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Integrated Periodic Outreach Services (IPOS) in Humanitarian Setting

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Abstract

Background: Globally, humanitarian crises, such as armed conflict, forced displacement, and natural disasters, have immense health impacts to millions of people. The most common causes of death in children are diarrheal diseases, measles, acute respiratory infections, and malaria. Few studies showed effectiveness of interventions.

Methodology: Transform: Primary Health activity focus primarily in the areas of maternal, newborn, and child health, nutrition, family planning (FP), reproductive health (RH) RMNCH N; and malaria in 400 districts found in Ethiopia's five major regions (Amhara, Oromia, Sidama, SNNP and Tigray). Ofla woreda borders Amhara and Tigray Regions and is highly insecure due to the conflict, routine health services were discontinued. IPOS was implemented periodically. The project provided financial, technical, and vehicle support for nine days.

Results: Children received Penta, polio, PCV vaccines were 1607, Measles 588, screened for malnutrition 8498, received vitamin A 2081, deworming 3190, Pregnant women received ANC 3183, TT vaccine 22914, screened for malnutrition 3183, Women received family planning serviece 601, Children treated for diarrhea 23, for pneumonia 27, screened and treated for malaria 682.

Discussion: IPOS has wider integration than EOS (Enhanced Outreach strategy), child health days, and PIRI (Periodic Intensification of Routine Immunization). After one round, **intervention** vaccination coverage increased on average by 34%, Pentavalent 1 coverage improved from 66% to 97% (31% increase), Pentavalent 3, 31% to 53% (22% increase), MCV 2, 25% to 39% (14% increase), Deworming 34% to 89% (55% increase), Vitamin A supplementation 35% to 59% (24% increase), children screened for malnutrition 23% to 73% (50% increase), febrile children tested for malaria 6% to 42% (36% increase). Additional services were Family planning, ANC, RDT, diarrhea and pneumonia treatment.

Conclusion: IPOS improved coverage and equity of most maternal and child health services when facilities were nonfunctional or damaged.

Keywords: IPOS; MNCH; immunization

Introduction: Background

In the past two decades, Ethiopia has made significant improvement in its health system, reducing its under-five mortality rate by two-thirds, meeting the target of Millennium Development Goal (MDG4) [1]. Access to basic health services improved by expanding primary health care facilities, however, health status remains low in terms of quality and equity. The aim of HSTP II is to achieve sustainable improvement, which require new ways of delivering evidence-based interventions to meet the needs of hard-to-reach population [2]. HEP could not provide full coverage of some of the high impact child survival strategies, Hence, the Enhanced Outreach Strategy (EOS) was introduced in drought prone Woredas supported by partners, later continued through Child Health Day by the public sector. PIRI (Periodic Intensification of Routine Immunization) was introduced later. Globally, humanitarian crises, such as armed conflict forced displacement, and natural disasters, have immense acute and long-term health impacts to millions of people. Health interventions should be integrated into comprehensive approaches and strategies [3]. The most common causes of death are diarrheal diseases, measles, acute respiratory infections, and malaria. Food insecurity, crowding, poor access to water and sanitation, and stress increase susceptibility to illness. The damage and breakdown of infrastructures increases exposure to disease and diminishes opportunities for health [4]. Few studies showed effectiveness of interventions, and crucial on costs effectiveness including potential to scale up [5]. Taking previous experiences, more Integrated strategy to provide multiple health services IPOS (Integrated Periodic Outreach Strategy) was designed by Transform Primary health Care, was

successfully implemented in hard-to-reach areas, and it was also tested in conflict affected woredas.

Methodology

Transform: Primary Health activity focus primarily in the areas of maternal, newborn, and child health (MNCH); nutrition, family planning (FP), reproductive health (RH); and malaria within Ethiopia's four major regions. Ofla woreda borders Amhara and Tigray Regions and is highly insecure due to the war, routine health services were discontinued. Population of the woreda was 158,744 had 8HCs and 23 HPs, which were nonfunctional or destroyed. IPOS was implemented in this woreda. During IPOS implementation, Immunization was provided to children under one (PCV, Rota, OPV/IPV, MCV 1,2) TT provided to child-bearing age or pregnant women. ANC including iron folate supplementation for pregnant women, PNC for recently delivered ones, family planning service for women in childbearing age, screening for malnutrition of children, pregnant and lactating women, Vitamin A supplementation to children 6–59 months of age, pneumonia and diarrhea treatment, malaria diagnosis, ITN distribution, and deworming of children 24–59 months of age. Supplies and logistics prepared ahead of with estimated population, and service points. Easy-to use job aids were used. Woreda health offices were responsible for carrying out detailed micro-planning, forecasting commodity needs, developing budgets, and conducting training and supervision. Communities were mobilized through local communication. Team formation and duration of service decided by the woreda and partners, generally each team can have seven members (health workers, health extension workers, volunteers (HAD) each two, and one social mobilizer. USAID Transform Primary Health Care allocated subgrant fund for the woreda and conducted eight days long IPOS. The project also provided technical, and vehicle supports for the successful completion of the planned activity.

Results

Children and women received immunization services, screened for malnutrition, and started on treatment those whose RDT test was positive for malaria received treatment, children with diarrhea received ORS with zinc, those with pneumonia received antibiotics treatment. Most MNCH indicators brought significant improvement. Penta 1 coverage increased from 66% to 97%, Penta 3, 31 - 53%, MCV 2, 25-39%, Deworming 34%-89%, Vitamin A supplementation 35%-59%, children screened for malnutrition 23% to 73% febrile children tested for malaria 6% -42% (figure1, 2).

Figure 1: Number of children and mothers who received health services

Serviece	Number	Serviece	Number	Serviece	Number
Penta 1	673	Fully Immunized	450	Family planning	601
Penta 2	465	OPV 1	673	PW/ lactating screened	1219
Penta 3	469	< 5 malnutrition screening	8498	ANC 4	128
MCV 1	294	Dewormed	3190	< 5 treated for pneumonia	27
MCV 2	294	Vitamin A	2081	Treated for diarrhea	23
PCV 1	673	Rota 1	673	Tested for malaria	245
PCV2	465	Rota 2	465	TT1	515
PCV3	469	IPV	469	TT2	425

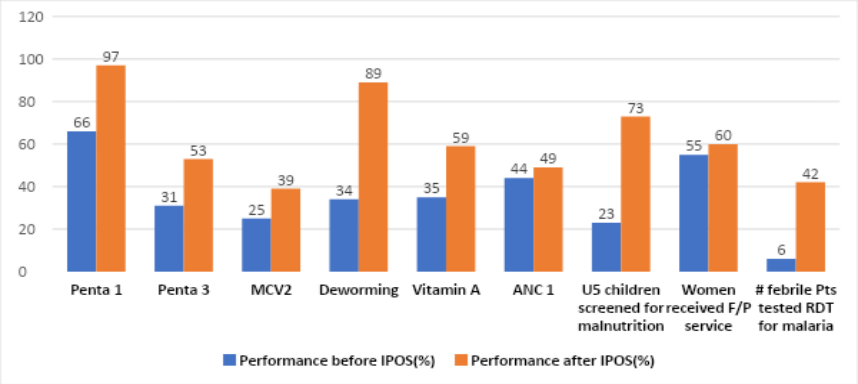

Figure 2: Changes in percentage on some indicators before and after IPOS

Discussion

IPOS has wider integration than EOS, child health days, and PIRI. After one round of activity on average by 34%, Penta 1 coverage improved from 66% to 97% (31% increase), Penta 3, 31 - 53% (22% increase), MCV 2, 25-39% (14% increase), Deworming 34%-89% (55% increase), Vitamin A supplementation 35%-59% (24% increase), children screened for malnutrition 23% to 73% (50% increase), febrile children tested for malaria 6% -42% (36% increase). Additional services were Family planning, ANC, RDT, diarrhea and pneumonia treatment. During EOS targeted children received, Vitamin A supplementation (VAS), de-worming, screening children and pregnant and lactating women for malnutrition [6]. The same activities continued through child health days by public health facilities [7]. PIRI (Periodic Intensification of Routine Immunization) strategy in EPI encourages the balanced use of both routine and campaign-style strategies to increase coverage [8]. IPOS approach also combines routine and campaign style strategy, but PIRI focuses only on EPI. IPOS can be planned and implemented with the available resources of the public sector, only minimum support is needed from partners, specifically financial and vehicle. It can be conducted two to three times a year to bring maximum effect specially in EPI.

Conclusion

In conflict affected areas IPOS improved quality and coverage of most maternal and child health services when facilities were nonfunctional or damaged.

Limitation

Woredas with limited budget may have difficulty to conduct IPOS in the absence of partner's support.

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