databases. Grey literature documents were provided by the Global Alliance for Improved Nutrition (GAIN) and retrieved from non-indexed sources such as the websites of non-governmental organizations (NGOs) and fortified food manufacturers . Outcomes included both quantitative (effectiveness) and qualitative (analysis of programs/barriers/lessons) measures. As such, our search was not restricted by study design. Inclusion criteriacapturedstudies that evaluate large scale, typically country-wide, fortification efforts in LMICs. Full text retrieval, data abstraction, and quality assessment were completed in duplicate for all studies that passed the screening process. Analysis Statistical analyses were performed using Review Manager Software version 5.3. Meta-analyses were conducted where possible.

Findings: A total of 140 quantitative studies were identified as 'included', of which 25 pertained to mass fortification with folic acid. Of these 25 studies, 14 reported a perinatal/neonatal outcome. In all cases, this referred to one or more type of NTD (spina bifida, anencephaly, or cephalocele). A meta-analysis for each outcome was conducted in order to determine to risk ratio (RR) of NTDs after folic acid fortification. When looking at total NTD rates, the combined RR was 0.65 [95% confidence intervals (CI) 0.53-0.79], demonstrating a positive association between fortification with folic acid and reduction in NTD prevalence. When examining NTD by type, this reduction in prevalence was also present. The overall RR was 0.53 [95% CI 0.42-0.66] for anencephaly, 0.67 [95% CI 0.48-0.92] for spina bifida, and 0.68 [95% CI 0.48-0.97] for cephalocele.

Interpretation: While there were some country-specific variations, the overall impact of mass food fortification led to a significant reduction in risk of NTDs when comparing pre- and post-fortification periods.

Funding: No funding listed.

Abstract #: *02ITIS005*

Quality-driven programming in global surgery: A 30-Year institutional experience delivering safe, timely and effective surgical care

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Program/Project Purpose: Basic surgical services are unavailable to the world's bottom billion, but still billions more lack access to surgical care of an adequate level of quality. Following the World Health Organization's definition of quality in service delivery, high-quality surgical services are those which are safe, timely and effective. The global community has made laudable steps towards increasing access to surgery, but achieving equity in surgical care delivery requires strengthening of quality in addition to accessibility. With this goal in mind, Operation Smile has cultivated a culture of quality for over 30 years.

Structure/Method/Design: Operation Smile is an international non-governmental organization dedicated to providing care for children affected by cleft lip and/or palate (CL/P) in low- and middle-income countries. The goal of quality in care delivery has become a central tenet of the organization, three core elements of which being the Global Standards of Care, the Medical Oversight program, and engagement with the community through local partnerships. The Global Standards of Care were developed by a consensus-based approach with stakeholders from more than 50 countries. The Medical Oversight department conducts monitoring and evaluation both in terms of surgical outcomes and patient satisfaction. Finally, national foundations and regional offices work with a network of community partners to identify and enroll children affected by CL/P into well-timed care.

Outcomes & Evaluation: The Global Standards of Care serve as the cornerstone of the organization and, while these may often be more rigorous than local guidelines, they were developed based on the concept that the highest quality of care should be available to all children born with CL/P worldwide. One key feature of these guidelines is the WHO Safe Surgery Checklist, which has been shown to reduce surgical complication rates by more than half. In regards to effectiveness, Medical Oversight team monitors program and surgical outcomes to continually ensure quality in care. Lastly, engagement with community partners has greatly expanded the organization's ability to reach individuals with CL/P in a timely manner, limiting the negative sequalae, stigma and elevated mortality risk associated with CL/P.

Going Forward: These initiatives illustrate ways in which quality has been incorporated within Operation Smile's institutional structure, however, more opportunities exist to further integrate quality improvement and delivery science methods into global surgery programmatic models, both through augmentation of existing initiatives and novel innovations. The goal of essential surgery must go beyond survival, ensuring that the procedure is both safe and delivered in a way that maximizes patient benefit. This requires surgical interventions be safe, well-timed and effective. Broader international support and action are necessary to promote equitable access to high-quality surgical care as an integral part of the human right to health.

Funding: None.

Abstract #: *02ITIS006*

A review of follow up of cervical cancer screening results in a primary health program in Cape Town, South Africa

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Program/Project Purpose: Cervical cancer is the second most common cancer among South African women, with one in 41 women developing the disease in her lifetime. South African National Cervical Cancer Screening Guidelines recommend results be returned in person within eight weeks for both abnormal and normal results. Despite these recommendations, barriers related to poor access, organization, education and availability in resource limited settings often disrupt the delivery of results and subsequent follow up and critical cancer prevention. The objective of this study was to determine if the primary heath clinics in our study population attained the recommended test result deliver and follow-up rates.

Structure/Method/Design: A retrospective log and chart review of Papanicolaou (Pap) smear results and follow up was performed in six primary healthcare clinics in one sub-district in Cape Town, South Africa. We collected data on 616 women who underwent Pap smear evaluation from January to March 2014. We collected data on the proportion of women who received their Pap smear results, the number of abnormal results, follow up, grade of abnormal Pap result and turn around time.

Outcomes & Evaluation: 616 women had a Pap smear during the study period. 10% (62/616) were abnormal, defined as HSIL (37% (23/62)), LSIL (52% (32/62)) or ASCUS 11% (7/62)). 38% (231/616) of all women who had a Pap smear received their results and had a follow up visit; this included 36%(197/554) of normal results and 55%(34/62) of abnormal results. More specifically, 83% (19/23) of women with HSIL received their results, 44% (14/32) with LSIL received their results, and 57% (4/7) with ASCUS received their results. The turn-around-time was evaluated in a subset of patients (n=199) who received their Pap results. In this study group, the average turn-around was 52.4 days post intervention.