

## Metformin as first-line treatment for type 2 diabetes

We read with interest the letter by Remy Boussageon and colleagues<sup>1</sup> (March 31, p 1261) discussing the certainty of evidence for metformin as first-line treatment for type 2 diabetes, in response to a Seminar by Sudesna Chatterjee and colleagues.<sup>2</sup> As stated in the Seminar,<sup>2</sup> metformin monotherapy is recommended by the American Diabetes Association clinical practice guidelines<sup>3</sup> as the initial glucose-lowering therapy for type 2 diabetes, with addition of second-line treatments on the basis of considerations of efficacy, risk of hypoglycaemia, weight, side-effects, and costs.

Our 2016 systematic review<sup>4</sup> with a meta-analysis of more than 300 randomised clinical trials supports that, based on the methodological limitations of existing trials, there is low certainty that metformin makes a difference to clinical outcomes such as cardiovascular events and death. Most studies of metformin were not designed to measure these endpoints, leading to fragility in estimates. The resulting estimated effects of metformin compared with other treatments are very imprecise, with a range of plausible effects, varying from important benefit to serious potential for harm. In our network meta-analysis,<sup>4</sup> we could not assert with a high degree of certainty that metformin decreased cardiovascular risk when compared with sulphonylurea or placebo-based care. Similarly, a meta-analysis<sup>5</sup> comparing metformin with sulphonylurea monotherapy, cited in the Seminar by Chatterjee and colleagues,<sup>2</sup> found that the comparative effectiveness of these two medications was very uncertain because of inconsistencies in existing evidence and risks of methodological bias in the source trials. We also suggest that the comparative

effectiveness of second-line therapies added to metformin (such as sulphonylureas or thiazolidinediones) is very uncertain when considering patient-level outcomes.<sup>3</sup>

On the basis of existing trials, it is not possible to rank the competing treatments reliably with regard to their effects on cardiovascular outcomes; therefore, determination of treatment preference is currently restricted to differences between drugs in terms of effects on bodyweight and hypoglycaemic risk.

We declare no competing interests.

Suetonia C Palmer,  
\*Giovanni F M Strippoli  
gfmstrippoli@gmail.com

University of Otago Christchurch, Christchurch, New Zealand (SCP); and Emergency and Organ Transplantation, University of Bari, I-70124 Bari, Italy (GFMS)

- 1 Boussageon R, Roustit M, Gueyffier F, Tudrej BV, Rehman MB. Type 2 diabetes. *Lancet* 2018; **391**: 1261.
- 2 Chatterjee S, Khunti K, Davies MJ. Type 2 diabetes. *Lancet* 2017; **389**: 2239–51.
- 3 American Diabetes Association. (7) Approaches to glycemic treatment. *Diabetes Care* 2015; **38** (suppl): S41–48.
- 4 Palmer SC, Mavridis D, Nicolucci A, et al. Comparison of clinical outcomes and adverse events associated with glucose-lowering drugs in patients with type 2 diabetes: a meta-analysis. *JAMA* 2016; **316**: 313–24.
- 5 Hemmingsen B, Schroll JB, Wetterslev J, et al. Sulphonylurea versus metformin monotherapy in patients with type 2 diabetes: a Cochrane systematic review and meta-analysis of randomized clinical trials and trial sequential analysis. *CMAJ Open* 2014; **2**: E162–75.

## Women in Global Health—Germany network

Women represent the majority of the global health workforce, but only 25% are in leadership positions.<sup>1,2</sup> In the UN System, only 23% of top leaders are women, and women are underrepresented in the governing bodies of public-private partnerships for health worldwide. Men direct around 70% of the total US\$92.1 billion in global health funding,<sup>3</sup> and they form the majority of discussion panels on global health.<sup>4</sup> To tackle the various complex issues of global

health, diversity and gender parity in leadership are needed.<sup>5</sup> Women's health is an integral and important part of global health. In sub-Saharan Africa, the lifetime maternal mortality risk is 100 times higher than it is for women in wealthier regions.<sup>6</sup> Several studies<sup>7,8</sup> have shown that women in leadership positions in global health give more attention to women's health, education, and access to health care than do male leaders.

Several initiatives aim to increase the number of women in global health leadership positions and to showcase women's leadership in global health. In 2014, Ilona Kickbusch launched a Twitter campaign asking people to nominate women working at the forefront of global health around the world.<sup>4</sup> The first list, published in December, 2014, consisted of 100 women. Further nominations followed, and in 2015, the 300 Women Leaders in Global Health list<sup>9</sup> was compiled and published.

During this time, Roopa Dhatt, Desiree Lichtenstein, Caitlin Jackson, and Kristina Ronsin founded the Women in Global Health organisation, which is a movement for gender equality in global health leadership, with the end goal of achieving improved and more sustainable health worldwide. Recognising the need to highlight the diversity of women working in global health, the organisation created networks at regional and national levels to work towards the advancement of women's leadership in specific contexts.

One such context has emerged in Germany, which has taken on a new leadership role in global health.<sup>10</sup> Therefore, giving professional women in the field of global health the opportunity to get adequately involved and considering them for leadership positions are important. In July, 2017, Ilona Kickbusch and Sabine Ludwig brought together a group of women working in the field of global health in Berlin, Germany, to discuss the founding of a German chapter of Women in

Global Health. Their first order of business was to collect nominations and compile a list of German women working in global health in Germany and internationally, and of women of other nationalities working in global health in Germany. Women on the list were required to have a minimum of 2 years of work experience in the field of global health. The list will be used as the basis for a national network of Women in Global Health in Germany.

The objectives of Women in Global Health Germany are to increase the visibility of women in the network and their contributions to global health, to extend the network, to keep the network flexible, to meet regularly, and to enhance mutual support. The network will serve as an easy reference for these women to be taken into consideration for leadership positions, decision-making bodies, and presentations and talks on panels and conferences. The Ministry of Foreign Affairs already uses the list to propose professional women for open leadership positions in international organisations in the field of global health.

Priorities for Women in Global Health Germany include active participation in revision of the German Government's global health strategy and in the 2018 Women Leaders in Global Health Conference, identification of important global health issues, integration of global health issues into health professionals' curricula, development of criteria for gender-equal representation on panels and conferences, collection of gender data, and establishment of a mentoring programme.

Currently, there are 102 women on the list from 55 different institutions, of whom 27 (26%) work in academia, 18 (17%) in the private sector, 12 (12%) in ministries, nine (9%) in international organisations, eight (8%) in non-governmental organisations, seven (7%) as independent or freelance consultants, seven (7%) in federally owned enterprises, six (6%) in research

institutions, two (2%) in foundations, two (2%) in federal development banks, two (2%) in public-private partnerships, one (1%) in politics, and one (1%) in journalism (appendix). 85 (83%) of the women on the list work in Germany and 94 (92%) are German. 56 (55%) of the women are in leadership positions, of whom ten (18%) are heads of division, nine (16%) are team leaders, eight (14%) are professors, five (9%) are chief executive officers, five (9%) are directors, four (7%) are vice-presidents, three (5%) are heads of section, two (4%) are presidents, two (4%) are heads of office, two (4%) are deputy heads of section, and one (2%) each is head of division, a former federal minister, a parliamentary secretary, a deputy head of department, an associate professor, and a chief physician.

The list and the network were officially launched on Jan 12, 2018, in Berlin, Germany, with the support of the Ministry of Economic Cooperation and Development, the Ministry of Health, the World Health Summit, and others. More than 70 women attended the event. Women in Global Health Germany is considered to be a best practice example for other national chapters. Norway and Sweden have already launched a national chapter of their own, a Women in Global Health francophone list is in the making, and in March, 2018, a Washington DC, USA, chapter was launched. We call for more groups to form and join the Women in Global Health movement, especially those from under-represented regions, including the global south.

We declare no competing interests.

\*Sabine Ludwig, Roopa Dhatt, Ilona Kickbusch  
sabine.ludwig@charite.de

Initiative Women in Global Health—Germany, Berlin, Germany (SL, IK); Charité-Universitätsmedizin Berlin, Robert Koch Institute, 10117 Berlin, Germany (SL); Women in Global Health, Washington, DC, USA (RD); and The Graduate Institute of International Development Studies, Geneva, Switzerland (IK)

- 1 WHO. Global strategy on human resources for health: workforce 2030. 2016. [http://www.who.int/hrh/resources/global\\_strategy\\_workforce2030\\_14\\_print.pdf?ua=1](http://www.who.int/hrh/resources/global_strategy_workforce2030_14_print.pdf?ua=1) (accessed March 15, 2018).
- 2 Human Resources for Health Global Resource Center. Gender and health workforce statistics. [http://www.hrhresourcecenter.org/gender\\_stats](http://www.hrhresourcecenter.org/gender_stats) (accessed March 16, 2018).
- 3 Hawkes S, Buse K, Kapilashrami A. Gender blind? An analysis of global public private partnerships for health. *Global Health* 2017; **13**: 26.
- 4 Devi S. Twitter campaign highlights top women in global health. *Lancet* 2015; **385**: 318.
- 5 Barry M, Talib Z, Jowell A, et al. A new vision for global health leadership. *Lancet* 2017; **390**: 2536–37.
- 6 Downs JA, Reif L, Hokororo A, Fitzgerald D. Increasing women in leadership in global health. *Acad Med* 2014; **89**: 1103–07.
- 7 Javadi D, Vega J, Etienne D, Wandira S, Doyle Y, Nishtar S. Women who lead: successes and challenges of five health leaders. *Health Syst Reform* 2016; **3**: 229–40.
- 8 Beaman L, Duflo E, Pande R, Topalova P. Female leadership raises aspirations and educational attainment for girls: a policy experiment in India. *Science* 2012; **335**: 582–86.
- 9 Graduate Institute of International and Development Studies. 300 Women Leaders in Global Health. 2015. <http://www.who.int/alliance-hpsr/news/2015/300women/en> (accessed March 1, 2018).
- 10 Kickbusch I, Franz C, Holzscheiter A. Germany's expanding role in global health. *Lancet* 2017; **390**: 898–912.

See Online for appendix

## Canadian Women in Global Health #CWIGH: call for nominations

A groundswell of attention and support for the need to recognise and advance women's leadership in global health has arisen since the issue was brought to light in 2014 by Ilona Kickbusch. She launched a Twitter campaign asking people to nominate women working at the forefront of global health around the world.<sup>1</sup> Subsequently, the Women in Global Health organisation was formed to advance gender equality in global health leadership, and many similar initiatives and chapters have developed.

Inspired by these movements, we have issued a Call for Nominations for a List of experienced Canadian Women in Global Health #CWIGH.



Alamy/istock

For more on Women in Global Health see <http://www.womeningh.org>