Title: Health Systems Strengthening in district Battagram, Pakistan (2008-2011) – A case study

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1. Context (country and area where the intervention was initiated and 'intervention level')

The World Health Report 2000 highlighted the significance of health system strengthening (HSS) as a cornerstone in achieving desired health outcomes.[i] A strategic shift from disease-specific vertical interventions to strengthening health systems is yet to fully cascade in to planning and implementation in Pakistan[ii]; a disaster prone country with complex geo-political profile, obvious disease burden and is currently off track to meet the health millennium development goals.[iii]

A devastating earthquake hit the northern parts of Pakistan in 2005[iv] and Save the Children (SC) initiated a humanitarian response in the Battagram district in northern Pakistan, where 33 out of 42 health facilities were totally damaged and local government system including the District Health Office was inundated. The humanitarian response was transitioned in early 2008 to a HSS project titled Revitalizing Primary Health Care (PHC) in Battagram based on a Public Private Partnership model, with funding from the World Bank's Japan Social Development Fund (JSDF). Through a tripartite agreement between SC, Department of Health, Khyber Pakhtunkhwa (DoH, KP) and District Government Battagram, all salary and non-salary health budget of the district was transferred to Save the Children as a one line item for revitalizing provision of PHC services across the district for a period of three years. Additional costs required for revitalizing the PHC, were covered by the JSDF grant from World Bank. The intervention overlapped between District and Community levels.

A Baseline Survey[v] revealed that for 60% respondents preferred seeking health care at a private health facility while only 37% preferred the public facility. Only 33% of women received antenatal care (ANC) during their last pregnancy and 67% of the births had taken place at home - among these, 98% were attended by an unskilled birth attendant. Only 10% of children under 2 were fully immunized and 28% of mothers received Tetanus Toxoid vaccination in their last pregnancy.

2. Brief description of the intervention

Save the Children revitalized facility based services at 13 public health facilities.[vi] A hub approach was used to link the rehabilitated public health facilities.[vii] Each hub was staffed with 5 physicians including 2 female doctors and was equipped to provide a referral services including basic Emergency Obstetric and Newborn Care and 24 hour emergency services. Ambulances were made available for referrals to secondary and tertiary facilities. All health facilities were made functional through provision of equipment, medical supplies, and staff.[viii] A total of 399 health workers from DoH and SC were trained in technical areas[ix], including Integrated Management of Neonatal and Childhood Illnesses (IMNCI)

and Immunizations. Health workers were also trained on effective management of health services including monitoring and supervision, and implementation of the Health Information and Management System (HMIS). SC also supported setup of a Medicine Logistics Management Information Systems (MLMIS) whereby software and tools were developed and DoH staff was trained.

The project introduced a system of performance based incentives (PBI); PHC facility staff was assessed against the targets sets using the monthly health management information system (HMIS). In addition, joint supervisory visits (DoH and SC) were carried out and each health facility was scored on the quality of care provided.

Save the Children strengthened the capacity of the district health management team (DHMT) on district annual planning and budgeting and on use of information for effective planning. DHMT chaired by District Coordination Officer (DCO) met bimonthly to review the programmatic and financial progress, HMIS findings and resolve operational issues.

3. Brief description and reflection on the challenges encountered

Acceptance of an international agency (SC) managing the government health staff was initially low, but this improved later on due to improvement in working conditions, benefits to staff and PBI for health facilities.

Low literacy rate and conservative local culture prevented women from delivering at facilities, and this was overcome by deploying female doctors and midwives in health centers. It has however been challenging to integrate the PBI mechanisms and nutrition services into the PHC system.

The ongoing conflict in the KP province has been another challenge, due to which the district remained highly volatile and insecure during the project period. Weather conditions in Battagram remained extremely harsh during winter season, often resulting in disruption of communications and supplies.

4. Evidence of impact of intervention on health and health system

The Battagram project was geared towards improving the governance of the district health system. A Mid-term Review concluded that Save the Children succeeded in effectively establishing a public private partnership in the district, strengthened existing systems and revitalized services resulting in improved range and quality, and increased utilization of PHC services in the project district. There was a considerable improvement in health governance, reflected by improvement in human resource management and capacity, improvement in health workers' retention and reduction in absenteeism, and effective use of information management systems (HMIS and MLMIS) for district annual planning. [x]

Save the Children commissioned three independent evaluations including an end-line household survey, assessment of the health facilities, and impact of performance based incentive on performance of health facilities. The evaluations concluded that the PHC project in Battagram had contributed significantly to rebuilding district health services at the cost of less than USD 4.5 per capita.[xixii] During the project life the HMIS reporting compliance increased from 25% in 2007 to 96% in 2010. PBI was seen as being objective and as rewarding[xiii] and helped improve the performance of the health facility as a unit.

Public Health Facility preference markedly improved from 37 % at the time of project baseline to 86% at the time of end-line study because of availability of female staff, equipment and medicines, and quality of care provided.[xiv] ANC coverage was 33% at the baseline and increased to 63% at the end-line assessment. An evident shift (from 33% to 50%) was found from home to hospital based deliveries. Tetanus toxoid vaccination for women 15-49 year old has also doubled over the project period (from 30% to 63%). A significant increase from 10% to 76% was seen in children 12-23 months who were fully immunized in the district.

An assessment by Oxford Policy Management (OPM)[xv] found that performance based incentives improved the performance of health facilities as a whole, because a points based performance system was used for grading facilities and staff encouraged positive behaviors and teamwork. While the PBI have not been included in the district health budget, the DoH increased staff salaries by 20% in order to improve staff performance.[xvi]

Save the Children supported village health committees have continued their work on awareness raising and mobilizing communities on health-seeking behaviors. These link the communities to BHUs and have resulted in improvement of demand and utilization of PHC services. **Error! Bookmark not defined.** Comparison of HMIS data from the last year of the project and the first two quarters post-intervention (in the absence of donor funding) reveals almost similar figures on coverage and utilization; such as Skilled deliveries (514/549), fully immunized children (1031/1077), ANC1 visits (1305/1312), family planning services (775/918) and average monthly OPD (32440/25936).

From a health system perspective, all SC supported posts have now been budgeted by district health department in its annual budget. The DHMT is functioning well, with active participation from the Department of Finance and law enforcing agencies, making the group more viable. Post-intervention, the DHMT has carried on its duties and conducted bimonthly meetings. Moreover, SC-supported HMIS and MLMIS systems have continued to perform well in the post-intervention period. The computerized system has been easier to use, and frequent refresher trainings and discipline in reporting for 3 years has contributed to improving staff habits, resulting in regular monthly reporting.**Error! Bookmark not defined.**

The project was initiated in an already fragile setting as an emergency response, and transitioned from humanitarian health service delivery to district health systems strengthening, in order to ensure an improved capacity of the district to deliver quality health services in the longer term. The conflict was superadded on this setting and due to the complex nature of association between service delivery, state building and peace building, we are unable to ascertain the impact on conflict transformation or our attribution to it, at this stage.

5. Other relevant information

The Battagram HSS project was undertaken on the initiative of the provincial government and its development impact has been significant.[xvii] The available data point to substantial improvement in utilization of PHC services.[xviii] As opposed to the planned exit, the government has requested SC to retain the management responsibilities for another 5 years as part of contracting out of PHC services with funding from Multi Donor Trust Fund

(MDTF) through the World Bank. The DoH, KP intends to scale up this model with MDTF support in five conflict affected districts in line with Battagram model of public-private-partnership.[xix] Battagram considered to be one of the poorest performing districts by Provincial Health Department in pre-earthquake era[xx] has now acquired the status of an innovative health model, which is being taught in a PG Certificate course on HRH at the national Health Services Academy in Islamabad, in collaboration with the Queen Margret's University, UK.[xxi]

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[i] World Health Organization. World Health Report 2000 Health System
[ii] Choked Pipes. Sania Nishtar. Oxford University Press.2010
[iii] Count Down to 2015. 2012 Report
[iv] http//www.pakquake2005.com
[v] Report on baseline Survey. Revitalizing and Improving Primary Healthcare Services. Contech International Health Consultants. 2008
[vi] Buildings painted, furnished, equipments were provided. Electricity and water supply connections were put in place. These 13 health facilities were; 3 Rural Health Centers (RHCs), 8 Dispensaries, 1 Tuberculosis Centre and 1 Mother and Child Health Centre
[vii] 3 RHCs and 1 DHQ Hospital were identified as hubs and Basic Health Units (BHUs) in the catchment area were linked to these referral centers
[viii] SC helped recruit 92 health care providers including 30 doctors, 6 Women Medical Officers, 13 Medical Technicians, 8 Lady Health Visitors and 11 Expanded Program on Immunization (EPI) technicians
[ix] Report on health Facility Assessment. End Line Survey. Contech International Health Consultants. 2010
[x] Mid Term Evaluation. Mustashaar Social Development Advisors. 2009
[xi] combining project and district health expenditure
[xii] Assessment of the Performance Based Incentives and Economic Analysis of "Revitalizing and Improving Primary Healthcare in District Battagram. OPM.2010
[xiii] Paying Health Workers for Performance in District Battagram. Human Resource for Health. 2011
[xiv] Final Report. Revitalizing and Improving Primary Health Services in Battagram. APEX Consulting. 2010
[xv] Assessment of the Performance Based Incentive and Economic Analysis of "Revitalizing and Improving Primary Healthcare in Battagram. Oxford Policy Management.(OPM) October 2010
[xvi] http://app.com.pk/en_/index.php?option=com_content&task=view&id=197903&Itemid=205. (last accessed 15 August, 2012)
[xvii] Implementation Completion Memorendum (ICM). Submitted by World Bank in 2010
[xviii] Handshake: IFC quarterly journal on Public private Partnership Issue3, Oct 2011
[xix] PC1: Revitalizing and Strengthening Health Services Delivery in Crises Affected Districts of Khyber Pakhtunkhwa under Public Private Partnership
[xx] Comments by Dr. Shabina Raza. Chief HSRU, Department of Health, KP March 20,2012.
[xxi] Module-NM253