Development and Validation of a Routine Respectful Maternity Care Measurement Tool

Respectful Maternity Care Innovation Case Study Produced by Comprehensive Community Based Rehabilitation in Tanzania

USAID'S HEALTH EVALUATION AND APPLIED RESEARCH DEVELOPMENT (HEARD) PROJECT

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Note: This work will be incorporated into the thesis' of Dr. Brenda and Dr. Natasha as partial fulfilment of their PhD and Post-Doc publication submissions.

ACRONYMS

CCBRT	Comprehensive Community-Based Rehabilitation in Tanzania
HEARD	Health Evaluation and Applied Research Development Project
RMC	Respectful maternity care
RMT	Respectful maternity care measurement tool
USAID	US Agency for International Development
WHO	World Health Organization

ABSTRACT

Addressing mistreatment of pregnant women and promoting a positive birth experience is an integral component of quality of care and required for all women to improve birth outcomes. The existing measurement tools used for quality improvement monitoring in birth facilities does not include a minimum set of standards to measure mistreatment and respectful maternity care (RMC). Utilizing a participatory approach, Comprehensive Community Based Rehabilitation in Tanzania (CCBRT) developed a study to co-create a measurement tool that can be used by health facility managers to detect and improve the experience of care. A literature review was conducted to estimate the magnitude of mistreatment and to find any previously developed measurement tool. An initial tool was then developed based on existing tools. Multiple stakeholders including regional and facility leaders, managers, researchers and frontline implementers/end-users and post-partum women were engaged in the tool development process through individual review and group discussions. The end product is a simple and user-friendly, 25-item questionnaire consisting of the nine domains of RMC. The questionnaire has been pilot tested and validated among post-delivery women in Dar es Salaam, Tanzania. The following case study discusses lessons learned during the co-creation process, finalization of the tool, and reflections for national and international application and/or adaptation.

INTRODUCTION

A positive birth experience emphasizes the provision of care that adheres to set standards and the client's experience of care. Respectful maternity care (RMC) is a human right – an integral part of quality care at childbirth – and linked to better birth outcomes. Disrespect and abuse of childbearing women is unethical and reported to be a greater deterrent to facility utilization than geographical access. We define RMC to include the absence of disrespect and abuse or mistreatment AND the presence of a positive, supportive, caring, and nurturing environment in which a woman can give birth. (see Box 1).1,2

Box 1: Domains of Mistreatment

Physical abuse	Hitting, slapping, pushing, sexual abuse, rape
Non -consented care	Failure to seek and receive consent before a procedure
Non-confidential care	Lack of physical privacy and/or privacy of information
Non-dignified care	Verbal abuse, negative gestures and comments
Discrimination	Differential treatment because of personal attributes
Non-supportive care (abandonment, Poor rapport between women and providers	Neglect, delivering alone, Ineffective communication, lack of supportive care, loss of autonomy
Detention in facilities	Detention in facility until payment is made; bribes
Health system constraints	Lack of resources, staff, and policies; facility culture, low skilled staff, mismanagement, or delayed care.

Substantial evidence shows that many women experience mistreatment during childbirth. In Dar es Salaam, Tanzania, rates of mistreatment during childbirth can be as high as 70% in urban tertiary hospitals and 19-28% in rural districts of Tanzania.3–6 Tanzania has a favorable policy environment, with national gender and RMC mainstreaming guidelines.6 However, assessment of health facilities where the intervention was developed revealed that structures and resources hindered provision of RMC.7,8

The Comprehensive Community Based Rehabilitation in Tanzania (CCBRT) Maternal and Newborn Healthcare (www.ccbrt.org) program supported 22 public health facilities that have a total of 80,000 births per year, improving the quality of obstetric care and implementing the Tanzanian Reproductive, Maternal, Newborn, Child and Adolescent Health roadmap.7,9 The CCBRT program has addressed some of the drivers of mistreatment through training more than 7,000 healthcare providers in Comprehensive and Basic Emergency Obstetric care short courses; and investing in creating a conducive environment for privacy, essential equipment, medicines, and supplies that promote standard-based care. The program's embedded strengthening of routine clinical data (2011-2019) showed significant decongestion in overcrowded hospitals and a comparable increase in the use of lower-level

facilities; improved quality of care; and concurrent overall reductions by 47% and 19% in the facility-based maternal mortality ratio and stillbirth rate.7 RMC is integral to CCBRT's success in improving birth outcomes. CCBRT serves as an active advocate advancing RMC and provided technical support for the development of the Tanzanian National Compassionate Care Nursing Guidelines and the Tanzanian National Gender and Respectful Care Guidelines.6 However, the absence of RMC assessment in measuring quality improvement remains a critical gap. RMC has traditionally been measured either through client complaints or in research settings. However, the existing tools are lengthy and expensive to administer, limiting opportunities for routine use for data-driven continuous improvement.

Recognizing the importance of routinely measuring RMC, there is a need to explore how international recommendations on measuring the experience of care can be appropriately adapted and implemented effectively in busy, low-resource maternity units. In this regard, the PartoMa project (www.publichealth.ku.dk/partoma/) is an example of how simple, innovative, context-specific clinical guidelines (and other maternal health interventions) can be developed and/or adapted through a participant-driven co-creation process that has shown promising health effects in the pilot phase at Zanzibar's tertiary hospital (2014-2018).10 This is a collaborative effort between the University of Copenhagen, supported by a research grant from DANIDA (under Ministry of Foreign Affairs, Denmark), Aga Khan University, and CCBRT to investigate how a modified PartoMa intervention of pocket guidelines and low-dose frequency training can improve the quality of care during childbirth in five large maternity hospitals in Dar es Salaam.

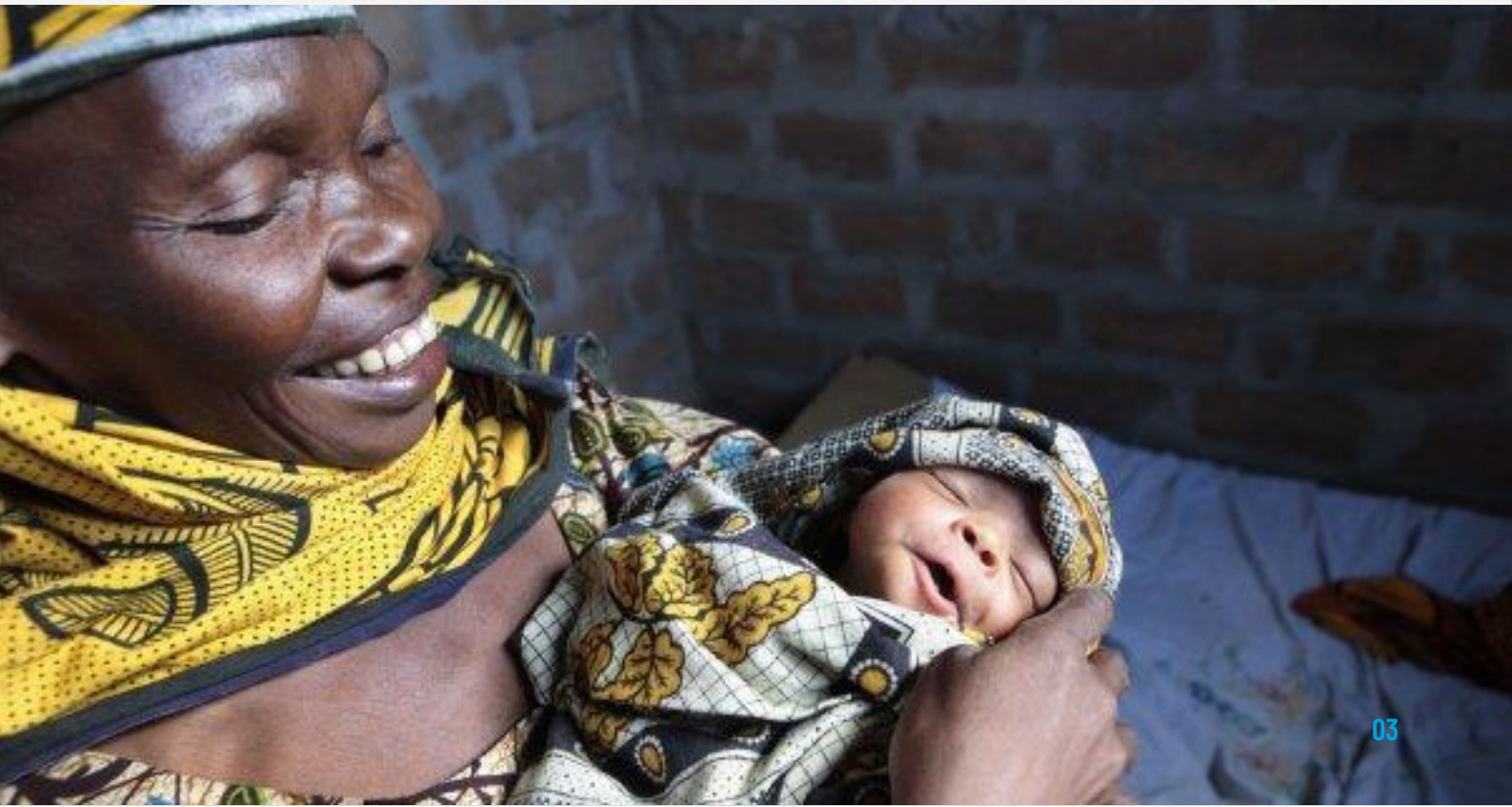
Both CCBRT and the PartoMa project have noted limited focus on user perspective/experience of care. Thus, this work is nested within the two ongoing maternal and newborn healthcare/RMC strengthening initiatives and supported by the Dar es Salaam regional health authorities, UNICEF, Global Affairs Canada, and the USAID Health Evaluation and Applied Research Development (HEARD) project. The RMC measurement tool (RMT) presented in this case study will be used to assess the RMC effect of the PartoMa intervention. CCBRT will advocate for use of the tool to measure RMC routinely at the CCBRT partner health facilities, as part of continuous quality improvement.

OBJECTIVES

The desired end-result of our innovation was to co-develop a short, simple, and user-friendly tool for use by facility managers to measure disrespect and abuse as part of routine quality of care assessments in order to address the gaps in care and monitor context-specific solutions.

This case study documents the processes involved in the development of the RMT and includes: a) the stakeholder/end user participatory engagement process; b) the sequential iterations; and c) the tool validation experience. The theory was that engaging users and beneficiaries in the creation of the RMT was likely to result in a product that is relevant and contextual.

The RMT is intended for routine use by health facility managers to measure RMC, identify gaps, and develop tailor-made action plans to promote continuous quality improvement, a positive birth experience, improved birth-related outcomes, and gender equality.



IMPLEMENTATION DESIGN, METHODS AND EXPERIENCE

The RMT was developed consultatively and collaboratively, with multi-level stakeholders engaged in the co-creation process to proactively promote routine measurement of client experience. It is expected that measurement will be followed by action plans to address the gaps. Stakeholders included representatives from the Ministry of Health, regional leadership in Dar es Salaam, health facility managers, frontline health care workers (midwives, medical doctors, obstetricians, and gynecologists), representatives of professional bodies, advocates in RMC, and women who had recently given birth.

Development of the tool was an iterative co-creation process using the following steps:

1. Formation of a collaborative Core Implementation Research Team to coordinate the developmental process.
2. Stakeholder engagement including frontline health care workers and mothers as well as researchers, professional bodies, RMC experts and advocates.
3. Structural assessment at facility for local contextual factors.
4. Review of the literature to assess prevalence of disrespect and abuse and existing tools for measuring disrespect and abuse. This identified several existing tools for measuring aspects of (dis)respectful maternity care, including a comprehensive tool developed by the World Health Organization (WHO) initiated research team.
5. Initial tool development using the WHO tool as a template.11 Extensive modification was required to shorten the tool including omitting of questions that asked details about abuses; merging similar concepts; and converting 5-point Likert scale answers to binary responses.
6. Review by key stakeholders and further modification through focus group discussions and workshops, in-depth-interviews, and online individual feedback.
7. Translation of the tool to Kiswahili.
8. Pilot-testing for language clarification and acceptability and validity-testing among 201 post-delivery women at Temeke Regional referral hospital in February-March 2021.
9. Further revision of the tool.
10. Final validity and reliability testing among 800 post-delivery women in four high-volume maternity hospitals in Dar es Salaam.

KEY FINDINGS

The initial RMT consisted of nine sections relating to domains of RMC: verbal abuse, physical abuse, stigma and discrimination, privacy, consented care, mobilization, fluids and pain relief, unreasonable demands and fee structures, and emotional support aligned to the domains of mistreatment and abuse (see Box 1). An additional section with open-ended questions explored women's ideas on how to improve childbirth care in the facility. Statistical testing to assess scale reliability showed high internal consistency between most items (Cronbach alpha score between 0.70 and 0.94). However, a few items did not perform well. In consultation with the stakeholder group, further revisions were required and included: 1) Restructuring of the tool including rearrangement of the order of the questions so that less sensitive questions were placed earlier in the tool; 2) the sub-headings relating to the different domains were removed; 3) the tool was shortened by removing and combining items; 4) addition of a question related to infrastructure/facility-related items which is a relevant part of RMC; and 5) revision of language and patient information section to make the tool easier to administer with the possibility of it being self-administered in the future (e.g. font style and font size, writing answer options for every question, providing more clear instructions). These modifications resulted in the final measurement tool that consists of 25-items relating to the nine domains of RMC, with interview length ranging between 15-25 minutes, with possibility for self-administration of the tool.

Challenges experienced using the tool include the following:

1. The tool did not measure health care provider perspectives. This is also a significant domain in RMC. Particular challenges faced by health care workers in busy urban maternity units include the extreme shortage of staff and multiple priorities for both staff and management.
2. Deciding who will administer the measurement tool in routine settings. During development and validation, the head of the quality improvement unit recognized that RMC was under his mandate, and he expressed that his department lacked the manpower to conduct the assessments routinely.
3. Patients are not aware of their rights during childbirth and have considerably low expectations, especially with regard to privacy and informed consent.

RECOMMENDATIONS

This work highlighted the need to routinely measure experience of care as part of quality of care assessment using a validated, simple, and user-friendly tool. The current tool was developed using previous rigorous research work and extensive participation of end-users, beneficiaries, and national and international RMC experts. The tool went through various stages of validity and reliability testing. The tool is therefore highly transferrable to other similar settings and applicable to both research and routine settings. For example, the finalized tool is for immediate use in the PartoMa research project to measure the effect of the PartoMa intervention of pocket guidelines and seminars on the experience of care. Additionally, the measurement tool will be embedded into CCBRT's ongoing maternal health care capacity-building efforts in 22 public health facilities in the Dar es Salaam region and the new CCBRT Maternal and Newborn Wing (a 200-bed facility). This also provides opportunities for further rigorous testing, implementation, upscaling, and sustainability to address the identified measurement gap(s) in RMC. We propose dissemination of the tool with regional and district leadership and management of the 22 CCBRT partner health facilities, and a further dissemination with national maternal and newborn health care leadership from the various directorates responsible for maternal and newborn health care service delivery, quality assurance, higher education, training as well as professional organizations. Proceedings from these dissemination workshops may be used to improve the tool and advocate for scaling up the use of the tool in an implementation research setting to understand when, where, how, how often, or if at all, the materials developed will be used routinely and at scale, with inclusion of additional implementation outcomes including feasibility, adoption, scalability, cost, and effectiveness. We also recommend combining the use of the tool with implementation of an intervention to address provider's knowledge/values to explore effectiveness. Addressing community awareness of the rights of women and newborns at childbirth is required to obtain the full benefit of the tool. This emphasizes the complexity of addressing mistreatment in low resource settings and the need to address the drivers of mistreatment. Additionally, there is a need for training for both providers and patients on the rights of women at childbirth.

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APPENDIX A: CCBRT- RMC TECHNICAL PROPOSAL

Title suggestion: Evaluating the effect of a tailor made on-the-job Respectful Maternity training on experience of care at birth in Tanzania: a step-wedge cluster randomized trial

The problem

Experience of care is a neglected component of Quality of Care and an emerging public health concern and priority. Mistreatment during childbirth is an infringement on human rights as well as a contributor to low quality care and poor birth outcomes. Substantial evidence globally and in Tanzania has shown that between 28% and 70% of the women giving birth in a facility experience mistreatment during childbirth, particularly physical, verbal abuse, discrimination, and neglect. The literature documents multilevel and multisystem barriers that contribute to mistreatment of women at childbirth, including gaps at the policy, health system, health facility, and community levels. Successful solutions implemented in Tanzania have mainly been in a controlled study setting.

Utilizing a participatory process, a Respectful Care Measurement Tool (RMT) has been developed and validated. An on-the-job training module to address provider knowledge on RMC and behaviours to promote improved experience of care has been developed consultatively with frontline workers. However, we have not determined the effectiveness of the training on changing the practices of providers.

What we have learned so far is that there are critical gaps in knowledge of healthcare workers on the rights of women at childbirth and the WHO standards of care, specifically those related to communication and consent. We need to understand whether the training course that has been co-created using a participatory process with multiple revisions based on user feedback will improve the experience of care measured using the RMT.

The opportunity:

- ·We propose to use an implementation science approach to determine the acceptability, appropriateness, feasibility and adoption of an on-the-job RMC training developed through a previous project and measure change in the experience of care utilizing an RMT that has been developed in a previous project by researchers from CCBRT and Aga Khan University.

- ·This implementation science research will be nested within the ongoing CCBRT Dar es Salaam regional collaborative capacity building program, a comprehensive health system strengthening initiative that supports 22 public health facilities and serves a total of 85,000 women in childbirth annually. The program has demonstrated significant improvement of birth outcomes and quality of clinical care through recurrent training; institutionalization of standards of care; and mobilization of facility, district, and regional quality improvement teams.

- ·The process will be aligned with the WHO Quality/Equity/Dignity indicators on experience of care and will document best practices such as promotion of birth companionship and reduction of physical and verbal violence.

- ·This will address prevalent knowledge gaps, and enable managers and frontline workers to take ownership of measurement and action toward addressing the challenge of the high prevalence of mistreatment and abuse during facility birth that ranges between 14-70%. (Sando 2016; Kujawaski 2017; Kruk 2018). This will form the basis of a continuous improvement process.

Description of the intervention: On-the-job RMC training

The training intervention has been developed collaboratively by researchers from CCBRT and Aga Khan University with funding from UNICEF and Global Affairs Canada. We employed a participatory process involving frontline managers and healthcare workers from the labour and postnatal wards. The training was adapted following feedback from multiple testing with various groups of health care workers and support staff. The feedback was used to modify the training to the current version, which is a 5-hour interactive scenario-based training that addresses domains of mistreatment, the rights, standards, and expectation for correct care during childbirth. The previously co-created RMC training will be implemented.

We propose to implement the 5-hour training module and to repeat the course three times during the implementation period. The training will be offered every three months. We propose to repeat the training every day for three days at each health facility, allowing the opportunity for critical volume of staff to attend the training without compromising service delivery.

Target population:

Hospital managers, in-charges of the maternity unit and at least three health care workers per shift or 80% of the staff in maternity ward, ward attendants at labour ward, cleaners, support staff, and even security guards.

Following the introductory training, we propose to hold focus group discussions with facility birth attendants to explore opportunities for ongoing training.

Study population:

Pregnant women receiving childbirth care at the participating hospitals, skilled birth attendants and managers providing childbirth care at the participating hospitals.

Objectives:

To assess the effectiveness of implementing a locally co-created RMC training module on the experience of care among intra-facility births in Tanzanian women.

Specific objectives:

1. To conduct a baseline assessment on the experience of care in the study health facilities.
2. To evaluate the effect of a low dose high frequency training module among skilled birth attendants on improving respectful care during childbirth at 12 maternity units in Dar es Salaam.
3. To explore the acceptability, feasibility, adoption, fidelity, and costs of the intervention package among healthcare providers at 12 maternity units in Dar es Salaam. The intervention comprises the measurement-training-measurement-training cycles, where the training will be conducted in low dose high frequency format.
4. .To explore the lessons learned, barriers, facilitators, and drivers for sustainability and scale up of the training.

Theory of Change and Intervention Outcomes

Change in knowledge coupled with routine measurement will result in improved provider perception on the importance of patients' rights to respectful care and improved skills in finding local solutions to disrespect and abuse. This will result in a change in practice among providers and managers, reduced mistreatment, and increased positive birth experience and client satisfaction.

OUTCOMES

Intermediate outcomes:

- Knowledge (staff), pre-post-test health care workers' perception of the training and qualitative/quantitative feedback on the training and serial assessments for retention of knowledge and skills.
- Percentage of staff per facility trained (trends).
- Case studies on system changes introduced at facility level to promote RMC.

Implementation outcomes:

Acceptability, feasibility, fidelity, adoption, costs.

Distal-service delivery outcomes

Change in the experience of care among women delivering at the health facility as measured by the RMT.

Implementation science methods

The proposed study design is a mixed-methods, hybrid step-wedged randomized control trial. It will compare the effect of the RMC training on client experience of care (EOC) at 12 multilevel health facilities, divided into 4 clusters. Each group is to have multiple levels of care: dispensary, upgraded health center, hospital, and referral hospital.

The RMT, developed within a previous project, will be used to measure the experience of care via a research assistant administered exit interview. Experience of care will be measured at 12 health facilities at three monthly intervals. The intervention (the on-the-job training) will be introduced at three health facilities at a time. Every three months an additional three facilities will be added until all 12 facilities receive the intervention over a 12-month period. The knowledge, practice and patient and provider satisfaction will be assessed at each time point.

Alternatively, a pre-post study design at 6 health facilities is a possibility.

Additionally, a detailed description of the context and feedback from patients, managers and providers will be collected to document perceptions and other case stories. We will also explore the perceptions of utilization of the measurement tool. For example, can facility managers use the tool to conduct routine assessments and assess the common manifestations of disrespect and abuse? And how much does the training, paired with routine measurement change RMC practice cost?

Relevance

The findings of this study have the potential to establish a low-cost solution to improve the experience of care for 85,000 mother and baby pairs a year and many more, if adopted nationally. The proposal will document the lessons learned and the process by which international recommendations on RMC can be appropriately adapted, implemented, and show effectiveness in busy, low-resourced maternity units. This approach aligns with the WHO's vision and implementation approach of Quality of Care Framework for maternal and newborn health.