to social community ladders of people if the message was well established. This phase implies a process plan that concern selection, screening, time targeted point for dissimulation. The audiences are also supposed to be selected accordingly. This message has to concern all individuals within the community and in different contexts. The message should be diffused in clear, precise and understandable language mean a language that is decoded by everyone in the community. The messages are established to be used during individual, collective, public campaigns, during audio-video diffused emission, during pregnant women's relays, mother and child day, and public lecture on equity and maternal child health promotion, during community cultural days.

- *Operational Settings*

At the provincial level, a Committee said Committee of Surveillance of maternal deaths and infantile (CSMI), Journal of maternal and child deaths (RDMI), and a database of the statistics of death Maternal and infant (BSDMI) will be set up for availability of information to all decision makers of the province and health zones in the decentralized health system.

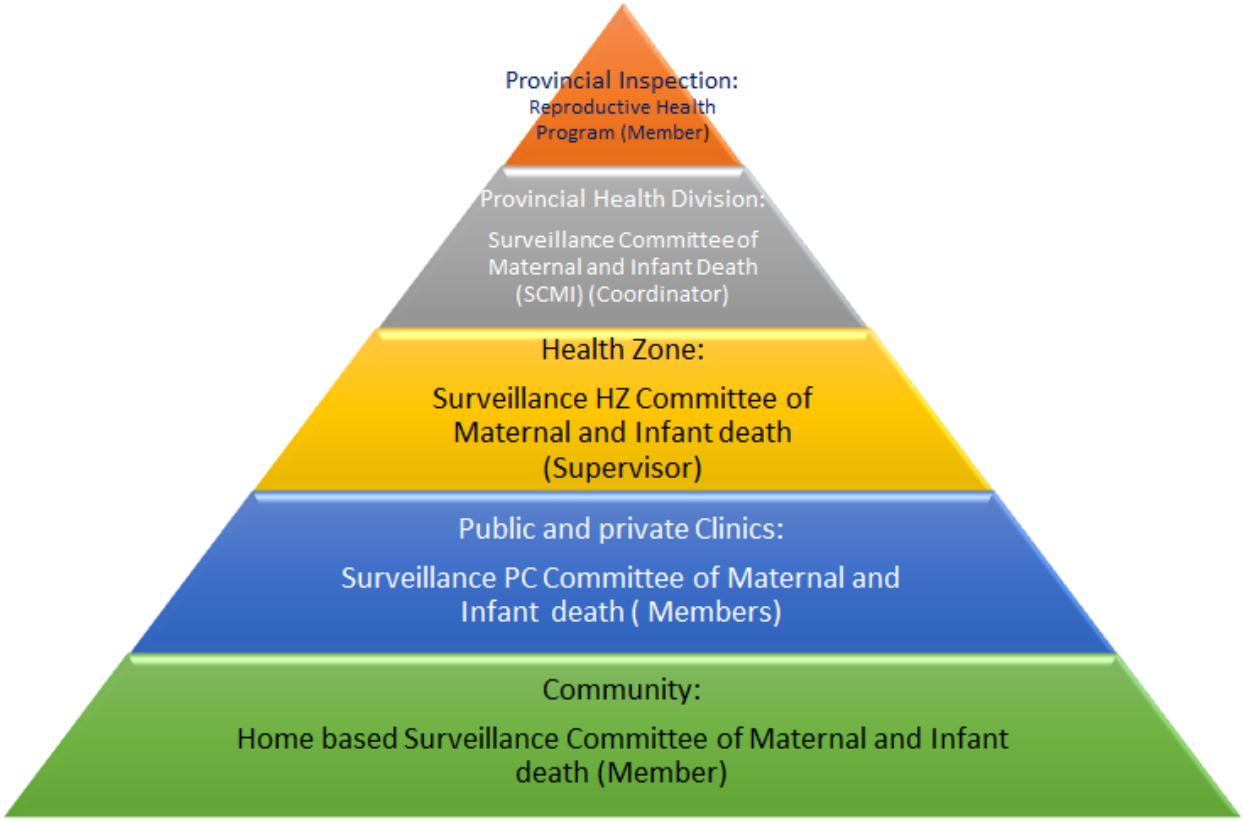

Fig. 2:- Illustration of committee structure by Levis K. Nyavanda, 2018.

The Provincial surveillance Committee of maternal and child deaths by a moral authority and assists by hospital officials and coordinators of surveillance activities. The Committee is supported by technical experts from civil society. This Committee is a sub-group of the commission to combat disease. He reported these activities to a weekly, monthly, annual epidemiological surveillance meetings. The monitoring of the activities of the prevention of maternal and child deaths is based on intrasectoral and intersectoral collaboration in a decentralized health system. The close collaboration within the Department of the health public must be strong and permanent. All the other ministries and civil society, even community organisations follow. This Committee must work closely with an office for maternal and child death statistics (public or private) and civil status to facilitate the reporting of deaths in the population.

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VI. CONCLUSION

The surveillance of maternity healthcare services is health system that generates sensitive data and strategic information that must follow a certain channel well maintained inside and outside products. Its sustainability and its success depend on it. For this purpose, some community and clinical measures must strengthen the foregoing and must be strict application by the various operational and actors responsible for the system at any level whatsoever. These measures are the attitudes to follow in practice in different circumstances that require a certain high sense of delicacy and especially of professionalism on the part of all without exception.

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