



Figure S1. Questionnaire development and validation

Additional notes on Phase 7

Compared to the previous version of the questionnaire, which was developed prior to the COVID-19 pandemic, minor adaptations were made, to optimise utilization for an online survey during the

pandemic. Specifically, first the questionnaire was shortened to improve acceptability and questions were adapted for an online survey, i.e. including clear explanations for women (such as, for example, the meaning of “active labor” in order to standardised answers). Secondly, 10 key questions relevant to the COVID-19 pandemic, prioritised among recommended indicators in existing WHO guidelines (see references below), were added. Questions were selected through a Delphi process, including experts from 16 countries with the following different backgrounds: clinical staff directly involved in the QMNC, sociologists, psychologist, anthropologist, public health experts, reproductive rights advocates

References

¹References for Phase 3

- 1) Lazzerini M, Valente EP, Covi B, et al Use of WHO standards to improve quality of maternal and newborn hospital care: a study collecting both mothers’ and staff perspective in a tertiary care hospital in Italy. *BMJ Open Quality* 2019;8:e000525. doi: 10.1136/bmjopen-2018-000525
- 2) Lazzerini M, Mariani I, Semenzato C, Valente EP. Association between maternal satisfaction and other indicators of quality of care at childbirth: a cross-sectional study based on the WHO standards. *BMJ Open*. 2020 Sep 14;10(9):e037063. doi: 10.1136/bmjopen-2020-037063.
- 3) Lazzerini M, Semenzato C, Kaur J, Covi B, Argentini G. Women's suggestions on how to improve the quality of maternal and newborn hospital care: a qualitative study in Italy using the WHO standards as framework for the analysis. *BMC Pregnancy Childbirth*. 2020 Apr 6;20(1):200.

²References used as source of standards for the COVID-19 domain

- 4) World Health Organisation. Maintaining essential health services: operational guidance for the COVID-19 context. World Health Organization, Geneva 2020
- 5) World Health Organisation COVID-19 Strategic Preparedness and Response Plan Operational Planning Guidelines To Support Country Preparedness And Response World Health Organization, Geneva 2020
- 6) Elhadi M, Msherghi A, Elgzairi M, Alsuyihili A, Elkhafeefi F, Bouhuwaish A, Biala M. Assessment of the preparedness of obstetrics and gynecology healthcare systems during the COVID-19 pandemic in Libya. *Int J Gynaecol Obstet*. 2020 Sep;150(3):406-408. doi: 10.1002/ijgo.13273. Epub 2020 Jul 7. PMID: 32538491