Original Article

Is Expanded Programme on Immunization doing enough? Viewpoint of Health workers and Managers in Sindh, Pakistan

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Abstract

Objective: To understand health managers' and service providers' views about routine immunization; perceived barriers and practical measures to improve the situation in three districts of rural Sindh and one town of Karachi, Pakistan.

Methodology: Key informants interviews and focused group discussions were carried out involving district and town health officers, health providers, vaccinators, lady health visitors and lady health workers.

Results: The study result showed that the problems hampering the routine immunization related mainly to lack of incentives and restricted mobility of health workers in the field. Political interference, flaws in monitoring of routine immunization, disinterest of facility based doctors and lack of private sector involvement in the provision of vaccine are other major problems. National immunization days (NIDs) so far had a negative impact on routine immunization coverage.

Conclusion: There is need of policy shift to integrate routine immunization with NIDs for polio which will help in improving routine immunization along with eradication of Polio. More incentives and clear service structure for vaccinators will raise the motivation among the EPI staff. The budgetary constraints must be overcome by involving all stakeholders both foreign and local. Public and private sector must work hand in hand to achieve the goal. Lastly, political will and support is mandatory to sustain the efforts of EPI (JPMA 58:64;2008).

Introduction

Immunization is the most cost-effective public health intervention that has had the greatest impact on health of the people. Every year millions of children around the globe are saved from illness or death because of vaccines. However, in spite of the availability of low cost vaccines, it is extremely tragic that almost two million children still die each year from vaccine preventable diseases; and more than 90, 000 children suffer from paralytic Polio that could have been prevented by administration of two drops of oral Polio vaccine.[1] The Expanded Programme on Immunization was initiated by the World Health Organization (WHO) in 1974 when less than 5% of the world's children were immunized during their first year of life against six diseases (Diphtheria, Tetanus, Pertussis, Polio, Measles, and Tuberculosis).[2] In 1988, World Health Assembly passed the resolution of global polio eradication by 2000.[3] Though international agencies such as the WHO and UNICEF promote global immunization drives and policies, the success of an immunization programme in any country depends more upon local realities and national policies.

In Pakistan, Expanded Programme of Immunization was started in the year 1978 with the ultimate objective of reduction in morbidity and mortality caused by six vaccine preventable diseases.[4] In addition, vaccination against Hepatitis B was included in EPI in July 2001. In 1980, Polio 3 coverage was just 2% which was increased to 54% by 1990. Onwards, progress was not encouraging, despite all the donor attention and investment. Pakistan could show only 58% coverage for Polio 3 in year 2000.[1,5] Thereafter, initiative of National Immunization days (NIDs) had rather a mixed impact on overall immunization coverage.[6] Government increased budget allocations to EPI due to donor withdrawal and thus coverage began to improve again from 1998 onwards with little fluctuations among the years. Besides, national immunization days, mass immunization campaigns have also gained great deal of acceptance in the communities.[7] However, after the lapse of 26 years, mortality from the vaccine preventable diseases is still high. Among various core reasons, most commonly observed are the lack of motivation of EPI staff, absence of vaccinators and inconvenient place of immunization and problems with cold chain.[8,9] Community perspective related to issues of EPI coverage in Sindh has been captured through different studies.[10] A number of evaluations of the Expanded Programme on Immunization (EPI) have also been carried out to identify the knowledge, attitude and practice of population.[11] Mass immunization campaigns though increase awareness about vaccination are not as cost-effective for raising coverage as the delivery of vaccines through routine services.[12,13]

The objectives of this qualitative study were threefold: to understand the issues in routine coverage; to explore perceived barriers that are present to achieve the required target; and to identify practical measures that may be taken to eliminate these constraints.

Methodology

A qualitative study was conducted, using focus group discussions and key informant interviews in order to understand health managers' and providers' perspective regarding the programme. Three Executive District Officers (Health), 1 Town Health Officer, 3 Paediatricians, 5 Doctors, 7 Vaccinators, 5 Lady Health Visitors and 15 Lady Health Workers of three districts of rural Sindh and one town of Karachi were interviewed. All participants for FGDs were recruited based on convenient sampling and availability to participate in the discussions. Relevant policy and EPI programme related documents were also reviewed where available. The study was conducted in districts Nawabshah, Sanghar and Mirpurkhas and Malir Town in Karachi city, from July to September 2005. All individual interviews and focus group discussions were audio taped and transcribed into verbatim notes. A qualitative data analysis delivered the following thematic results.

Results

Outreach capacity of vaccinators: The participants highlighted the issue of mobility of the vaccination teams to access the far-flung areas for vaccination, due to which many pockets of population go undetected. "We cannot achieve the target because most of our assigned communities can't be reached by foot; there must be motorcycles for vaccinators". The health managers also stressed the need for solving all issues related to vaccinators' mobility and motivation through offering extra incentives from the funds available under Sindh Devolved Social Services Program (SDSSP) of Government of Sindh.

Service structure of EPI staff: All the participants showed a great deal of dissatisfaction over the incentives, allowances and the overall service structure in the department. "I was only once given a bicycle allowance in my 20 years of service", a male vaccinator informed. Lady vaccinators talking about the service structure mentioned, "I was appointed in grade 5 and I am still serving on same position since the last 20 years. I think that I will retire at the same". Many vacant positions exist both at tehsil and district level. "Vaccinators are working very hard in health department, but instead of offering incentives for performance we are rather intimidated by either stopping or delaying our salaries", reflect the EPI personnel.

Attitude of doctors in health facilities: It was a common complaint that the health facility doctors neither refer the children for vaccination to the EPI centre nor welcome any EPI activity at their health centres. "Facility-based doctors are not taking requisite interest. They feel that they are merely to see the patients and to look after the facility only. They pay very little attention towards routine immunization activities", cites a district health officer. The role of paediatrician cannot be ignored and most of the participants did recognize it. However, the trend is that paediatricians do not refer the eligible children to EPI centres. "They supply routine vaccination from their private clinics but with no record maintenance", narrated one participant.

Private sector involvement: It is a gigantic task for public sector alone to reach all the children in a huge populous country like Pakistan. Therefore, it is very important to involve private sector in providing routine immunization services. One of the senior district officer, said "The private hospitals and clinics must be first brought under the government regulations by registration and formal memorandum of understanding, in order to keep check and monitoring system on their performance".

Involvement of Lady Health Workers: The National Programme for Family Planning & Primary Health Care recruits Lady Health Workers (LHWs), who have a minimum of 8 years of school education and are residents of the village they serve. They are trained for 15 months covering topics of essential maternal and child health and family planning services, management of common ailments and health education for the general population. Each LHW has to serve approximately 1000 individuals, delivering door to door services including Direct Observation Therapy Short Course (DOTS) for tuberculosis. Everybody was appreciative of their potential role that they can play in polio eradication campaign and suggested that, "If we formally train and involve LHWs, it will give us tremendous results". During FGD with LHWs, it was narrated by participants that they are cooperating with vaccinators in certain areas and these areas have higher immunization coverage.

Political interference in EPI staff management: Political influences regarding appointments and postings of vaccinators, and absenteeism among the staff who are politically supported, was generally raised as a serious concern. In one district during FGD, participants expressed apprehension over the poor performance of vaccinator of their catchment area. "In our area, the vaccinators come after every six months; even then they are not carrying immunization cards". The health managers were also very critical of the political pressures and wanted authority to deal with the matters related to appointments and postings of EPI staff. "The district officers should be given full power to deal with the absentee vaccinators and powers to take action against them without any political pressure".

Effects of NIDs on routine immunization: A collective feeling was that the NIDs have a detrimental effect on routine immunization because it keeps the vaccinators busy at least one week before and one week after the NIDs in which they only concentrate on polio vaccination and the campaign related arrangements. Particularly, in rural areas, routine immunization comes to naught during NIDs. "The vaccinators are unable to carry routine immunization because of the additional responsibility entrusted during NIDs for covering 150-200 children in one day, door-marking, record keeping in tally-sheets, locating and marking the missing children etc". According to them the work of routine immunization suffers because their vaccinators remain engaged in pre campaign (team selection/training, social mobilization, banners/posters pasting, polio walk, vaccine collection and distribution), campaign (Polio vaccination, monitoring and facilitating of teams) and post campaign activities (catch up and submission of reports).

Discussion

It is a hard fact that polio cases re-emergence in countries where it was eradicated or near to be eradicated. This is mainly due to the weak routine immunization.[1] Pakistan's case has not been very different. Very few studies reflect managers' or providers' perspective on EPI per se.[10,12] The present study identified the factors associated with issues in routine immunization of EPI in Sindh as perceived by the health managers and service providers. Activities in routine EPI coverage have been suffering due to NIDs without substantially contributing to the overall programme.[6] In our setting too, the constraints in the coverage of routine immunization according to the health managers and providers is mainly due to continuous NIDs rounds. However, government is committed to continue NIDs to keep on improving the vaccine coverage and till the certification of WHO.[14] Nonetheless, NIDs are publicised through widespread mass awareness campaigns. Studies have shown that EPI administration can be improved through mass campaigns but it necessitates strengthening of health systems, enhanced political commitment and raising awareness among the masses.[7,11] Health managers were suggestive of increasing the duration of one round of NID with mandatory routine vaccination along with polio vaccine. This endeavour may turn cost effective and would provide an extra opportunity to do routine vaccination as well. The restricted mobility of vaccinators is the main constraint leading to poor coverage because of the remoteness of some population pockets in Sindh. Even in

urban areas, at least a bicycle is needed to cover the allotted area. Lack of motivation of the vaccinators has been another constraint which is directly linked with low salaries and improper service structure. Sindh Devolved Social Services Program (SDSSP) of Government of Sindh funds can be used for provision of conveyance for the vaccinators, and for establishing new EPI centres, to facilitate the physical access of the EPI services.[15] National programme guidelines explicitly articulate that 'Health Houses' of LHWs may act as vaccination sites where LHWs will assist the vaccinators in provision of immunization services through arranging the immunization sessions and necessary social mobilization.[16] Involvement of LHWs can make a difference in terms of vaccine coverage.[17] This study observed that in areas where health managers have developed an immunization coverage plan for vaccinators in collaboration with LHWs, a positive effect on coverage rate was noticed. Cooperation of the health care facility doctors has been largely criticized, who can play a vital role by screening the children for routine immunization before prescribing medicine. The facility doctors could also be involved in monitoring of the EPI field activities. Similarly the role of paediatricians was observed as untapped for both routine vaccination and social mobilization. Bureaucratic and political hurdles seem to have widened social inequities particularly in EPI coverage.[18] This study also indicated to minimize the political interference and to empower the health managers for the real success of the programme. The district governments must engage political parties in a dialogue to instigate a strong political will to eradicate the disease from the country. The trainings, logistic and social mobilization programme of polio can be used for measles and hepatitis which will be cost effective and help in strengthening the routine immunization. This innovative approach will encourage improving routine immunization which is backbone of any EPI. Another common problem in urban setting is lack of trust on the quality of vaccine supply by public sector due to which people usually prefer to go to the private sector for immunization services. Involving private sector has demonstrated resolving of issues pertaining to geographic accessibility, consumers' confidence and quality of services.[19] This study recommended that government must consider formulating a policy to register the private sector hospitals, maternity homes and clinics to provide routine immunization in cooperation with national immunization programme.

The road map to implement and achieve millennium development goals on child mortality emphasize on the fundamental role of immunization.[20] Government of Pakistan with all its commitments, finances only 61% of the total immunization expenditure.[21]

Conclusion

This small scale study, though with limitations, has highlighted various bottlenecks in the EPI and pleads some bold and innovative steps needed to overcome all constraints.

References

1. World Health Organization. State of the World's Vaccines and Immunization. Geneva: 2002.
2. World Health Organization. Expanded Programme on Immunization. Immunization policy: global programme for vaccines and immunization. Geneva: 1996. (WHOGPV/GEN/95.03 Rev.1).
3. World Health Organization. Global eradication of poliomyelitis by the year 2000. World Health Assembly. Resolution no. 41.28. Geneva: 1988.
4. Ali SZ. Health for all in Pakistan: achievements, strategies and challenges. East Mediterr Health J 2000; 6:832-7.
5. Expanded Programme on Immunization. Financial Sustainability Plan 2003-2012. Federal EPI/CDD Cell, National Institute of Health. Ministry of Health, Government of Pakistan. Islamabad: 2003.
6. Hong R, Banta JE. Effects of extra immunization efforts on routine immunization at district level in Pakistan. East Mediterr Health J 2005; 11:745-52.
7. Khan MI, Ochiai RL, Hamza HB, Sahito SM, Habib MA, Soofi SB et al. Lessons and implications from a mass immunization campaign in squatter settlements of Karachi, Pakistan: an experience from a cluster-randomized double-blinded vaccine trial. Trials 2006; 7:17.
8. Ahmad N, Akhtar T, Roghani MT, Ilyas HM, Ahmad M. Immunization coverage in three districts of North West Frontier Province (NWFP). J Pak Med Assoc 1999; 49:301-5.
9. Provincial EPI Directorate. Expanded Programme of Immunization: Logistics Inventory. Department of Health, Punjab: 2000.
10. Mansuri FA, Baig LA. Assessment of immunization service in perspective of both the recipients and the providers: a reflection from focus group discussions. J Ayub Med Coll Abbottabad 2003; 15:14-8.
11. Rafi S, Shah IA, Rao MH, Billoo AG. Expanded programme of immunization in Karachi. J Pak Med Assoc 1995; 45:34-7.
12. Dietz V, Cutts F. The use of mass immunization campaigns in expanded programme on immunization: a review of reported advantages and disadvantages. Int J Health Serv 1997; 27: 767-90.
13. Anjum Q, Omair A, Inam SNB, Ahmed Y, Usman Y, Shaikh S. Improving vaccination status of children under five through health education. J Pak Med Assoc 2004; 54: 610-3.
14. Health policy for the province of Sindh 2005. Paving the way for health sector reform. Health Department. Government of Sindh, 2005.
15. Program Support Unit. Guidelines for Annual Sector Plan: Health Sector. Sindh Development Social Services Program. Finance Department, Government of Sindh 2005.
16. Ministry of Health. National EPI policy and strategic guidelines. Government of Pakistan, Islamabad: 2005.
17. Loevinsohn B, Hong R, Gauri V. Will more inputs improve the delivery of health services?: Analysis of district vaccination coverage in Pakistan. Int J Health Plann Manage 2006; 21: 45-54.
18. Bonu S, Rani M, Baker T. The impact of national polio immunization campaign on levels and equity in immunization coverage: evidence from rural North India. Soc Sci Med 2003; 57:1807-19.
19. Shaikh BT. Quality of care: an absolute necessity of patient's satisfaction. J Pak Med Assoc 2005; 55: 515-6.
20. United Nations. General Assembly 56th session. Road map towards the implementation of the United Nations Millennium Declaration; report of the Secretary-General. New York: 2001. URL http://www.un.org/milleniumgoals/index.html. [accessed on 4th September, 2006]
21. UNICEF & World Health Organization. Immunization summary 2006. New York: 2006.