ELSEVIER

Contents lists available at ScienceDirect

SSM - Population Health

journal homepage: http://www.elsevier.com/locate/ssmph



Commentary



Progress on Sustainable Development Goal 5 and improved health through better measurement

Emily C. Keats ^a, Gary L. Darmstadt ^b, Zulfigar A. Bhutta ^{a,c,*}

- ^a Centre for Global Child Health, The Hospital for Sick Children, Toronto, Ontario, Canada
- ^b Department of Pediatrics, Stanford University School of Medicine, Stanford, CA, USA
- ^c Center of Excellence in Women and Child Health, The Aga Khan University, Karachi, Pakistan

Within the current global health landscape, gender equality and empowerment are emerging as priorities for research and programming. This is due, in part, to greater accountability through Sustainable Development Goal (SDG) 5, but has also grown from increased knowledge that women's empowerment as a process will lead to important opportunities to improve health. While the global community has embraced the importance of empowerment, its definition is evolving and, subsequently, there is little consensus on its objective measurement. This timely Special Issue in *SSM: Population Health* includes 14 papers that address this challenge through the use of innovative measures of gender equality and empowerment, and provide evidence of the links between empowerment and health.

In a landmark paper on measuring empowerment, Kabeer defined it as a process by which the ability to exercise choice is achieved through three intersecting dimensions - preconditions (resources), process (agency), and outcomes (achievements) - and their interaction with structures of constraint (Kabeer, 1999). Over the past two decades, while there have been relatively few deviations from this conceptual thinking, we have evolved to understand that measurement could be at multiple levels, such as the individual, household, community, or nationally. Three papers in this supplement examine variations of this empowerment process. In the first, Green et al. evaluated remittance regularity and its effect on women's autonomy in healthcare decision-making, suggesting that autonomy increases when remittances are received regularly, regardless of the amount. Jones et al. assessed social/human assets and agency as determinants of child nutritional status in East Africa, while Samari asked whether agency could explain the relationship between education and fertility among married women Egypt. In both studies, empowerment pathways differed depending on the type of agency (whether instrumental or intrinsic) and, in East Africa, varied by country and household wealth. Associations were not always in the expected direction (e.g. women in Egypt with more instrumental agency, versus less, had higher fertility), underscoring the critical need to operationalize empowerment in a contextually-relevant manner.

There is a similar need to understand context-specific gender assumptions and practices. For example, Moradhvaj and Saikia demonstrated the unique role of gender in determining health care financing strategies in India; one that puts women at a disadvantage in terms of accessing health care. Schuster et al. used Cultural Consensus Analysis, derived from the theoretical assumption that cultural beliefs are learned and shared across communities, to define gender assumptions in the West Bank. While this tool demonstrated its utility for rapidly collecting data on enduring societal norms, it was less able to capture the perceptions of women's empowerment that are in the process of shifting. Several additional studies allow us to reflect on the differences between norms at the individual and group level. Baird et al. studied the young adolescent population (10-12 years) and the link between individual gendered attitudes, collective gendered norms and adolescent health outcomes. While there were some differences across countries, these restrictive attitudes and norms had a direct negative association with Bangladeshi and Ethiopian girls' and boys' physical health (height-for-age, BMI, increased hunger) and mental health (self-esteem). Shakya, Weeks, Christakis, 2019 used spatial analysis to visualize the clustering of adolescent births with socially cohesive villages in Honduras where descriptive and injunctive norms favoured adolescent fertility. Conversely, a recent prospective cohort study in the US has revealed that the expression of gender, as highly masculine or feminine, in adolescence is strongly associated with health outcomes in adulthood (Shakya, Domingue, Nagata, Cislaghi, Weber, 2019). These studies underscore the far-reaching effects of social norms that systematically disadvantage women and must be taken into account when introducing

^{*} Corresponding author. 555 University Ave, Toronto, ON, M5G 1X8, Canada.

E-mail addresses: emily.keats@sickkids.ca (E.C. Keats), gdarmsta@stanford.edu (G.L. Darmstadt), zulfiqar.bhutta@sickkids.ca, grace.belayneh@sickkids.ca (Z.A. Bhutta).

interventions.

A subset of studies in this Issue (Clark et al., 2019; Heise, Pallitto, Garcia Moreno, & Clark, 2019; Reed et al., 2019) also highlight the importance of defining gender-based or intimate partner violence at a more granular level, and its association with poor physical and mental health outcomes for women including increased risks of depression, anxiety, and substance abuse for girls. Gender-based violence remains widespread, though its measurement and targeting of interventions remains patchy. Although a synthesis of reviews on prevention of gender-based violence among adolescents and young women in lower-income countries suggests that building social cohesion and improving voice and agency are effective (Yount, Krause, & Miedema, 2017), the implementation of these strategies in primary care settings remains very poor.

Female empowerment as it relates to reproductive health and rights was another common theme. Hinson et al. established a novel measure of reproductive decision-making and found that it was valid and predictive of reproductive outcomes among married Nepali women. Importantly, this measure allowed for more objective prioritization of joint or sole decision making based on the survey questions asked; a topic that researchers have been grappling with because of the varying interpretations of these responses as they relate to agency. Reproductive coercion will factor into reproductive decision-making, where this type of stressor is prevalent at the level of the household. In Uttar Pradesh, India, Silverman et al. found that married women who experienced this type of coercion by husbands or in-laws were significantly less likely to use modern contraception and were significantly more likely to have an unintended pregnancy.

While this supplement highlights several innovative empowerment measures and indices, this is a dynamic field with much work in progress. Related approaches include Bisung and Elliott's development of a WASH empowerment index and Klugman et al.'s practical use of the Women, Peace, and Security composite Index (including measures of women's inclusion, justice, and security) as a predictor of maternal and infant mortality across countries. This elucidation of context-specific and global indicators is an important step linking local assessment to global monitoring.

This series of papers has bridged several diverse aspects of gender equality and empowerment, many of which have demonstrated robust associations with physical, mental, and reproductive health outcomes. As evidenced through this important work, interest and momentum around gender equality and empowerment is clearly building, though we continue to conduct research while lacking a global consensus on the objective measurement of empowerment. Several recent initiatives have taken steps towards resolving this concern. In April 2019, a group of academic experts convened for a 2-day workshop to discuss the global measurement of empowerment, with the goal of producing a workshop proceedings paper that reflects a broad consensus. This paper will define empowerment in the development context, outline relevant empowerment measures for different dimensions and constructs, consider validity of measures across contexts, and discuss the importance of analysis and choice of methodological approach. In addition, the recent Lancet series on Gender Equality, Norms, and Health (Darmstadt et al., 2019) takes a deep dive into understanding how gender norms can restrict girls, boys, women and men from reaching their full potential. The work in this Lancet series has filled key gender data gaps using novel methodologies

and existing gender-related survey data, and authors explore strategies for shifting restrictive norms that include gender transformative policies and programs. Through the work in this Special Issue, we have seen the importance of addressing stagnant gender norms, at both an individual and a collective level, for improving health outcomes. In addition, it is clear that unpacking the various dimensions of empowerment further, especially in a context-dependent manner, will be necessary to refine and improve upon their measurement. It is only through good quality data that we can begin to accurately quantify the health effects of achieving empowerment, and track progress towards achieving SDG5.

References

- Baird, S., Bhutta, Z., Hamad, B. A., Hicks, J. H., Jones, N., & Muz, J. (2019). Do restrictive gender attitudes and norms influence physical and mental health during very young adolescence? Evidence from Bangladesh and Ethiopia. Social Science & Medicine Pop Health (forthcoming).
- Bisung, E., & Dickin, S. (2019). Concept mapping: engaging stakeholders to identify factors that contribute to empowerment in the water and sanitation sector in West Africa. Social Science & Medicine Pop Health (forthcoming).
- Clark, C., Cheong, Y., Gupta, J., Ferguson, G., Shres, B., Shrestha, P. N., & Yount, K. M. (2019). Intimate partner violence in Nepal: Latent patterns and association with depressive symptoms. Social Science & Medicine Pop Health (forthcoming).
- Darmstadt, G. L., Heise, L., Gupta, G. R., Henry, S., Cislaghi, B., Greene, M. E., et al. (2019). Why now for a Series on gender equality, norms, and health? *Lancet*, 393 (10189). 2374–2377.
- Green, S., Wang, C., Ballakrishnen, S., Brueckner, H., & Bearman, P. (2019). Patterned remittances enhance women's health-related autonomy. *Social Science & Medicine Pop Health* (forthcoming).
- Heise, L., Pallitto, C., Garcia Moreno, C., & Clark, C. (2019). Measuring psychological abuse by intimate partners: Constructing a cross-cultural indicator for the sustainable development goals. Social Science & Medicine Pop Health (forthcoming).
- Hinson, L., Edmeades, J., Murithi, L., & Puri, M. (2019). Developing and testing measures of reproductive decision-making agency in Nepal. Social Science & Medicine Pop Health (forthcoming).
- Jones, R., Haardörfer, R., Ramakrishnan, U., Yount, K. M., Miedema, S., & Girard, A. M. (2019). Women's empowerment and child nutrition: The role of intrinsic agency. Social Science & Medicine Pop Health (forthcoming).
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30, 435–464.
- Klugman, J., Li, L., Barker, K. M., Parsons, J., & Dale, K. (2019). How are the domains of women's inclusion, justice, and security associated with maternal and infant mortality across countries? Some insights from the women, peace and justice index. Social Science & Medicine Pop Health (forthcoming).
- Moradhvaj, & Saikia, N. (2019). Gender disparities in health care financing strategies for inpatient care in India. Social Science & Medicine Pop Health (forthcoming).
- Reed, E., Salazar, M., Agah, N., Behar, A., Silverman, J. G., Walsh-Buhi, E., Rusch, M. L. A., & Raj, A. (2019). Experiencing sexual harassment by males and associated substance use and poor mental health outcomes among adolescent girls in the United States. Social Science & Medicine Pop Health (forthcoming).
- Samari, G. (2019). Education and fertility in Egypt: Mediation by women's empowerment. Social Science & Medicine Pop Health (forthcoming).
- Schuster, R. C., Brewis, A., Ochandarena, P., Abdelmonem, A., Hoso, S., & Faqeeh, K. (2019). Measuring community norms around women's empowerment in the West bank: Opportunities and challenges of a novel approach using cultural consensus. Social Science & Medicine Pop Health (forthcoming).
- Shakya, H. B., Domingue, B., Nagata, J. M., Cislaghi, B., Weber, A., & Darmstadt, G. L. (2019). Adolescent gender norms and adult health outcomes in the USA: A prospective cohort study. *Lancet Child Adolescent Health*, 3(8), 529–538.
- Shakya, H. B., Weeks, J., & Christakis, N. (2019). Do village-level normative and network factors help explain spatial variability in adolescent pregnancy in rural Honduras? Social Science & Medicine Pop Health (forthcoming).
- Silverman, J. G., Boyce, S. C., Dehingia, M., Chandurkar, D., Krishnan, S., Nanda, P., Hay, K., Atmavilas, Y., & Raj, A. (2019). Reproductive coercion in Uttar Pradesh, India: Prevalence and associations with partner violence and reproductive health. Social Science & Medicine Pop Health (forthcoming).
- Yount, K. M., Krause, K. H., & Miedema, S. S. (2017). Preventing gender-based violence victimization in adolescent girls in lower-income countries: Systematic review of reviews. Social Science & Medicine Pop Health, 192, 1–13.