- Stanford RH, Gilsenan AW, Ziemiecki R, Zhou X, Lincourt WR, Ortega H. Predictors of uncontrolled asthma in adult and pediatric patients: analysis of the Asthma Control Characteristics and Prevalence Survey Studies (ACCESS). J Asthma 2010; 47: 257-62.
- Yaghoubi M, Adibi A, Safari A, et al. The projected health and economic burden of uncontrolled asthma in the United States. Am J Respir Crit Care Med 2019; published online June 5. DOI:10.1164/rccm.201901-00160C
- Bateman ED, Boushey HA, Bousquet J, et al. Can guideline-defined asthma control be achieved? The gaining optimal asthma control study. Am J Resp Crit Care Med 2004; 170: 836-44.
- FitzGerald IM, Bleecker ER, Nair P, et al. Benralizumab, an anti-interleukin-5 receptor  $\boldsymbol{\alpha}$  monoclonal antibody, as add-on treatment for patients with severe, uncontrolled, eosinophilic asthma (CALIMA): a randomised, double-blind, placebo-controlled phase 3 trial. Lancet 2016; 388: 2128-41.
- Virchow JC, Kuna P, Paggiaro P, et al. Single inhaler extrafine triple therapy in uncontrolled asthma (TRIMARAN and TRIGGER): two double-blind, parallel-group, randomised, controlled phase 3 trials. Lancet 2019; published online Sept 30. https://doi.org/10.1016/S0140-6736(19)32215-9.

- Kerstjens HA, Engel M, Dahl R, et al. Tiotropium in asthma poorly controlled with standard combination therapy. N Engl J Med 2012; 367: 1198-207
- Bateman ED, Esser D, Chirila C, et al. Magnitude of effect of asthma treatments on Asthma Quality of Life Questionnaire and Asthma Control Ouestionnaire scores: systematic review and network meta-analysis. J Allergy Clin Immunol 2015; 136: 914-22
- FitzGerald JM, Bleecker ER, Menzies-Gow A, et al. Predictors of enhanced response with benralizumab for patients with severe asthma: pooled analysis of the SIROCCO and CALIMA studies. Lancet Respir Med 2018; 6: 51-64
- Castro M, Corren J, Pavord ID, et al. Dupilumab efficacy and safety in moderate-to-severe uncontrolled asthma. N Engl I Med 2018: 378: 2486-96.
- Bel EH, Wenzel SE, Thompson PJ, et al. Oral glucocorticoid-sparing effect of mepolizumab in eosinophilic asthma. N Engl J Med 2014;





## Accountability for respectful maternity care

Published Online October 8, 2019 https://doi.org/10.1016/ 50140-6736(19)32258-5

See Articles page 1750

Worldwide, maternal health efforts are shifting from an emphasis on boosting service utilisation to improving quality of care. This change has been accompanied by a growing body of work on how women are treated during facility-based childbirth, which was first brought to global attention in 2010 by Bowser and Hill's landscape analysis.<sup>1</sup> Several studies have documented the ubiquitous nature of disrespectful care and its adverse effects on care-seeking behaviour,2 and calls to action on quality of maternal health care have prioritised women's experiences.3

Before 2015, most of the research on women's experiences during childbirth was qualitative in nature.2 Since then, several studies have sought to quantitatively measure the extent of disrespect and abuse during childbirth. These initial attempts highlighted that disrespect and abuse of women during childbirth are prevalent, although the estimates varied widely (from 15% to 98%) because of several methodological issues, including inconsistencies in how disrespect and abuse were measured.<sup>4</sup> In The Lancet, Meghan Bohren and colleagues<sup>5</sup> describe their efforts to address this issue by using tools that were rigorously developed for continuous observations of women during the intrapartum period and for communitybased assessments at up to 8 weeks post partum.

Their analysis of more than 2000 birth observations and community surveys in Ghana, Guinea, Myanmar, and Nigeria showed that, irrespective of the measurement approach, more than a third of women experienced some form of mistreatment. For example, 838 (41.6%) of 2016 observed women and 945 (35.4%) of 2672 surveyed women experienced physical or verbal abuse, or stigma or discrimination. The investigators also found other forms of mistreatment such as lack of consent for vaginal examinations, episiotomies, and caesarean sections.

A key strength of this study was the use of standardised and evidence-informed measurement tools, which were applied in two different ways. Like most studies involving self-reporting of potentially subjective experiences, social desirability and recall bias are limitations of the community survey. However, the Hawthorne effect is a potential limitation when people are observed, with likely underestimation of undesirable behaviours. However, the combination of approaches and the similarities in the results across methods provide strong evidence for the validity of the findings. The study is limited in generalisability given that only three facilities were selected from each country in urban areas in a nonrandom fashion. Nonetheless, it is one of the few studies



to examine mistreatment across different settings, using the same standardised tools.

Bohren and colleagues' study extends the evidence that many women are mistreated during facility-based childbirth in low-resource settings. In addition, other studies—including a birth observation study in five countries (Ethiopia, Kenya, Madagascar, Rwanda, and Tanzania)<sup>6</sup> and more recently another study that used a validated person-centred maternity care scale in surveys with women in Kenya, Ghana, and India<sup>7</sup>—have highlighted that the problem is not just about the presence of negative interactions such as verbal and physical abuse but also an absence of positive interactions such as effective communication and supportive care.<sup>67</sup> Furthermore, studies in high-income countries have shown that mistreatment is not just an issue in low-resource settings.<sup>8</sup>

Bohren and colleagues' study also extends the evidence on disparities in how women are treated on the basis of age and socioeconomic status. Sources of disparities highlighted in other studies have included the type of facilities women receive care in and race and ethnicity.<sup>8,9</sup> Additionally, the study affirms that the aspects of mistreatment requiring prioritisation will likely differ across settings.

In a campaign by the White Ribbon Alliance on what women want worldwide, the top demand from more than 1 million women from 114 countries was respectful and dignified health care. However, it is clear from these results that many women are not getting such care. Yet there have been very few studies documenting the drivers of mistreatment and even fewer studies documenting interventions to prevent it.<sup>10,11</sup> Perhaps most importantly, there has been a surprising dearth of discussion regarding accountability. Governments, facilities, and individual providers are increasingly acknowledging the prevalence of mistreatment, perhaps even committing to reduce it—but where is the accountability? Although measurement

remains important, we need to move beyond assessing prevalence of mistreatment and begin using the validated tools that have been developed to drive efforts at increasing accountability and tracking change.

Patience A Afulani, \*Cheryl A Moyer

Departments of Epidemiology and Biostatistics and Obstetrics, Gynecology, and Reproductive Sciences, University of California, San Francisco (UCSF), UCSF Institute for Global Health Sciences and UCSF Bixby Center for Global Reproductive Health, San Francisco, CA 94158, USA (PAA); and Departments of Learning Health Sciences and Obstetrics and Gynecology, Global REACH, University of Michigan Medical School, Ann Arbor, MI 48109, USA (CAM) camoyer@umich.edu

We declare no competing interests.

Copyright © 2019 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license.

- Bowser D, Hill K. Exploring evidence for disrespect and abuse in facility-based childbirth: report of a landscape analysis. USAID-Traction Project. 2010. https://cdn2.sph.harvard.edu/wp-content/uploads/sites/32/2014/05/ Exploring-Evidence-RMC\_Bowser\_rep\_2010.pdf (accessed Sept 15, 2019).
- 2 Bohren MA, Vogel JP, Hunter EC, et al. The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. PLoS Med 2015; 12: e1001847.
- 3 Miller S, Abalos E, Chamillard M, et al. Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. *Lancet* 2016; 388: 2176–92.
- 4 Sando D, Abuya T, Asefa A, et al. Methods used in prevalence studies of disrespect and abuse during facility based childbirth: lessons learned. Reprod Health 2017: 14: 127.
- 5 Bohren MA, Mehrtash H, Fawole B, et al. How women are treated during facility-based childbirth in four countries: a cross-sectional study with labour observations and community-based surveys. *Lancet* 2019; published online Oct 8. https://doi.org/10.1016/S0140-6736(19)31992-0.
- 6 Rosen HE, Lynam PF, Carr C, et al. Direct observation of respectful maternity care in five countries: a cross-sectional study of health facilities in East and Southern Africa. BMC Pregnancy Childbirth 2015; 15: 306.
- 7 Afulani PA, Phillips B, Aborigo RA, Moyer CA. Person-centred maternity care in low-income and middle-income countries: analysis of data from Kenya, Ghana, and India. Lancet Glob Health 2019; 7: e96-109.
- 8 Vedam S, Stoll K, Taiwo TK, et al. The Giving Voice to Mothers Study: inequity and mistreatment during pregnancy and childbirth in the United States. Reprod Health 2019; 16: 77.
- 9 Afulani PA, Sayi TS, Montagu D. Predictors of person-centered maternity care: the role of socioeconomic status, empowerment, and facility type. BMC Health Serv Res 2018: 18: 360.
- 10 Sen G, Reddy B, Iyer A. Beyond measurement: the drivers of disrespect and abuse in obstetric care. Reprod Health Matters 2018; 26: 6–18.
- 11 Downe S, Lawrie TA, Finlayson K, Oladapo OT. Effectiveness of respectful care policies for women using routine intrapartum services: a systematic review. Reprod Health 2018; 15: 23.

For more on the White Ribbon Alliance's What Women Want Campaign see https://www. whatwomenwant.org

## Challenging social structures and changing research cultures



Academia can be a rewarding place to work, but not always and not for everybody. Precarity, inequality, and discrimination are stubbornly persistent, and bullying and harassment can make for a toxic environment. In the UK, a range of scientific organisations and

funders are addressing these problems by emphasising the need for a positive research culture to promote quality scholarship. In 2018, a conference convened by the Royal Society of London, UK, explored the cultures necessary to support excellent research and