

Emergency maternal and child health training courses and advocacy to achieve Millennium Development Goals in a poorly resourced country; challenges and opportunities

Assad Hafeez,¹ Shamsa Zafar,² Farrukh Qureshi,³ Irfan Mirza,⁴ Khalif Bile,⁵ David P Southall⁶

National Program for Family Planning & Primary Health Care, Federal Ministry of Health, Islamabad,¹ Child Advocacy International, Pakistan,^{2,3} SIMS Lahore,⁴ WHO Country Director Pakistan,⁵ Honorary Medical Director CAI, UK⁶

Abstract

Our three years' experience of Essential Surgical Skills-Emergency Maternal and Child Health (ESS-EMCH) Programme in Pakistan suggests that despite a compromised healthcare delivery system, a tangible improvement in the management of emergencies in pregnancy, the neonate and children can be achieved by adopting a novel but robust mechanism of effective advocacy along with provision of innovative, evidence based and high quality training for healthcare staff.

Introduction

There is growing international awareness of the need to provide accessible EMCH in the poorly resourced countries. In these countries, one woman in sixteen may die of pregnancy-related complications compared to one in 2800 in developed countries.¹ More than 10 million children younger than 5 years of age die every year all over the world.² Half of these deaths occur in only six countries and Pakistan ranks number 4 in this list.³

In Pakistan the Infant Mortality Rate (78 per 1000),⁴ Under-five Mortality Rate (98 per 1000)⁴ and Maternal Mortality Rate (400 per 100,000)⁴ are alarmingly high and are not showing the desired decline. Reducing maternal and child mortality by 2015 is part of the Millennium Development Goals (MDGs) set forth by the international community and endorsed by the Government of Pakistan, by virtue of which we are committed to reach the stated targets in the next 8 years.⁵ The 'three delays' in the management of emergencies and trauma in mothers are internationally recognized.⁶ One of these, is lack of training in handling emergencies. This, can be addressed by training of the emergency caregivers, which will sharpen their skills and promote the development of efficient teams.

This article draws upon our experience in the development and implementation of a programme for poorly resourced countries, in which the maternal, neonatal and child health components of emergency care were combined.

In the year 2000, Child Advocacy International (CAI),

the provincial health department of the North West Frontier Province (NWFP) and the United Nations High Commission for Refugees (UNHCR), working in refugee camps for families from Afghanistan reported their experience in training frontline health workers by combining maternal and paediatric components and the development of linkages between primary, secondary and tertiary care facilities.⁷ These experiences, along with support from the Essential Surgical Skills Department of WHO in Geneva, led to the inception of the ESS-EMCH (Essential Surgical Skills with emphasis on Emergency Maternal and Child Health) programme. This programme/movement was initially designed for Pakistan, with a view subsequently to replicating it in other developing countries. ESS-EMCH programme has 6 main components and was started in Pakistan in 2004.

1. Training in the early and effective management of emergencies for all health workers in the community, health centers and hospitals.

2. Advocacy to seek continuous and sustainable provision of essential drugs and medical supplies by local Government departments.

3. Provision of essential basic emergency equipment in each hospital and inexpensive renovation to ensure cleanliness, safety and efficiency.

4. Integration of hospital and community care.

5. Training of nurses and doctors to become trainers and ensure sustainability through internationally recognized Generic Instructor Course (GIC).

6. Evaluation, including logbooks, detailing every instance of resuscitation undertaken by trained providers.

The training component of the programme targeted life-threatening emergencies in maternal, neonatal and child health, prevalent in a poor country. Such conditions require immediate resuscitation and timely specific management.⁸ The approach was to combine international expertise with local wisdom and to tailor the programme according to the indigenous conditions of Pakistan.

The contents of the training part of the programme

were based on training methodologies adopted for internationally certified courses in maternal and child health, run by the Advanced Life Support Group (ALSG) of UK including the Advanced Paediatric Life Support (APLS) and Management of Obstetrics Emergency and Trauma (MOET) courses.⁹⁻¹¹ A team of internationally renowned educators designed the curriculum of these structured ESS-EMCH trainings and local experts (surgeons, anaesthetists, obstetricians and paediatricians) having extensive experience in the field of emergency management, modified and adapted it according to the requirements of Pakistan. The resulting programme was scrutinized by the ALSG and recommendations were added to make it compatible with international guidelines. A provider and a reference manual were prepared deriving the evidence base from international guidelines. The training materials included slides, handouts, transparencies and display algorithms (pathways of care).

After the preparation of the training tools, the logistics for the training, including training equipment, venue, transportation, and human resources, were developed. The target audience, mainly from primary and secondary health care settings were identified and nominated with the help of local health authorities. The programme was piloted in Pakistan in 2004 in Gujranwala district.

Implementation Strategy:

A core team of ALSG accredited instructors from Pakistan was established, who helped develop the programme strategy. This team, was tasked to implement the programme as a public-private partnership.¹² CAI UK and CAI Pakistan were responsible for the implementation of the programme. ALSG was the certifying authority to ensure quality control, World Health Organization Pakistan (WHO) provided technical support and the Federal Ministry of Health (MoH) provided the ownership and stewardship for the initiative. Linkages were developed with provincial health departments, academic institutions, professional bodies and civil society organizations directly and indirectly involved in maternal and child healthcare delivery systems at the district level. It was felt that advocacy and lobbying with the relevant stakeholders, including policy makers at all the tiers, was necessary for successful working of the programme.

Subcommittees were formed and local providers were trained by ALSG. Following Generic Instructor Courses, locally qualified master trainers from Pakistan (ALSG accredited Instructors) were developed and these volunteers further developed and cascaded the training to more emergency care providers throughout Pakistan. In this trickle down process quality was achieved through a continuous monitoring mechanism by UK based ALSG international volunteer instructors. Pilot districts to implement the

programme were carefully chosen keeping in mind the diversity in Pakistan's geopolitical environment and healthcare requirements. The local key players in the districts were identified and consulted before the process. These included the senior health managers, clinicians, public health personal, district management teams, politicians and others.

Implementation of the programme required immaculate logistic support from a team comprising coordinator, financial manager and logistic assistants.

Evaluation remained an inbuilt essential component of the programme to monitor the short term and long-term impact. This included a system of feedback from participants and facilitators, to improve upon the subsequent training courses. The intermediate impact of trainings was also evaluated two years down the line by combining multiple evaluation strategies in the form of a methodological triangulation.¹³ The results of this evaluation are being presented in a series of subsequent publications.

Ingredients of success:

The programme was introduced in the Pakistan healthcare system at a time when devolution was taking place and proved challenging.

The major contributor to the success of this project was the passion and enthusiasm of a team of highly motivated and committed volunteer instructors. Care was taken to make their visits to each teaching venue comfortable; and recreational trips and social meetings were arranged whenever time permitted. Traditionally the training organized in the health sector were undertaken at central venues inviting people from different provinces to congregate. The ESS-EMCH programme however, provided training in or near their place of work.

Advocacy at all levels of governance, both in the health and social sectors, was required to counter resistance and enhance acceptability. Lobbying with the district health care systems was essential and helped in the organization of training. Local political figures were involved in the planning.

Another major strength of the programme was the international partnership and certification by ALSG. This created an additional incentive for health workers. Monetary incentive for participants was discouraged. Contrary to concerns, that this could result in a decline in attendance, it helped to produce enthusiastic and motivated participants.

The programme's strength also came from its course content and teaching methodology, adopted from the MOET and APLS courses. This methodology includes lectures for emphasizing key points, workshops and closed discussions to optimize learning by active involvement of the learners,

scenario teaching to create a "near-real life" situation experience and skills teaching to provide hands-on training in practical skills.

A continuing inbuilt evaluation system for the candidates helped in outcome-oriented learning. An evaluation based upon individually held log-books documenting each resuscitation undertaken to assess the use of the skills taught in the workplace helped in improving the course content.

Another major contributor to the success of the programme was quality control, for which ALSG devised a monitoring system. The course content, teaching methodology and organization were all standardized. The appraisal of the trainers was also part of the evaluation system.

The course addressed the training requirements of health workers directly involved in treating emergencies. The programme helped to fill the gaps in their knowledge and brought the participants abreast with the recent modifications and developments in emergency care protocols. This increased the morale of the health workers as they found it applicable to their situation. The role of volunteer instructors in the success of the programme cannot be over-emphasized. They acted as role models in their dedication, discipline and supportive behavior.

By February 2008, meticulous programme planning and continuous advocacy at grass-roots level has helped to develop a workforce of more than 3000 health workers skilled in Emergency Life Support (following 1 day courses) and in ESS-EMCH (5 day courses), APLS or MOET (3 day courses). There is now a local volunteer instructor base of 60 health professionals willing to dedicate their time to expand these trainings across the country.

Challenges:

The major challenge was to revive a bungling emergency health-care system. There was no specified team approach to manage emergencies, the essential equipment and drugs such as oxygen were frequently not available and the morale of the frontline health workers was low. Pakistan's district governance systems were in a phase of devolution and increasing costs and funding constraints were not easy to overcome.

Disassociating from a previously built-in culture of providing monetary incentive to health workers was not an easy decision. We believe such incentives bring many people in competition for enrollment that are neither motivated nor committed to bring about change. There was some resentment initially, but our decision proved to be a step in the right direction as the programme started gaining popularity and authenticity over a short time period.

Meaningful evaluation of the short and long term outcomes of the course was required, for which we needed resources and planning. Since it was a new intervention and the methodology was still evolving, there were some teething problems. However an evaluation methodology has been developed.¹³

For the training to have meaning and be properly utilized, it was necessary to ensure a sustainable supply of basic inexpensive life saving equipment, essential emergency drugs and supplies to the health centers. This component was also highlighted in the feedback from the participants. We held meetings and discussed this issue with the district health authorities who expressed their commitment to ensure supplies. Moreover initiation of demand by the health workers was also emphasized, which proved fruitful. For example, in the provision of certain medicines such as magnesium sulfate for eclampsia and misoprostol for post partum haemorrhage.

Though all instructors are committed volunteers, it was necessary not to overtax this invaluable resource. Not only was it necessary to provide some form of compensation, it was also considered necessary to expand the instructor pool in order to limit their input to a manageable duration of 5-10 days per year. It was encouraging to find instructors willing to teach on courses at very short notice.

Conclusion

Our experience with the ESS-EMCH programme has highlighted the fact that a programme for skill-based training together with the provision of essential equipment, drugs and medical supplies in managing emergencies in pregnancy, the newborn and child is feasible and viable in countries with under-resourced healthcare systems. A dedicated core team, a robust training methodology for imparting emergency management skills, quality control with international certification, provision of trainings at the doorstep, linking-up of public-private stakeholders and planned advocacy and lobbying were the main ingredients of success.

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