

## GOVERNANCE/MANAGEMENT/HUMAN RIGHTS/ECONOMICS

### Awareness, implementation process and impact of a citizen's charter: A case study from a primary health care setting of Nepal

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**Background:** An informed citizenry is necessary for citizens to demand accountability from service providers. A citizen's charter is one approach intended to inform citizens about service entitlements and standards. The key assumption of a charter is to inform citizens about their rights so they can, in turn, exert pressure on service providers to improve performance. Nepal has recently implemented a charter program in its primary health care facilities. Despite some empirical findings on the effect of charters on awareness of rights and services, there is a scarcity of local literature about how charters have been implemented and their effect on health service delivery. The aim of this study is to gauge the level of awareness of the charter, explore the process of implementing it, and the perceived impact on transparency and accountability in a primary health care setting of Nepal.

**Methods:** Using a mixed methods case study design, a total of 400 service users, health facility committee members and service providers were recruited from 22 of 39 public health facilities in the Dang District. Interviewer-administered structured questionnaires were used to collect quantitative data. In addition, qualitative interviews with 39 key informants were conducted to provide more detailed and contextual information. Quantitative data were analyzed using SPSS 16; qualitative interviews were transcribed and then analyzed using QSR Nvivo 10. Ethical approval was obtained from the Human Ethics Committee of Otago University and Nepal Health Research Council, and written consent was granted by all participants.

**Findings:** There was low awareness (15%) among service users of existence of the charter. Literate respondents were more likely to be aware than illiterate (p

**Interpretation:** Poor implementation and low public awareness of the charter has limited it to a mere information tool suggesting the need for consultation with citizens in charter development. This study was limited to a single district of Nepal, but a thick description of the study context helped to provide detail of the charter implementation and its perceived effects.

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**Abstract #:** 02GMHE001

### Impact of a district-wide health center strengthening intervention on healthcare utilization in rural Rwanda: An interrupted time series analysis

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**Background:** Health systems strengthening (HSS) interventions are needed in developing countries to improve service delivery and population health, but evidence on service uptake following these interventions is limited. In 2009, Partners In Health (PIH) and the Government of Rwanda (GoR) implemented a district-wide HSS intervention in two rural districts in Rwanda over a five-year period. Following a year-long evaluation and gap analysis to assess facility readiness across the six WHO building blocks, health centers (HC) received targeted instrumental support to improve service readiness. The aim of this study is to assess whether this HC strengthening intervention led to increased facility utilization in the intervention area.

**Methods:** We used a controlled quasi-experimental design to compare healthcare utilization at HC with complete data that received the intervention (13/14) to those in other rural areas of Rwanda (131/161) following implementation of the HC strengthening intervention over a period from January 2008 to December 2012. Our control group included HC in all rural districts that reported data that was more than 80% complete over the study period. HC support included infrastructure renovation, salary support for HC staff, provision of medical equipment, referral network strengthening, and clinical training. The intervention began in June 2010 and was rolled out over a twelve month period. We obtained monthly healthcare utilization data from the national Rwandan health management information system (RH MIS). Our outcome measures were differences in the number of facility deliveries per 10,000 women per quarter, number of outpatient (OPD) visits performed per 1,000 catchment population per quarter, and the number of referrals for high risk pregnancy per 100,000 women per quarter between the intervention HCs and control HCs.

**Findings:** There was an immediate, significant increase in the number of facility deliveries per quarter (5.5/10,000, 95% CI: [0.26-10.7], p=0.0487) and trend in facility deliveries per quarter (1.1/10,000, 95% CI: [0.25-2.0], p=0.017) relative to the comparison group following the intervention. No changes were found in level or trend for OPD visits per quarter post-intervention. The trend in high risk pregnancies per quarter increased significantly following the intervention (0.8/100,000, 95% CI: [0.2-1.5], p=0.0124).

**Interpretation:** High coverage of several health service indicators in Rwanda limited our choice of variables for this analysis. Increases in facility deliveries and referrals could have resulted from emergency obstetric care trainings and the strengthening of referral systems through provision of ambulances to HC. Our intervention occurred alongside a government initiative to enroll citizens into a community-based health insurance scheme, which may have discouraged outpatient healthcare utilization over the period of study. Our findings suggest that targeted HSS can lead to increases in health service uptake.

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**Abstract #:** 02GMHE002

### Exposure to traumatic experiences among asylum seekers from Eritrea and Sudan during migration to Israel

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**Background:** The Israeli Ministry of the Interior reports that 54,580 asylum-seekers arrived in Israel through the Sinai desert between 2007 and 2013, most originating in Eritrea and Sudan. Approximately 30% of asylum-seekers who received treatment at a mental health clinic in Israel were diagnosed with PTSD. This study examines the reports of exposure to traumatic experiences among asylum-seekers en route to Israel.

**Methods:** The study took place between the fall of 2010 and the spring of 2012 at the Physicians for Human Rights Israel's (PHR-I) Open Clinic, a free clinic located in Jaffa, Israel for undocumented and uninsured people. All asylum-seekers over 18 years of age who presented for their initial visit to the Open Clinic were given the opportunity to participate in the study, and 1,044 asylum seekers (447 women, 448 men from Eritrea and 18 women, 131 men from Sudan) participated. Upon accessing services at the Open Clinic, participants were verbally consented for participation, and then interviewed in their native language by a nurse fluent in Tigrinya and Arabic about their experiences during migration. The study was approved by the Ethics Committee of PHR-I, and data collection was in compliance with human subject protocol. To identify gender and country of origin differences in dependent variables, independent samples t tests and Chi square analyses were performed for continuous and categorical variables, respectively. Analysis was performed using the SPSS version 20.0 (SPSS Inc., Chicago, IL). Bonferroni correction was applied in order to account for multiple comparisons ( $\alpha = 0.0025$ ).

**Findings:** 56% of Eritrean men, 34.9% of Eritrean women, 51.9% of Sudanese men, and 44.4% of Sudanese women reported being victims of violence, with exposure to shooting and beating being the most prevalent forms. Significantly more male than female Eritrean asylum seekers reported witnessing violence and experiencing violence themselves ( $p < 0.0001$ ,  $< 0.0001$ ). Eritreans paid more to their smugglers on average than Sudanese ( $\$3,765 \pm \$4,269$  and  $\$957 \pm \$1,633$  respectively; figures in USD). A total of  $\$3,822,760$  was paid by participants to smugglers overall.

**Interpretation:** These data demonstrate a large amount of trauma among asylum-seekers in Israel, with some variability according to gender and country of origin. Limitations include potential reporting bias, especially with respect to sexual violence, as well selection bias, as an estimated 4,000 asylum seekers have perished in Sinai in the past 5 years en route to Israel. Our data highlight the need for a coordinated international effort to improve the well-being of this vulnerable population, as well as cross-border cooperation in order to document and prevent the transgressions.

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**Abstract #:** 02GMHE003

### Estimating costs and lives saved following implementation of a community health worker delivered timed and targeted counseling approach in Palestine

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**Background:** In Jerusalem West Bank Gaza World vision implemented an Operations Research (OR) around deployment of its Timed

and Targeted Counseling (ttC) program in Palestine from 2008 through 2012. ttC is delivered by trained community health workers and provides prioritized preventive and care-seeking messages to pregnant women and mothers/caregivers of children under two at time points when the information is needed. In 2013, evaluation results were used to conduct the cost-effectiveness analysis (CEA) presented here.

**Methods:** Five interventions were included in the CEA namely exclusive breastfeeding, duration of breastfeeding beyond a year, introduction of supplemental foods at six months, danger sign recognition and use of oral rehydration therapy during diarrhea. The CEA was conducted in step-wise approach. First, the Lives Saved Tool (LiST) (<http://www.jhsph.edu/departments/international-health/centers-and-institutes/institute-for-international-programs/list/index.html>) used to estimate lives saved by each intervention separately. Using a version of this mathematical modeling software that provides error estimates, lower and upper bounds around point estimates were also calculated. Secondly, using cost data furnished from 66 study households included in the OR study over a 14-month intervention period, costing of each intervention was included in the model. The final stage of CEA was calculating ratio of cost per life saved then comparing these to WHO reference values. To provide a conservative estimate, interventions were considered independent, as if they were carried out in separate households. Estimated costs per life-year saved were discounted using a 3% rate and 5-year time horizon.

**Findings:** Assuming zero additivity of the interventions, exclusive breastfeeding was estimated to yield the greatest number of life-years saved with around 41 life-years (discounted) in the target population. The most conservative scenario yielded a cost per life-year saved of 197USD associated with the exclusive breastfeeding intervention.

**Interpretation:** Considering the total costs of the interventions, the non-additive scenario yields a cost per discounted life-year saved of 197USD, which is under the threshold of GDP per capita (1,340USD for the case of Palestine) as proposed by the WHO Macroeconomics in Health Commission as a criteria of very cost-effective intervention.

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### Assessment of the structure and activities of pharmacy and therapeutics committees of public sector hospitals, Gauteng Province, South Africa

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**Background:** The World Health Organisation (WHO) identified Pharmacy and Therapeutics Committees (PTCs) at district and hospital level as one of the pivotal models to promote rational medicines use. In South Africa, one of the objectives of the National Drug Policy (1996), was for the establishment of PTCs in all hospitals to ensure rational, efficient and cost-effective supply and use of medicines. Documentation on the functionality of PTCs in achieving this objective is limited. The study aimed to evaluate the structure, activities and medicines selection process used by public sector PTCs in Gauteng Province, as compared to WHO- and provincial guidelines.

**Methods:** An exploratory, mixed-methods study with a triangulation design was adopted. Qualitative and quantitative data were collected and analysed separately, but sequentially in three phases, with priority given to the qualitative data. Phase 1 entailed a questionnaire survey of 20 hospitals, followed by non-participatory observations of 13 PTC meetings in Phase 2. Gaps identified in the first two phases were