MIX COMMUNICATIONS STRATEGIES AND RATE OF UTILIZATION DURING POLIO VACCINATION CAMPAIGN RETROSPECTIVE STUDY IN WESTERN BAHAR E-LGZAL STATE, REPUBLIC OF SOUTH SUDAN WAU

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ABBREVIATION

- **CDC** Center for Disease Control and prevention
- CVDP Circulated vaccine driveled polio
- EPI Expanded program on immunization
- **IEC** Information, education and communication
- **IPV** In activated polio vaccine
- **PEI** Polio eradication Initiatives
- **RI** Routine immunization
- WHO World health organization

WPV Wild polio virus

INTRODUCTION

Effective communication activity is an essential type of program action in support of Polio eradication initiatives (PEI), and routine immunization. Communication activity includes: Social mobilization, Advocacy, and behavioral change communication aspired to improve immunization services and use of those services. Other key components of effective immunization services include: Vaccine procurement for service delivery, cold chain, logistics and capacity building for health workers to provide high quality immunization service and to

conduct surveillance on vaccine preventable disease to monitor disease circulation in the country to guide immunization Polio eradication initiative (PEI) was launched in May 1989 by world health Assembly (WHA) resolve to eradicate poliomyelitis from the word by the year 200 using the following strategies;

- 1) Establishing high level national commitment to the program to ensure that adequate personnel and financial resources are made available
- 2) Administering oral polio vaccine in the manner that will effectively interrupt the transmission of wild polio virus
- 3) Attain high level of routine immunization coverage with at least three dosed of OPV administration
- 4) Implement action oriented surveillance for all possible cases of poliomyelitis/Acute Flaccid Paralysis (AFP)

Although polio transmission was not fully stopped by the year 2000, tremendous progress has been made in the eradication effort since 1989. The number of polio cases has fallen by 99%. Polio a highly infectious viral diseases that causes swift and irreversible paralysis became a distant memory in most of the world. Polio infected countries reduced from 125 to 3 countries: Nigeria, Afghanistan and Pakistan. Initial estimate of polio cases reduced from 350,000 to 360 cases from endemic and other re infected countries across the world according to 2013 WHO report. More than 10 million people are walking today who otherwise would have been paralyzed. This is incredible achievement. The global polio eradication is on track to have polio free world by the year 2018.

Therefore, the communication strategies to address program issues have to be accelerated and fine tuned. The promotion of routine immunization and the education of public on the importance of immunization services has to be strengthened and effective surveillance should be in large scale to monitor vaccine preventable condition for desired decision

Now a day, the world is closer than ever been to eradicate polio. It is critical to take this advantage and to build more effort on this momentum and end polio for ever to enjoy polio free world.

As Dr Frieden has stated, "If we fail to get over the finish line we will need to continue expensive control measures for indefinite future...more importantly without eradication in resurgence of polio could paralyze more than 200,000 children worldwide every year within a decade". Now it is a time we must not fail.

LITERATURE REVIEW

DEFINITION OF TERMS

Communication for Development: Is researched and planned process crucial for social transformation operating through main strategies: Advocacy to raise resources, political and social leadership commitment for desired program, social mobilization for wider participation and ownership, and program communication for change in knowledge, attitude, and practices.

Advocacy: Is continuous and adoptive process of gathering, organizing, and formulating information in to argument to be communicated through various interpersonal and media channel with a view to raising resources, organizing political and social leadership acceptance and commitment for development program.

Social Mobilization: Is the process of pulling all feasible intersectional social partners and allies together to identify needs and raise awareness for particular development objectives. It ensures the participation of all actors: institution groups', partners and other community network in identifying, rising and managing desired resources.

COMMUNICATION PLAN BASED ON RESEARCH INFORMATION

Influencing or modifying human behavior is a complex process that needs to be planned carefully based on valid information. Pertinent information enables the planner to develop relevant and focused plans that can be achieved and help the program manager to assess and revise their strategies when needs arise. It is, therefore, the program manager always needs to use research based information in communication planning.

Conduct research through collaborative institutions, and partners who are conversant with development work. Different institution has different research orientation and will not always collect targeted data each used in development work. Some of institution may need orientation to produce research benefit to the EPI. EPI program involves district teams and community members in the research process. This will build research capacity in country and increase application for the role of research. Involvement in data collection and analysis should give health workers, community members as opportunity to interact with pertinent issues on the ground.

Summarize research findings and their implication for EPI planning and share with communities, partners, and district level team, so that they can use the finding to develop their plan.

COMMUNICATION MODEL FOR DEVELOPMENT

Communication for development may be defined as researched and planned process crucial for social transformation and operating thought three main strategies: advocacy to raise resources

and political leadership commitment for development goal, social mobilization for wider participation and ownership, and program communication for bringing about changes in knowledge attitudes and practices among specific participants in program

COMMUNICATION FOR POLIO ERADICATION/ROUTINE IMMUNIZATION



Communication for development goes beyond the term social mobilization that is so widely used in EPI. Communication for development seeks and not only to transfer message but also to promote interaction around messages for target audience to understand them better, accept them and practice the healthy behavior proposed, not once but long enough to reap the benefit that such behavior brings. The ultimate goal, therefore, is the behavior change, that is bringing about and sustaining the desired healthy behavior. In the case of immunization programs, one of the promoted behaviors is to take children for immunization regularly, according to the immunization schedule, and for polio campaign waiting vaccinator at home to get children vaccinated with OPV

Good planning includes effective and timely identification of needed resources. Government needs to have a time to prepare and do support. Partners in turn need to do everything possible to avoid the types of bureaucratic delay that can disrupt the disbursement of promised financial or logistic support. In program or in business world human interaction in the form of communication is crucial; nothing can be achieved without communication with target audiences.

ROLE OF COMMUNICATION AND POLIO END GAME STRATEGIC PLAN (2013-2018)

The polio end game strategy was developed to end all polio cases. The end game strategy is designed in such a way that to account for parallel purist of world polio eradication and Circulating Vaccine Derivative Polio (CVDP) elimination. The goal is the complete eradication

and containment of all wild polio virus (WPV), vaccine related and Sabin polio virus. So, no child ever again suffer paralytic poliomyelitis

THE FOUR MAIN OBJECTIVES OF THE POLIO END GAME PLAN

1) Polio virus detection and interruption

The first objective is stopping all wild polio virus transmission by the end of 2014 and new outbreak due to a CVDP within 120 days of conformation of the index case. The primary geographic focus is on the three endemic countries, the countries at the highest risk of importation in Africa and countries with persistent CVDP or history of CVDP emergence. Activities will focus on enhancing global polio surveillance, improving OPV quality to children in the remaining endemic and persistent CVDP countries and ensuring rapid outbreak response.

2) Immunization System Strengthening and OPV withdrawal

This objective seeks to hasten the interruption of polio virus transmission and help strong system for the delivery of other life saving vaccine. This objective engaged all in 145 countries that current use of OPV in their routine immunization program. The introduction of in activated Polio Virus (IPV) and withdrawal of OPV from routine immunization.

3) Containment and Certification

All 194 member state of World Health Organization (WHO) will have certificate for free polio country by 2018

4) Polio Legacy

The aim of this objective is to ensure that the world remains permanently polio free and that the investment in polio eradication provides public health dividends for year to come. The work involves main screaming long term polio function such as IPV immunization containment and surveillance leveraging lessens for the health initiative and transforming the polio infrastructure as appropriate at present, polio eradication staff comprises the single largest source of external technical assistance for immunization and surveillance in low income countries.

Polio funded personnel are responsible for helping countries reach hundred millions of the world most vulnerable children with polio vaccine and other health intervention such as measles vaccine and anti malaria bed net, careful planning is essential to ensure that lesson learned during polio eradication, as well as the assets and infrastructure built in support of the effort are transitioned responsibly to benefit other development goals and other global health priorities. This will be through consultation and communication with a range of stakeholder group.

RISKS ALONG WITH POLIO ERADICATION PROCESS AND EFFORT TO OVERCOME

Unexpected factors and external risks can delay or compromise the GPEI's ability to achieve the Plan's four major objectives. Recognizing risks, identifying mitigation options and articulating

contingency plans enhance the GPEI's ability to rapidly react to problems, adjust its strategies as needed and minimize setbacks. Six major forward-looking input and implementation risks, listed in. The insecurity in Pakistan and Nigeria has caused tragic losses and poses a new and real threat to the program as of 2013. However, the leaders of Afghanistan, Nigeria and Pakistan remain fully committed at all levels to stop the transmission of polio in their respective countries, and efforts are under way to address the security challenges. The GPEI has developed an overarching framework for insecure areas that is being tailored to each setting.

1. Operational adjustments to polio campaigns: reduce the exposure of the program and vaccinators to potential threats by holding campaigns that are of shorter duration or lower profile.

2. Program safety and security: enhance coordination between civilian and security services to inform local risk assessments, integrate these into operations plans and, where necessary, provide security to improve the physical

3. Community demand: improve local community demand to increase access to vaccination and basic health services through a combination of awareness raising activities related to the disease, its consequences and its prevention, and, where helpful, by coupling OPV with the delivery of other services/interventions

4. Religious leaders' advocacy: markedly step up advocacy by international, national and local religious leaders to build ownership and solidarity for polio eradication across the Muslim world, including for the protection of children against polio, the sanctity of health workers and the neutrality of health services

5. Measures to prevent poliovirus spread: reduce the spread risk from insecure areas through measures such as intensive vaccination in surrounding areas and the vaccination of travelers moving in and out of the infected areas

OBJECTIVES THE STUDY

The general objective of this study is to see the status of communication means used during the polio vaccination campaign in Western Baher el-gazal state, in 2011.

SPECIFIC OBJECTIVE

- 1) Review different literature of strategic communication to enlighten important concept and use of strategic communication in immunization services/polio eradication initiatives
- 2) Analyze different types of communication strategies used during polio campaign
- 3) Compute different communication means used during the campaign
- 4) Identify communication gaps during the campaign

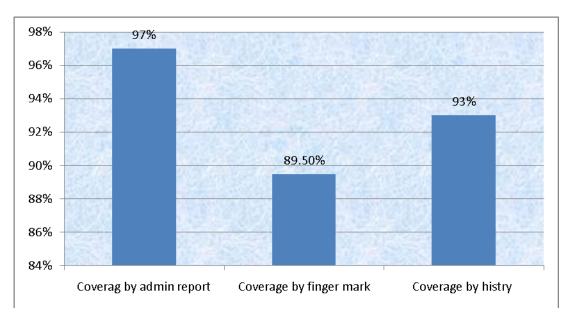
METHODOLOGY

The post campaign survey communication data was used as secondary data for analysis. The variables was analyzed using excel sheet to compute different means of communication used during vaccination campaign in the state.

RESULT

Maximum effort was done to reach 133,075 under 5 children with two drops OPV during polio vaccination campaign. According to state MoH report 97% of children vaccinated with two drops of OPV. The analyzed independent monitor data revealed that 89.5% of children were vaccinated by finger mark and 93% by history. See computed coverage below on figure 1.

Figure 1: polio vaccination camping administration result versus finger mark and history, Western Baher-elgazal state, March 2011



COMMUNICATION STRATEGIES USED DURING CAMPAIGN

Mix communication strategies were used to reach partners, stakeholders and all caretakers with campaign information to reach children with two drops of OPV. Advocacy, social mobilization and partners/stalkholder meeting, Information, Education and communication strategies were used to conduct quality polio campaign in the state.

ADVOCACY

Advocacy was done at different levels: at state, county and payam level with politician, county commissionaire, county implementing partners/NGOs and community/religious leaders. The

purpose of advocacy was to inform all why polio eradication initiative and what is community benefit from program achievement? Partners were called for introductory meeting and briefed on PE. Trend of global polio since PEI and current achievement, and future effort to end polio were briefly discussed. In general, top advocacy was done to get the audience understand and advocate the PE to the community at large and to support the program implementation process. These activities were cascaded to county and payam administration units to mobilize resources to maximize quality campaign activities at their perspective houses to reach target children with recommended dose of OPV.

POLIO CAMPAIGN LAUNCHING



Figure 1: Official gather during campaign launch

Launching is a set of ceremony that the higher officials, civil organizations, partners, religious leaders and community memebrs join together to share the occasion when polio vaccination campaign is officially declared. The first dose of OPV administered for legible children during these events. Launching was used as introductory part of polio campaign communication and initial vaccination. The state figure head and WHO representative reached different groups of audiences with polio information and importance of vaccination to eradicate polio. Local artist or musicians played drama/role play on polio scenario to draw a picture of polio in the mind of audience, its impact on the victim, family and the society at large and reflected the importance vaccination as a sole prevention from polio. Launching was also used as a central occasion to help the audiences convey a message home to share with their families,' neighbors and

communities in particular care takers to waiting the vaccinator at home to get their children vaccinated during the Campaign



Figure 2: Traditional dance during polio campaign launch

SOCIAL MOBILIZATION

Social Mobilization is UNICE supported activities at all administration levels to help desired information reach the target community at the right time. Different actors: government officials, community leaders/chief, religious leaders, social mobiliers were all used to reach the community with campaign message at their setting. Social mobilization was the central strategy involving different groups to influence community behavior to receive vaccines to protect their children from poliomyelitis. Traditional artists were organized and given script on polio scenario for role play/drama and trained to show the audiences' that polio is deadly and crippling disease that will keep the victim on a wheel chair for his/her life but vaccine preventable disease if children received recommended dose of oral polio vaccine.

INFORMATION, EDUCATION, AND COMMUNICATION (IEC)

IEC materials were developed to increase and sustain demand for OPV use. In order to achieve these objective, different kinds of IEC materials were developed and distributed to all level of administration to display in a place where people gather for different purposes: The school, market, bus and bodaboda terminals, health facilities, government office, recreational areas, church, and mosques. Flipchart, banner, and leaflet were mainly distributed and used during the campaign Church and mosque are crucial religious institutions predominantly used to convey campaign messages to the care takers during worships.



Figure 3: Polio IEC Materials on Bajage during polio campaign

MEDIA AND OTHER CHANNELS

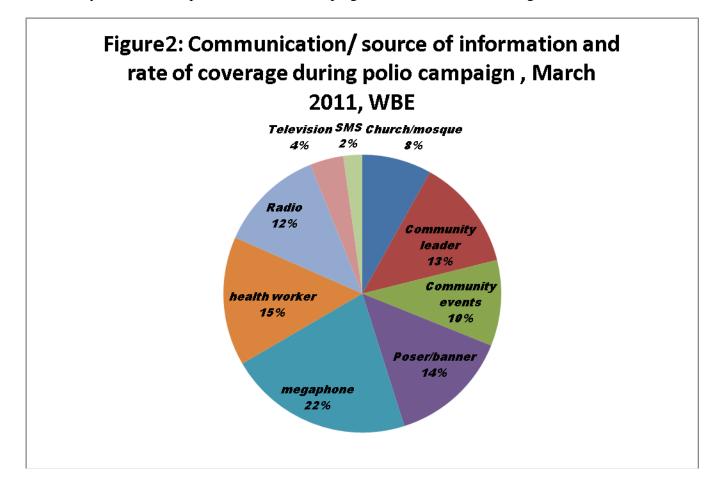
Television and FM radio were used for talk show on cause, sign and symptoms of poliomyelitis and prevention. Spot message on campaign schedules and benefit of vaccination were broadcasted. The utilization of media depends on the level of access; the community those have television and radio broadcast services in the area got information from media. Moreover, SMS was also used to send the text message to the communities who have mobile phone and network access. For detail, see different sources of information with utilization rate during campaign.

S.No	Source of Information/Communication	Rate of utilization (%)
1	Church/Mosque	8.1
2	Community leaders	13
3	Community Events	10
4	Poster/banner	14
5	Megaphone	21.5
6	Health Worker/vaccinator/field assistant	15
7	Radio	12.3
8	Television	3.9
9	SMS	2.2

Table 1: Different source of information and rate of utilization

Different communication strategies were used with different means of channels to reach the care takers with desired campaign information. According to post campaign evaluation data analysis, megaphone was widely used in the state by town/village mobilizer to reach the community with campaign message. More than one fifth of the community (21.5%) heard campaign information through megaphone. Megaphones were fairly distributed by UNISEF to each administration units in the state for mobilization of SIAS/polio/measles campaign and routine immunization

Health workers/vaccinators were the 2nd source of information following megaphone to convey campaign information to the community. Poster/banner was the 3rd source of information for the community to hear about polio vaccination campaign. For detail see below diagram



CONCLUSION

The global effort on polio eradication is more visible now. Polio infected countries reduced from 125 countries to 3 countries. More than 10 million people are walking today who otherwise would have been paralyzed. This is impressive and promising achievement to build more effort on ongoing momentum to see polio free world in 2018.

Polio free world is global shared vision that every country eager to see polio free country. This is an opportunity for all committed WHO member countries to create healthy environment where healthy children grow; and educate. Indeed, past achievement is telling us that polio is about to finish and all efforts are on track to end polio.

On the other hand, there are also challenges: terrorist attack, insecurity, and tribal conflict around the world; in particular polio endemic countries are potential blockage to polio ending road to reach target children with polio vaccines.

It is, therefore, communication is so crucial to look for a way on how to reduce polio eradication related risks affecting polio program and polio team who are committed to finish polio around the world. Continuous dialogue with community leader, religious leader, politician and other significant members of the community on value and importance of immunization should be major task of communication officers to pave the way to ending polio.

The mix strategies: Advocacy, Social mobilization and interpersonal communication and different message transmitting channels will help the community to receive adequate information in order to reason out why PE and value of vaccination to assist ending polio. Access to adequate communication will improve the communities' concept about immunization and service utilization

In this, retrospective communication activity analysis, different strategies were demonstrated during the campaign to reach the community with desired campaign information. Different means of channels used to access the community with polio campaign information at their setting directly from a channel they are closer to.

The state polio campaign achievement was 97% administratively and 89.9% by finger mark. This proved that the campaign was well don and met closely the bench mark which is missed children is $\leq 10\%$. The utilization rate of communication means are almost fairly spread over all caretakers. Only message heard by megaphone excelled to 22% and while others: radio, TV, posters/banner, community events, community leaders, church/mosque...etc ranged between 10-15%. This rate displays that all listed communication means have different range of access to the community. In a place where TV is not available radio will be substitute. In a place where no mobile network for SMS, church or mosque is a substitute to access the community with camping message. A group of community might be accessed to one or two or more communication means to receive the message. Thus, It is important to use mix strategy and different means of message convey to enable the community get information through the means they are closer to...

PROBLEM

1) There is no communication culture to plan and use polio communication effort as an opportunity for routine immunization too

2) It is not common to review communication activities to examine communication performance after campaign

RECOMMENDATION

- 1) Strengthen and sustain the use of mix communication strategies and different means of communication for both polio and routine immunization plus....
- 2) Review the campaign achievement and communication effort post campaign for program improvement

REFERENCE

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- 2. Communication guideline for Immunization, August 2013
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- 5. Polio eradication and end game strategy plan (2013-2018), by WHO, UNICEF, and CDC