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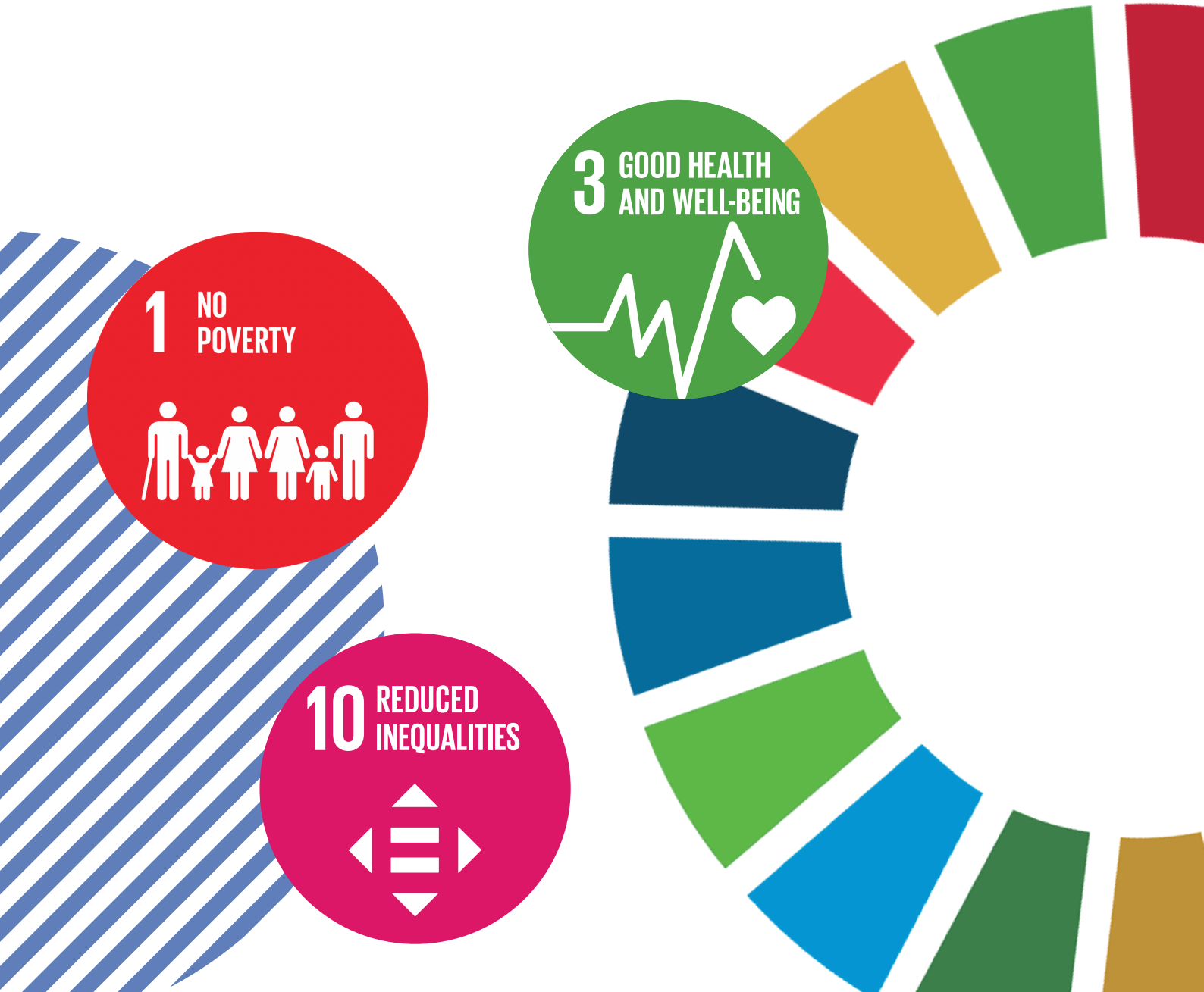

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THE FINANCIAL BURDEN OF POOR HEALTH

Catastrophic costs in rifampicin-resistant tuberculosis-affected households and their determinants in the Republic of Moldova

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The Republic of Moldova is among the 30 countries with rifampicin-resistant (RR) TB burden in the world. The system of adherence incentives is implemented in the country. We aimed to determine the proportion of TB-affected households experiencing TB-related catastrophic costs and investigate their determinants. A cross-sectional countrywide study was done among RR-TB affected households in 2016. The analysis included newly and relapsed RR-TB patients, adults (≥18 years), received TB treatment in inpatient or outpatient TB care for at least two months. TB-related catastrophic cost was considered at the threshold of ≥20% of household income. Odds ratio was selected for analysing risk factors; levels of significance were set at 5%.

Our analysis comprised 430 patients (median age 42 years, 78%-male and 55%-lived in a poor household). Of them 26% experienced TB-related catastrophic costs. The proportion (65%) of total direct TB costs was observed in inpatient care (68% - poor and 53% - non-poor TB patients). RR-TB patients lost 30% of total household income in inpatient and 70% in outpatient TB care. Unofficially employment or not employed (adjusted odds ratio (aOR) 1.9, 95%CI: 1.1-3.3), small household (aOR 2.1, 95%CI: 1.3-3.5), having an income that accounted for over 50% of total household income (aOR 2.4, 95%CI: 1.5-3.8), and poor households (aOR 2.2, 95%CI: 1.2-3.9) were identified with an association to TB-related catastrophic costs. Excluding the amounts received as adherence incentives from the measurement of TB-costs shows that the proportion of households with TB-related catastrophic costs would be 46% (197/430) among overall, 55% (131/238) in poor and 34% (66/192) in non-poor TB patients (p>0.05). The existing system of incentives, which could exert some protective effect on TB-related costs by covering some of them. More attention is needed to improve patient-centred TB care and mitigate key barriers to accessing care, especially in vulnerable groups.

Cost of care in patients with psychiatric illness in rural South India

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Background: Despite mental health illnesses bearing significant social and economic consequences globally, there is scarcity of monetary and healthcare resources to address mental health needs. In low-resource settings like India, the private sector caters to a significant proportion of healthcare, including mental healthcare, resulting in out-of-pocket expenditures. This makes optimizing mental healthcare costs a necessity. We therefore chose to assess the mental healthcare costs that patients registered at a private, not-for-profit, rural mental health service in India, incurred.

Methodology: This prospective study assessed cost-of-illness (COI) over a year in 130 patients with mental illness. The participants were aged >18years and resided in the field practice area of St. John's Medical College, Bangalore, India. Costs were assessed from patient's perspective using a modified version of the Tuberculosis Patient Cost Survey Instrument and a patient cost diary. Quality-of-life (QOL) (EQ-5D-5L, score-range: 0-100) and treatment adherence (Medication Adherence Rating Scale) were also assessed. Analysis comprised descriptive and linear regression.

Results: Overall, there were 130 person years of follow-up in the study. Of the participants, 98(75%) were women, 69(53%) literate and 61(47%) unemployed due to mental illness. The median COI/person-year was $68.83(IQR: $34.72-216.26). The mean QOL score was 58.39±22.45 (range 5-100). Overall, 94(74%) participants were adherent to medication, while 43(33%) incurred catastrophic health expenditures (CHE). Low QOL and substance abuse (chewable tobacco) were significantly associated with higher COI ($p<0.05$). COI was not associated with adherence, workplace conflicts or delays in initiating treatment due to financial constraints. Further, only 13(10%) participants received disability pension while 5(4%) had medical insurance.

Conclusion: The study informs costs that patients with mental illness incur in rural India. While these costs could lead to CHE, social protection was available to only a few. Identifying low-cost interventions that improve QOL of patients with mental illness, and address substance abuse is necessary.

Alcohol policy as catalyst for optimising health-related social protection

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Alcohol is a major, yet often disregarded, obstacle to sustainable development and a serious burden on healthcare systems. The alcohol industry is a significant vector of under-development, including social, health, environmental and economic harm that strains health systems and care services. Alcohol is in fact adversely affecting 14 of 17 Sustainable Development Goals, cutting across the entire Agenda 2030. This also means that the benefits of addressing alcohol as obstacle to development and as preventable burden on health systems are substantial in multiple policy areas. In fact, evidence shows that evidence-based alcohol prevention and control holds the potential to be real catalysts to optimise health-related social protection.

In this paper, we provide analysis to deepen the understanding of how and to what extent alcohol and the alcohol industry are hindering sustainable human development with a focus on alcohol's healthcare burden, including on individual and family levels. The aim of the paper is to discuss the evidence of concrete policy actions to solve these problems, and to outline the catalytic potential across different policy areas all adding to the optimization of health-related social protection.

In this context, the analysis explores alcohol policy effects on inequality. The analysis builds on an extensive examination of how alcohol harm affects the SDGs and links this analysis to health-related social protection - taking a health in all policies approach. This extensive examination of the harm as it pertains to health-related social protection is then contrasted with evidence about the efficacy of the alcohol policy best, especially alcohol taxation to explore the potential of catalytic effects across SDGs and to tie the analysis back to a broad conceptual understanding of health-related social protection. The analysis shows that there are three dimensions of catalytic effects of addressing alcohol harm as obstacle to the SDGs in general and health-related social protection in particular: it helps prevent and reduce health, social and economic harm that all burden social protection; it promotes health, well-being, social development and economic prosperity that all boost social protection and resilience, and it helps raise domestic resources both through increasing revenue and through reducing spending on avoidable costs.

The conclusion is that alcohol prevention and control is a vastly underutilized tool to achieve health-related social protection. This topic should be explored more, especially in low- and middle-income countries in both research and policy implementation.

Economic recovery following treatment for pulmonary TB - results from a multi-country observational cohort study in sub-Saharan Africa

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Background: Understanding the economic burden of TB on patients before, during, and after TB treatment is important to identifying appropriate social protection strategies needed to prevent poverty.

Methods: Ongoing observational cohort study among patients receiving treatment for TB through national TB programs in Mozambique, South Africa, and Tanzania. Adults (≥18 years) with drug-susceptible TB were recruited at TB treatment initiation between 09/2017-02/2020 (n=1006). An adapted version of the WHO TB Patient Cost Survey instrument was used to capture individual and household income effects and coping strategies. We report the degree of economic recovery, as proxied by employment, numbers of hours worked, and use of dissaving strategies (borrowing money, selling property, or using savings) at the start of TB treatment (0M), completion of treatment (6M), and 6 months after completion (12M).

Results: Employment and hours worked per week were low at 0M but improved with TB treatment, with the biggest change observed at 6M and limited further recovery at 12M. Consequently, some patients reported working fewer hours at 12M compared to 6M. The proportion of patients using dissaving strategies was also highest at 0M, though a third to two thirds of patients were able to repay loans during TB treatment. At 12M, the frequency of dissaving was less than 10%, but for those who did report dissaving at 12M, the monetary amounts were high in Mozambique and Tanzania. Large proportions in each country (20% Mozambique; 11% South Africa; 60% Tanzania) reported that TB had a "serious or very serious" impact on their financial status at 0M; these proportions dropped by more than half at 12M.

Conclusion: We observed a limited recovery in employment and saving after TB treatment completion. TB survivors continue to use dissaving strategies, report fewer hours worked, and feel the impact of TB on their financial status at 12M, suggesting that TB's economic impact continues well beyond treatment completion.

The household financial burden of noncommunicable diseases in low- and middle-income countries: a systematic review

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Background: The chronic nature of noncommunicable diseases (NCD) and costs associated with long-term care can result in catastrophic health expenditure for the patient and their household pushing them deeper into poverty and entrenching inequality in society. As the full financial burden of NCDs is not known, the objective of this study was to explore existing evidence on the financial burden of NCDs in low- and middle-income countries, specifically estimating the cost incurred by patients with NCDs and their households to inform the development of strategies to protect such households from catastrophic expenditure.

Methods: This systematic review followed the PRISMA guidelines, PROSPERO: CRD42019141088. Eligible studies published between 1st January 2000 to 7th May 2020 were systematically searched for in three databases: Medline, Embase and Web of Science. A two-step process, comprising of qualitative synthesis proceeded by quantitative (cost) synthesis, was followed. The mean costs are presented in 2018 USD.

Findings: 51 articles were included, out of which 41 were selected for the quantitative cost synthesis. Most of the studies were cross-sectional cost-of-illness studies, of which almost half focused on diabetes and/or conducted in South-East Asia. The average total costs per year to a patient/household in LMICs of COPD, CVD, cancers and diabetes were $7386.71, $6055.99, $3303.81, $1017.05, respectively.

Conclusion: The available evidence on costs reveals a large financial burden imposed on patients and households in seeking and receiving NCD care and emphasizes the need for adequate and reliable social protection interventions to be implemented alongside Universal Health Coverage. This review also highlighted major data and methodological gaps when collecting data on costs of NCDs to households along the cascade of care in LMICs and lack of a structured framework manifesting the costs at different stages of the cascade of care for NCDs making it difficult to capture a complete picture of the financial burden of NCDs to households across the cascade of care in low- and middle-income countries. More empirical data on cost of specific NCDs are needed to identify the diseases and contexts where social protection interventions are needed most. Rigorous and standardised methods of costing for NCDs will enable more reliable and comprehensive evidence of the economic burden of NCDs to patients and households in LMICs.

FINANCIAL PROTECTION UNDER UNIVERSAL HEALTH COVERAGE (UHC)

Tuberculosis incidence rates and their social determinants 2005-2015: an ecological analysis across 116 countries to support TB prevention

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Background: Accelerating declines in tuberculosis (TB) incidence is paramount for achieving Sustainable Development Goals and the End TB Strategy. This study identified social determinants of trends in national TB incidence rates.

Methods: The analysis took a longitudinal, country-level ecological design between 2005 and 2015. After excluding for missing data, 116 countries were included. The outcome was age- and sex-standardized TB incidence rate. Associations between national TB incidence rates and 17 indicators of material circumstances, behaviours, biological and psychosocial factors, health systems and TB programmes were estimated overall and stratified by country income group. We used univariable and multivariable Poisson regression models with country-level and year fixed effects and robust standard errors.

Results: The sample included 19 high-income (HIC), and 97 low- and middle-income countries. A decline in TB incidence rate was observed in 108/116 countries with an overall average decline of 12.96% over follow-up. Human Development Index (IRR 0.991, 95% CIs: 0.985-0.998) and health expenditure per capita (IRR 0.999 95% CIs: 0.9986-0.9999) were dominant structural determinants at socioeconomic and political level across all countries. TB case detection rate (IRR 1.002, 95% CIs: 1.001-1.0013), prevalence of undernourishment (IRR 1.002, 95% CIs: 1.0003-1.004) and prevalence of diabetes (IRR 1.007, 95% CIs: 1.001-1.014) were dominant determinants at intermediary level. Prevalence of diabetes (IRR 1.006, 95% CIs: 1.007-1.012) retained significance in the adjusted final multivariable model including structural and intermediary determinants. In stratified analysis, public social protection expenditure (IRR 0.987, 95% CIs: 0.978-0.997) was the dominant structural social determinant among HICs. Access to clean fuels and cooking technologies (IRR 0.979, 95% CIs: 0.965-0.993) was the dominant intermediary determinant in the final multivariable model among HICs.

Conclusion: Key social determinants of health influenced TB incidence trends 2005-2015. Investments in health, social protection, and broader human development to address these may accelerate future declines in TB incidence rate.

Enrolment, linkages, and gaps in Ethiopian Community Based Health Insurance: a cross-sectional study

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Background: In 2011, the government of Ethiopia piloted Community-Based Health Insurance (CBHI) in 13 rural woredas and the scheme has been expanded since then to 360 woredas as of 2017/18. Due to low enrolment in CBHI by poor and vulnerable households and fragmentation of social protection programs, the government also embarked in integrating CBHI with Productive Safety Net Program (PSNP). We examined the gaps, understandings, reasons for non-coverage and factors associated with enrolment in CBHI by PSNP households.

Methods: Data for this study come from Integrated Safety Net Program (ISNP) baseline survey in four rural woredas in Amhara region, Ethiopia. We collected cross-sectional data from 5,398 PSNP households. We used descriptive methods to characterize sample households and fitted binary logistic regression to identify factors associated with households' CBHI enrolment decisions.

Primary and secondary outcome measures: While primary outcome of the study is current enrolment in CBHI, secondary outcomes include reasons for non-coverage in CBHI.

Results: Current enrolment is higher among Public Work (PW) (70.1%) than Permanent Direct Support (PDS) clients (50.3%), and too expensive premium has been mentioned as the main reason for non-coverage in CBHI both by PW and PDS clients. Results further show that household's demographic factors such as the number of dependent household members, wealth status, income from PSNP, and perceptions and knowledge about how CBHI could nudge households' decision to join CBHI.

Conclusion and implications for future research: While demographic factors are important in decisions to enroll in CBHI, various mechanisms could be used to increase enrolment among vulnerable households. While better communications about the scheme could increase enrolment for sample households, premium subsidy and fee waiver for low income earner and most vulnerable groups could raise enrolment in CBHI. Future research may explore the pathways to increase enrollment and its impacts on health care utilization.

Social protection for health in Ecuador during the Venezuelan influx of refugees and migrants

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Background: Only 41% of the population in Ecuador have public health insurance and 41% of out-of-pocket health expenditure is destined to medication. Five million Venezuelans have emigrated in the past years, 500,000 of whom are currently in Ecuador. The government recently registered 165,000 Venezuelans in Ecuador (51% men, 49% women), of whom only 50% noted having had access to some form of health delivery.

Method: This exploratory study focused on textual analysis of policy documents and reports, aggregated secondary data on health and migration, and interviews to government officials, researchers, humanitarian response personnel from multilateral and non-governmental organizations, and Venezuelan migrants. Text was first coded inductively, then regrouped according to pre-determined themes defined in the regional umbrella research project.

Results: The official discourse, echoed by humanitarian response personnel, emphasizes the relevance of Ecuador's constitutionally enshrined right to health for all, which has largely translated into migrants having access to basic or emergency health delivery, but not to specialized or preventive care. This is similar to conditions for local and other foreign populations in the country, and exemplified in the use by Ecuadorians of 40% of the free telemedicine advice Venezuelan medical doctors in the country provided during the COVID-19 pandemic. Multilateral and non-governmental organizations provide social protection through a complex patchwork of initiatives for which there is no systematic interoperable data collection effort.

Conclusions: Limited public resources and foreign funding and interventions may have led to a convenient inaction by the government. Despite lack of free medication and adequate follow up, the network of primary level of health care delivery that is freely accessible provides a crucial form of social protection for health in Ecuador.

Integrating Social Protection and Health Financing to advance UHC in Kenya: the potential of Community-Based Health Insurance targeting vulnerable pregnant and lactating women in light of Covid-19

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UNICEF Kenya in cooperation with the County Government of Garissa commissioned a study around the overall feasibility and the potential design and implementation of an innovative model of Community-Based Health Insurance (CBHI) focusing on improving Maternal, Newborn and Child Health (MNCH) in the county of Garissa as well as in approaching UHC through the potential future link to the main public health insurance scheme of the country, the National Hospital Insurance Fund (NHIF). The main target group for this intervention are pregnant and lactating women being beneficiaries of the government-led social cash transfer schemes, comprised under the National Safety Net Programme (NSNP).

Garissa is one of the counties with the highest poverty rates and worst MNCH indicators in Kenya. The CBHI is part of a broader Primary Healthcare Pilot for maternal and perinatal survival that is being conducted in the county through support from the Bill and Melinda Gates Foundation. The envisioned CBHI model will foresee that cash top-ups are provided to vulnerable pregnant and lactating women (who are beneficiaries of the NSNP) to enable them to pay the insurance premium and access existing MNCH services.

The study - currently in its preparation phase - aims at assessing the feasibility of a CBHI, as well as suggest design features and implementation modalities to make it successful. Through KIIs and other types of interviews with stakeholders and perspective beneficiaries, and a desk review of national and international relevant practices, the study looks at willingness and ability of community members to contribute to the CBHI, specific health needs of pregnant and lactating women enrolled in the NSNP, as well as demand-side and non-medical barriers that constraint access to essential health services for the target group. The study aims at representing a case study in the literature on CBHI and health insurance, as well as contribute to existing knowledge on the links between social protection and access to health services.

SOCIAL PROTECTION POLICY TO FACILITATE ACCESS TO HEALTH CARE AND INCOME SECURITY

Referral Systems between Health Care Services and Social Protection Services in Low- and Middle-Income Countries: A scoping review

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Background: The linkage between poverty and ill-health is well established. Social protection is instrumental in protecting individuals from poverty. However, despite the existence of social protection schemes in many countries and patients being eligible for them, few receive much needed support. Establishing functioning referral systems between health care services and social protection services could help build systems better equipped to reach and target the needs of the most vulnerable. However, evidence is limited on what strategies are effective and how they can be implemented in low- and middle-income countries. Aim To determine what is known about referral systems between health care services and social protection services in low- and middle-income countries.

Methods: A scoping review was carried out following the framework developed by Arksey & O'Malley and expanded upon by Levac et al. Relevant literature were identified searching PubMed, Web of Science, CINAHL and Global Health as well as grey literature. Information was complemented by four key stakeholder interviews. Additional targeted searches on Bolsa Familia and Progresa were used to complement the searches. Studies were selected using the PRISMA ScR framework. A descriptive numerical summary was done and important results relevant to the scope were reported. Finally, a thematic analysis applying meaning to the results and an overall reflection of implications was performed.

Results: Seven articles were included covering 15 referral or collaborative projects in 10 different countries ranging from low-income to high middle-income. The projects were distributed over three continents and most focused on referral models for people living with HIV. Building on existing structures and local collaboration were identified as factors for facilitating successful referral models while lack of clear referral structures and poor communication were identified as barriers. Furthermore, successful referral models required good governance and sustainable funding to allow for resources directed towards monitoring, evaluation and follow-up of outcomes.

Conclusion: There were many collaborations/referral models identified in LMICs but the dearth of published literature on mechanism utilized and what factors may potentially facilitate or impede their success limits the possibility of drawing broad transferable conclusions. Future research should focus on recording and evaluating the referral models of already existing multi-sectoral programs and assert the effectiveness of linking social protection services and health care services in reaching vulnerable populations to create models for best practice.

Effects of a 'cash plus' adolescent-focused health and livelihood intervention on mental health: evidence from a cluster-randomized control trial

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Background: Depression causes the largest burden of disease among adolescents globally, with poor populations at the highest risk. The aim of this study is to evaluate the impacts of an adolescent-focused livelihood and sexual and reproductive health pilot intervention on depressive symptoms among Tanzanian adolescents who live in households benefiting from Tanzania's flagship social protection programme.

Methods: This study uses a cluster randomized controlled trial design (n=130 communities) to evaluate the effects 12- and 24-months post-intervention on depressive symptomology (⩾10 on the 10-item Center for Epidemiological Studies Depression Scale). We estimated intent-to-treat impacts on depressive symptoms as well as outcomes representing potential pathways of impact using Analysis of Covariance models, adjusting for youth characteristics (including outcome at baseline) and community-level clustering (via multilevel models).

Results: Among the 1933 panel youth eligible, the intervention reduced the rate of depressive symptomology for the full sample (adjusted odds ratio 0.69 [95% CI 0.55-0.88]), as well as for males (aOR 0.72 [95% CI 0.51-1.02]), and females (aOR 0.57 [95% CI 0.39-0.83]), separately. When examining potential pathways of impact, we found positive impacts on self-esteem, a negative effect on school attendance concentrated among youth engaged in both paid work and education, but no impacts on other pathways.

Conclusion: Mental health is a complex public health problem, influenced by numerous interwoven biological, social, and economic mechanisms. As such, interventions to improve mental health require an integrated, intersectoral approach. This pilot intervention, implemented within Tanzania's large-scale, national social protection programme, has great potential for scaleup and sustainability, and, by design, increases engagement between communities, health professionals, and young people. This intervention has great potential to improve youth mental wellbeing and thus may help break the vicious cycle of poverty and poor mental health.

Knowledge, attitudes, and access related to case management, community social workers, and health extension workers among vulnerable households in Amhara region, Ethiopia

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Social protection programming has been largely successful in addressing poverty and vulnerabilities of beneficiary populations across countries. However, in countries such as Ethiopia, poverty persists and reinforces subsequent social and health-related vulnerabilities. Social protection programmes in Ethiopia have traditionally targeted poverty and food insecurity with little targeting to other domains of life related to social, economic, health, and educational capital. The ISNP, piloted in the Amhara region in 2019, has been developed with these gaps in mind and is intended to address to multi-dimensional nature of poverty and deprivation.

In this study, we utilize multivariate logistic regression models to estimate odds ratios and 95% confidence intervals to measure the association between household- and individual- level characteristics and the primary outcomes of frontline worker knowledge, access, and service utilization among a sample of 5,047 purposively sampled households using a simple random sampling within four purposively selected woredas. Models were stratified by beneficiary type (permanent direct support [PDS] or public works [PW]) as well as by service provider (social workers/services or health extension workers/health and nutrition services).

We found that household size and asset index were significantly associated with health worker access and health care and service utilization among PDS beneficiaries, while asset index, education, and age of respondent were significantly associated with these outcomes among PW clients. There were few characteristics associated with social worker interactions for both PDS and PW beneficiaries. For all client categories and outcomes, residents in Ebinat, Artuma Fursi, or Dewa Chefa woredas versus Libo Kemkem were less likely to have access, interact with, and utilize services of frontline agents.

This study highlights various pathways and opportunities for more improved and focused programming, including integrated social protection efforts, to better achieve these goals of poverty alleviation and improvement in areas that are related to poverty.

Evaluating cost-effective combinations of social protection using observational data: A methodological framework and appraisal of assumptions

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Background: There is need to maximise the impact of resources on interlinked health and wellbeing outcomes. Methods for investigating which combinations of social interventions might achieve this are lacking. Whilst optimal, using randomised control trials to investigate multi-component exposures and multiple outcomes is complex and expensive. We aimed to develop a methodological framework for evaluating cost-effective combinations of interventions using observational data.

Methods: We used a three-step approach: 1) mapping modifiable protective factors in observational data; 2) quantifying associations between modifiable factors and multiple adolescent outcomes in observational data; 3) modelling cost-effectiveness of interventions known to act on significant modifiable factors identified in observational data. Our six outcomes included: sexual abuse, transactional sexual exploitation, physical abuse, emotional abuse, community violence victimisation, and youth lawbreaking. We used a pooled cohort of 5034 adolescents in South Africa (mean age: 13.54 years, female: 56.62%, loss to follow up: 4%).

Results: We mapped seven modifiable protective factors: positive parenting, parental supervision, food security at home, basic economic security at home, free schooling, free school meals, and abuse response services. After multivariable adjustment, and correcting for multiple outcome testing, positive parenting, parental supervision, and food security at home were each found to be significantly associated with lower adjusted probability of three or more outcomes ($p<0.05$), Fig 1. Our cost-effectiveness model investigated using a top-up cash grant to improve food security, and a parenting programme to improve positive and supervisory parenting. All evaluated scenarios were estimated to be cost effective, with the combined scenario of both proposed interventions most cost-effective.

Implications: Our methodological framework is able to identify possible modifiable protective factors that act on multiple outcomes, and assess whether interventions might be cost-effective at the population level. Further research is need to assess important model assumptions and evaluate the acceptability of proposed interventions.

The disability-differential impact of the Malawi Social Cash Transfer Program on acute illness among children

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Background: According to the World Health Organization, roughly one billion people, or 15% of the global population, have disabilities. Often excluded from livelihood activities like employment and education, people with disabilities (PWD) can be vulnerable to poverty. Cash transfer (CT) programs are one type of social protection policy that have been implemented in many low and middle-income countries and disburse funds at regular intervals, broadly targeting such vulnerable populations. CTs often include PWD, either explicitly or via more general criteria, like poverty. Little research specifically evaluates CT impacts on PWD and their households. Because PWD are typically disproportionately included in CTs, it is crucial to establish whether households with PWD benefit from CTs differently than households without PWD.

Methods: This analysis examined differences in CT impacts on acute illness among children 18 years or younger living in households of people with and without disabilities. Data came from the Malawi Social Cash Transfer impact evaluation conducted by the Transfer Project. This evaluation was designed as a cluster-randomized study, with treatment randomized at the village level and participation occurring at the household level. Disability-differential CT impacts were estimated using difference-in-difference-in-differences.

Results: At baseline, 32% of children lived in households of PWD. The CT resulted in significantly greater reductions to the prevalence of acute illness among children living these households, by 5.25 and 7.64 percentage-points at midline and endline respectively, relative to children living in households without PWD. There were also significant CT impacts among children living with PWD in terms of reductions in the fever prevalence at midline and the diarrhea prevalence at endline, but no significant disability-differential effects for fever, cough, or diarrhea prevalences specifically.

Conclusions: These findings indicate that children from households of PWD may be more sensitive to CT effects on acute health than children from households without PWD.

Income security during periods of ill health: a scoping review of policies, practice and coverage in low-income and middle-income countries

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Background: The COVID-19 pandemic is a reminder that insufficient income security in periods of ill health leads to economic hardship for individuals and hampers disease control efforts as people struggle to stay home when sick or advised to observe quarantine. Evidence on income security during periods of ill health is growing but has not previously been reviewed as a full body of work concerning low-income and middle-income countries (LMICs).

Method: We performed a scoping review to map the range, features, coverage, protective effects and equity of policies that aim to provide income security for adults whose ill health prevents them from participating in gainful work.

Results: A total of 134 studies were included, providing data from 95% of LMICs. However, data across the majority of these countries were severely limited. Collectively the included studies demonstrate that coverage of contributory income-security schemes is low, especially for informal and low-income workers. Meanwhile, non-contributory schemes targeting low-income groups are often not explicitly designed to provide income support in periods of ill health, they can be difficult to access and rarely provide sufficient income support to cover the needs of eligible recipients.

Conclusion and recommendations: While identifying an urgent need for more research on illness-related income security in LMICs, this review concludes that scaling up and diversifying the range of income security interventions is crucial for improving coverage and equity. To achieve these outcomes, illness-related income protection must receive greater recognition in health policy and health financing circles, expanding our understanding of financial hardship beyond direct medical costs.

Person-centred care to improve MDR/RR-TB treatment: A multidisciplinary psychosocial support and harm reduction intervention for MDR/RR-TB patients with harmful use of alcohol in Minsk, Belarus

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Background: TB is concentrated in groups with complex health and social issues. The risk of active TB and the risk of poor treatment outcomes is substantially elevated in people who have alcohol use disorder (AUD). In 2014, MSF-OCA opened a project to support the Belarus Ministry of Health to improve treatment adherence and outcomes in MDR/RR-TB patients by providing a psycho-social support and harm reduction intervention with a patient-centred approach. Patients are screened using validated AUD and psychosocial screening tests (AUDIT, ASSIST, PHQ9, GAD-7, and self-motivation score) and then assigned to different packages of psychosocial and harm reduction counselling sessions. We analyse whether this intervention contributes to better treatment adherence for patients with AUD and MDR/RR-TB in Minsk.

Methods: Mixed methods: cohort study with in-depth interviews with patients. Patients admitted to the programme between January-01-2019 and April-09-2020 were included.

Results: Sixty-one patients are included, of which 11 (18%) are female and 50 (82%) male. Thirty-nine patients (63.9%) have history of incarceration (n=39, 63.9%), without a fixed place of residence (n=7, 11.5%) and unemployment (n=34, 55.7%). The most commonly recorded co-morbidity is Hepatitis C (n=25, 41%), followed by HIV (n=18, 29.5%). Twenty-eight (45.9%) report moderate alcohol use, 10 (16.4%) high levels of alcohol use, 19 (31.1%) were diagnosed with AUD and 3 (12%) opioid dependence. The median adherence is 97.4% (IQR:94.4-100.0), and to date 48 (78.7%) and 53 (86.9%) patients in the programme have at least 90% adherence and 80% adherence, respectively. Whilst level of reported alcohol use is not a risk factor for non-adherence, reported use of other drugs and having Hep-C are risk factors. Further analysis will be available by December.

Conclusions: Patients receiving psycho-social support and harm reduction using a patient-centred approach had good adherence to MDR/RR-TB treatment.

Experience of continuing Health Promotion activities distantly via mobile and social media network during COVID-19 lockdown in Sri Lanka - Lessons learnt from NIROGI Lanka Project

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Background: The NIROGI Lanka project, the flagship project of Sri Lanka Medical Association initiated to prevent and manage growing non communicable diseases in Sri Lanka successfully completed 11 years (2009-2020). Conducted via Health promotion officers allocated to Medical Officer of Health (MOH) areas in Sri Lanka, developed a 'health promotion model' now accepted to be institutionalized to the Sri Lankan state health sector. The COVID-19 pandemic caused devastating global morbidity and mortality where public lifestyle and health was affected by social distancing and isolation now being graduly lifted with 'new normal' life . During the initial complete lockdown period, the helath promotion activies of the project were halted in a context were physical, social,and psychological stress and anxiety to the people.

Methods: NIROGI team faced challenges to continue the health promotion activities and initiated an intervention to maintain the already ongoing activities via telephone and social media platform to help communities to maintain their healthy behaviors without falling back, facilitating mental wellbeing in uncertain situations, motivating to practice and initiate new healthy behaviors and practicing COVID-19 prevention measures. During the intervention the community members were contacted individually via telephone, 2) facilitated to re-start the group communication via telephone and social media platforms, 3) re- initiated the health promotion setting groups, 4) provided continuous technical and psychological support, 5) developed an ongoing dialog among the community members, and 6) re-initiated the health promotion on life style modification and on the new state of living during the COVID-19 period.

Results: By this small-scale intervention we were able to facilitate 256 individual community members in all 6 districts including grassroots level healthcare workers. By those active leaders 2782 Families were reached. The individuals were followed up by health promotion officers where new social media groups were developed within the communities to share their learnt facts and practiced behaviors. These group-initiated actions were used to motivate other members in the community virtually reaching larger number of individuals. Weekly online meetings were held to review the progress and to address challenges.

Conclusions: With the use of telephone and social media platforms we were able to continue part of the health promotion activities which were previously done only via face to face interventions. With the experience of the intervention, the project developed a new communication system were continuous community contact and mobilization is possible during normal and challenging times.

Projecting the potential health and poverty impact of COVID-19 control measures

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Background: The household impact of measures to mitigate the Covid-19 pandemic is poorly understood, giving decision-makers few models for policy making when considering the health and economic trade-offs for Covid-19 response. This study aimed to estimate the equity impact of national lockdowns in six different settings in terms of health risk and economic impact for households.

Methods: We created a model to simulate the economic impact of 'lockdown' in Pakistan, Georgia, Chile, the United Kingdom, the Philippines, and South Africa. We consider impact on households in terms of risk of COVID-19 exposure, and risk of losing income during the lockdown. To evaluate socio-economic inequalities, we assigned occupation codes into socio-economic status (SES) quintiles using the International Socio-Economic Index (ISEI).

Results: In all countries, the lowest SES quintile has the least income loss, due to larger numbers of essential workers in this quintile. Quintiles 2 and 3 see the majority of income loss. Potential exposure to Covid-19 was highest in Quintiles 1 and 2 in all settings, and very few people were able to telework outside of the highest ISEI quintiles in all settings.

Discussion: National lockdowns in response to the pandemic are likely to have a significant impact on equity in all settings, putting the poorest at greater health and/or economic risk. Our analysis shows populations with different kinds of risk will need different types of interventions to manage economic / health impact of lockdowns. Although social protection is usually targeted to the poorest, the near-poor (SES quintiles 2 and 3) will also need support to cope with the impact of lockdown as they suffer the worst income losses and are disproportionately more exposed. There's a great need for better data and greater consideration of the impact of social protection on economic and/or health risk in greater detail by country.

Social protection to mitigate the impact of COVID-19 on TB patients in South Africa. A qualitative study

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Background: Amid the COVID-19 crisis, Tuberculosis (TB) patients face increased vulnerability due to the consequences of the COVID-19 response such as loss of income, challenges to access healthcare services and anti-TB medication, increased stigma, and a loss of social support structures. Many of them are already poor, and many depend on informal work or have lost their jobs. The response to the COVID-19 pandemic has unintended yet severe consequences on TB services, with lockdowns and limitations on diagnosis, treatment and prevention services expected to increase the annual number of TB cases and deaths. The COVID-19 social and economic response in South Africa, however, might also offer some alleviation to TB patients' burden by accessing the Covid-19 Social Relief of Distress Grant (SRDG) designed for unemployed working age adults who are destitute because of the virus. Receipt of this grant and other forms of assistance such as food parcels might help counter the negative consequences of the COVID-19 crisis and response.

The qualitative study explores how the COVID-19 epidemic and response have affected the social, economic, and health situation of TB patients, as well as how COVID-19 grants to alleviate the social and economic effects of COVID-19 have affected TB patients' vulnerability.

Methods: We interviewed 15 TB patients utilising healthcare services at a health facility in Langa, Western Cape, South Africa. In addition, we interviewed 5 healthcare workers as well as officials of the South Africa Social Security Agency.

Findings: Our findings demonstrate the toll of the COVID-19 epidemic on the social, economic and health of TB patients and whether and how social protection played a role in mitigating the impact.

The burden of TB and access to social protection for TB patients in South Africa. A qualitative study

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Background: Tuberculosis (TB) remains a global health problem. In South Africa, in 2018, more than 300,000 people fell ill with TB and 63,000 died from the disease. South Africa has made great strides in the fight against TB. Treatment and care for TB are free of charge and several innovations have been introduced in the fight against TB which have contributed to a decrease in TB incidence and mortality. However, the decline is slowing down and approximately 1 in 3 TB patients still loses the fight against TB. At the same time, South Africa has a well-established social welfare system and a large proportion of social spending goes towards social grants. While TB patients can apply for a social grant, only 5% of DS-TB patients received the grant in 2012.

Methods: Our qualitative study explored the burden of TB on patients, the role that social protection can play in alleviating this burden, as well as challenges with accessing social grants by TB patients, through interviews with 25 TB patients and 6 healthcare workers at two clinics in Cape Town South Africa.

Findings: TB patients reported losing their job or losing their source of income from informal trading/jobs, leaving them destitute and forced to rely on the support from their households which in many cases were already struggling financially. Many participants reported food insecurity. Despite the availability of a disability grant that TB patients can apply for, our study found that doctors and nurses intentionally and unintentionally practiced gatekeeping, resulting in restricted access to social grants for TB patients.

Conclusion: We recommend a review of the medical assessment process to ensure 1) an objective application process, and 2) that it goes beyond a physical assessment and incorporates the social and economic elements of a patient's life.