Methods Results pooled in the previous update of the LSR, or derived from the studies already known in the PMA, can be used to provide an objective/historical prior distribution. The combination of this information with the accumulated results (conditioning on these) provides the posterior probability distribution that can be used as the prior in the next iteration of the LSR/PMA (yesterday’s posterior becomes tomorrow’s prior).

Results We will show an example of BMA on a LSR of the association between Covid-19 and asthmatic patients and give practical suggestions for its use.

Discussion Without relying on asymptomatic normality assumptions, BMA is suitable as it is a coherent and flexible framework that, in comparison with frequentist MAs, allows a better assessment of the between-study variance and overcomes some common issues as dealing with missing data and publication bias.

Objective Universal health coverage (UHC) is about ensuring that people have access to the health care they need without suffering financial hardship (WHO, 2021). With rising non-communicable disease burdens, low-income countries are increasingly challenged to close the gap between demand for health spending and available public resources. The aim of the study is to assess the challenges of attaining UHC in low-income countries.

Methods The paper has followed an integrative review of the literature an approach which summarize empirical literature to provide a more comprehensive understanding of a healthcare problem (Whittemore & Knaf, 2005). A search strategy was developed and a search in Scopus, ScienceDirect, CINAHL, PubMed databases yielded 247 documents from the year 2011 to 2021 covering a full 10-year period. 66 duplicates and irrelevant articles were removed and 181 articles were considered for abstract review. 128 articles were not related to UHC. Only 53 were analysed thematically.

Results There are financial aspects related to heavy underfunding of the health care system in low income countries. There are significant gaps in countries’ health systems and populations. For every 1,000 people in Malawi, there are 0.19 physicians and 2.83 nurses and midwives against the recommended 2.5 physicians per 1,000 people by WHO. Funders’ priorities are at odds with what is required on the ground. UHC policies are poorly developed and implemented as they are engulfed in poor governance. Management, leadership, and organizational culture are all interconnected issues that affect UHC.

Conclusions and Implications UHC in the sub Saharan Africa faces multiple challenges. By implications, establishing UHC is dependent on improving infrastructure, training the healthcare workforce, expanding and improving existing healthcare facilities, developing information services, and ensuring the supply of medicines and medical technologies.

Abstracts

152:oral CHALLENGES OF INSTITUTIONALIZING PRIORITY SETTING FOR UNIVERSAL HEALTH COVERAGE IN IRAN

Haniye Sedat Sajadi, Health Services Management, Knowledge Utilization Research Center, Tehran University of Medical Sciences, Tehran, Iran; University Research and Development Center, Tehran University of Medical Sciences, Tehran, Iran

Objective To investigate the challenges of institutionalizing evidence-informed priority setting (EIPS) to develop/revise the health intervention package in Iran.

Methods A qualitative systematic literature review was conducted. Two international and one national database were extensively searched. Google Scholar was also mined to find potential studies. Relevant keywords were used in the English and Persian languages. Two individuals independently screened and extracted studies. The reference list of relevant studies was also scanned for cross-referencing. Studies with the defined inclusion and exclusion criteria were enrolled and relevant data extracted.

Results The socio-economic-cultural context and the perceived need for evidence-informed decision-making were the main challenges of enabling environment. Availability of financial and human resources, advocacy, political will, alignment of policies and guidelines, and the health system governance arrangement were the challenges of organization. The supports required are strategic planning, training and supervision, active stakeholders’ participation, and strong leadership.

Discussion Further progress to achieve universal health coverage needs comprehensive measures to address challenges of EIPS institutionalization to revise the health intervention package in Iran. Besides the technical dimensions of EISP, we should consider motivations, establish structure, and strengthen support processes, which in turn provides a solid social coherence and strong leadership for EIPS.

171:oral PROMOTING EQUITY IN RATIONING AND BEYOND THOUGH DISADVANTAGE INDICES: ASSESSING THE POTENTIAL OF A NOVEL APPROACH

Harald Schmidt*, Dept of Medical Ethics and Health Policy, Perelman School of Medicine, University of Pennsylvania, USA

Background In the USA, Covid-19 exposed deep social, racial and ethnic inequities—but policy makers also deployed a major novel tool to promote equity within, and likely beyond, the pandemic, by modifying allocation frameworks with disadvantage indices (DIs, ie: place-based measures integrating census variables such as income, education or housing-situation, enabling ranking geographic areas as small as neighborhoods).

Objective To assess to what extent DIs have been adopted, and what their potential is to improve equity in, and beyond, Covid-19 allocation-decisions.


Results In an unprecedented, rapid, and widespread effort, a majority of US states (n=34) added disadvantage indices in
Covid-19 vaccine allocation plans. The dominant model is the CDC’s Social Vulnerability Index (SVI), developed for natural disaster response efforts (mapping well onto a conceptualization in the philosophical literature: Wolff/De-Shalit, ‘Disadvantage’, OUP 2007, as well as public preferences: Schmidt et al. ‘US adults’ preferences...’ JME, 2021). Main DI uses: planning dispensing site locations, targeted outreach/communication, increasing vaccine quantities, and monitoring uptake/course-correcting. Adapted forms were also used for tests and antiviral treatment allocation. The scoping review of SVI uses is ongoing at the time of submission; preliminary findings are that around 50% of N=119 publications use DIs ‘off-label’, ie in non-emergency settings, indicating an unmet need. Emergent themes include: budgetary allocations, healthcare service access planning, targeted prevention.

**Discussion** In Spring 2020, the dominant theme in Covid-19 allocation frameworks was maximizing overall benefits—often risking exacerbating existing inequities. The rapid and widespread DI adoption opened a major new chapter, holds major potential Organ Failure Assessment score (SOFA) to assess patients across racial groups from using SOFA. For example, drawing on data of >100,000 patients, Ashana et al. 2021, showed that the metric erroneously overestimates the mortality of Black patients and wrongly excludes >9% from the highest prioritization. Removing SOFA’s creatinine sub-score reduced the miscalibration.

**Objective** To assess whether US state-level CSC included the SOFA score in January 2022, when Omicron led to 20 US states at >85% ICU bed capacity; if so, with or without measures aimed at reducing the risk of inequitable outcomes.

**Methods** We reviewed SOFA use in all US states’ publicly available CSC querying: a) the US Health Depts’ Technical Resources, Assistance Center, and Information Exchange (TRA-CIE) database; b) state health department websites; complemented with c) webbrowser searches. Documents were retrieved January 14-16, 2022. 4 team members independently retrieved and coded documents using a structured extraction tool (capturing date of issue; use of SOFA or other prediction models; measures proposed/noted to adjust SOFA for equity; and whether/to what extent remaining life expectancy was included in algorithms).

**Results** The study is ongoing at the time of abstract submission (min. 8 states currently use SOFA).

**Discussion** While influential commentators recently argued that CSC ‘cannot be expected to remedy historic and structural inequity’ and should merely ‘not exacerbate’ them (Hick et al., 2021), and while states continue to use the SOFA score and fail to meet even this minimalist criterion, we need to better understand why robust evidence on inequitable outcomes is ignored, and what alternatives can be offered to avoid them in future heath emergencies.

**Background** Crisis Standards of Care (CSC) ventilator triage guidance often includes prediction models such as the Sequential Organ Failure Assessment score (SOFA) to assess patients’ ICU survival. However, from Spring 2020, a number of publications and robust studies demonstrated inequitable outcomes across racial groups from using SOFA. For example, drawing on data of >100,000 patients, Ashana et al. 2021, showed that the metric erroneously overestimates the mortality of Black patients and wrongly excludes >9% from the highest prioritization. Removing SOFA’s creatinine sub-score reduced the miscalibration.

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