ORIGINAL RESEARCH ARTICLE

The Botswana Medical Eligibility Criteria Wheel: Adapting a Tool to Meet the Needs of Botswana’s Family Planning Program

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Abstract

In efforts to strive for family planning repositioning in Botswana, the Ministry of Health convened a meeting to undertake an adaptation of the Medical eligibility criteria for contraceptive use (MEC) wheel. The main objectives of this process were to present technical updates of the various contraceptive methods, to update the current medical conditions prevalent to Botswana and to adapt the MEC wheel to meet the needs of the Botswanian people. This commentary focuses on the adaptation process that occurred during the week-long stakeholder workshop. It concludes with the key elements learned from this process that can potentially inform countries who are interested in undergoing a similar exercise to strengthen their family planning needs. (Afr. J Reprod Health 2016; 20[2]: 9-12)

Keywords: Family planning, Contraception, Medical Eligibility Criteria (MEC), Adaptation

Resume

Dans les efforts visant à lutter pour repositionner la planification familiale au Botswana, le ministère de la Santé a convoqué une réunion pour procéder à une adaptation des critères d’admissibilité médicale pour la roue de l’utilisation de contraceptifs (CAM). Les principaux objectifs de ce processus ont été de présenter des mises à jour techniques des différentes méthodes de contraception, de mettre à jour les conditions médicales actuelles qui prévalent au Botswana et d’adapter la roue MEC pour répondre aux besoins de la population botswanaise. Ce commentaire met l’accent sur le processus d’adaptation qui a eu lieu au cours de l’atelier des parties prenantes qui a duré une semaine. Il conclut avec les éléments clés tirés de ce processus qui peuvent potentiellement informer les pays qui sont intéressés à entreprendre un exercice similaire pour renforcer leurs besoins en matière de la planification familiale. (Afr. J Reprod Health 2016; 20[2]: 9-12)

Mots-clés: planification familiale, contraception, critères d’admissibilité médicale (CAM), adaptation

Introduction

As we transition from the Millennium Development Goals (MDGs) into the Sustainable Development Goals (SDGs), family planning continues to play an integral role in ensuring universal access to sexual and reproductive health. It also carries important implications for achieving the other international development goals1. Utilizing evidence based Family Planning (FP) tools is an important strategy to realize these benefits.

The WHO Medical Eligibility Criteria for Contraceptive Use (MEC)2 consists of evidence based recommendations intended to eliminate medical barriers to contraceptive use and to guarantee safe utilization of FP methods. WHO produced a user friendly job aid- the “WHO MEC Wheel” to ensure that health workers had easy access to these recommendations. Several countries have subsequently adapted it based on the unique contraceptive needs of their populations.

The MEC wheel displays the common contraceptive methods against selected medical conditions and personal characteristics. By manipulating the circles on the wheel to select a medical condition or personal characteristic, the user is able to quickly see the eligibility categories for multiple contraceptive methods. This enables
the provider to offer the safest contraceptive(s) to the client.

In 2010, the Botswana Ministry of Health (MOH) requested WHO for support in updating their service delivery protocols and developing a Botswana MEC wheel, as part of their efforts in strengthening their family planning program.

Methods

The adaptation process involved three components as shown in Table 1.

The desk audit and site visits highlighted various barriers to accessing FP for certain medical conditions and personal characteristics. Additionally, health worker interviews revealed limited capacity to determine contraceptive eligibility.

<table>
<thead>
<tr>
<th>Table 1: Components of the Adaptation Process</th>
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<tbody>
<tr>
<td>I. Desk audit/ Site Visits</td>
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<tr>
<td>*information gathering</td>
</tr>
<tr>
<td>*assess familiarity/use of WHO MEC wheel</td>
</tr>
<tr>
<td>II. Stakeholder workshop</td>
</tr>
<tr>
<td>*Technical updates of FP methods</td>
</tr>
<tr>
<td>*Adaptation of the MEC wheel</td>
</tr>
<tr>
<td>*Evaluation of the workshop</td>
</tr>
<tr>
<td>III. Field testing</td>
</tr>
<tr>
<td>*review and re-orient service providers on the MEC wheel</td>
</tr>
<tr>
<td>*introduce the draft of the Botswana MEC wheel</td>
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In response to the findings from the site visits, the stakeholder workshop provided technical updates on all family planning methods, and employed case studies to familiarize participants on the content and use of the WHO MEC wheel. Extensive discussions and consensus building on: i) which methods to retain, ii) which medical conditions to highlight, iii) how these should be presented on the Botswana wheel, iv) what information to put on the jacket, v) the cover design, vi) the size of the wheel and vii) the implementation process, were undertaken. An interactive and participatory approach entailing small groups and plenary sessions was used.

Prior to the workshop’s conclusion, stakeholders completed a short questionnaire to evaluate the adaptation process. The draft wheel was field tested for user-friendliness before production.

Results

This section focuses on the process and lessons learned during the stakeholder workshop.

Stakeholder Workshop

The week-long workshop brought together 31 participants from various agencies: the MOH, medical training institutions, District health management teams, health facilities, Center for Disease Control Botswana and WHO. The multidisciplinary group included clinicians, service providers, program officers, program managers, lecturers, and trainers.

Review of contraceptive methods

The stakeholders maintained all the methods that appear on the WHO MEC wheel (i.e. combined hormonal contraceptives, POPs, DMPA/NET-EN, Implants and IUDs). In addition, the hormonal patch and vaginal ring were added to the combined hormonal contraceptives category, in preparation for their introduction by the MOH Botswana. Male and female sterilization were also added to the front of the wheel.

In Botswana, only about 20% of infants <6 months are exclusively breastfed. In order to promote the benefits of exclusive breastfeeding which include birth spacing, LAM criteria were added to the Botswana wheel. Vital information on Fertility Awareness Methods was outlined on the jacket.

While Botswana has one of the highest HIV prevalence rates in the world (22.2% in 2014), studies reveal very low (2.5%) dual contraception use among sexually active men and women aged 15–49 years. The stakeholders therefore highlighted the importance of condom use for dual protection on the front of the wheel, to prompt health providers to incorporate this into their counseling.

Review of medical conditions

After extensive discussions, stakeholders agreed to
maintain all the medical conditions on the generic WHO MEC wheel, but re-arrange them in alphabetical order to facilitate their location. In addition, they decided to include notes on ‘family planning counselling in the context of alcohol abuse and mental health / intellectual disabilities’ on the jacket. These notes highlighted FP counseling for these groups and were not intended to influence their eligibility.

**Additional features**

The final focus was on the layout and appearance of the wheel. The stakeholders agreed to apply the Botswana flag colours (black, white and sky blue) to the wheel. They decided to increase the actual size of the wheel to accommodate the addition of sterilization methods to the face of the wheel. In addition, the wheel and the jacket would be affixed to one another -resulting in essentially one tool- in order to prevent the loss/misplacement of the jacket. (Figure 1)

**Stakeholders’ observations**

At the end of the workshop, the stakeholders completed a structured evaluation form to provide additional insight and observations. From the close-ended questions about the adaptation process, majority of participants agreed that the objectives were clearly defined and the product was useful. (Table 2)

**Table 2: Stakeholders Meeting Evaluation**

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>% agreed</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>The objectives of the training session were clearly defined</td>
<td>94.70</td>
</tr>
<tr>
<td>2</td>
<td>The training session has helped my understanding of the MEC wheel</td>
<td>94.70</td>
</tr>
<tr>
<td>3</td>
<td>I feel more comfortable using the MEC wheel</td>
<td>94.70</td>
</tr>
<tr>
<td>4</td>
<td>After this training, I will use the MEC materials in my workplace</td>
<td>94.70</td>
</tr>
<tr>
<td>5</td>
<td>Time for discussion and questions was sufficient</td>
<td>89.40</td>
</tr>
<tr>
<td>6</td>
<td>The MEC wheel will be useful for the providers who do not usually provide family planning</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>This adaptation process has produced a tool more fitted for the needs of Botswana</td>
<td>94.70</td>
</tr>
<tr>
<td>8</td>
<td>There was sufficient time to adapt the MEC wheel to the FP needs of Botswana</td>
<td>84.20</td>
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</table>

From the open-ended questions, the majority of participants concurred that the wheel had all the critical elements. However, half of them felt that the adaptation process required more time. Some suggested that wider stakeholder participation to include parties such as private practitioners, non-governmental organizations, ministers/politicians,
anti-retroviral and tuberculosis programs and more trainers (TOTs) should have been engaged.

The stakeholders were curious on what would be the next steps after the workshop. On implementation and capacity building the importance of piloting the wheel was most commonly proposed. It was suggested that training on the wheel should be standardized and include health workers dealing with Sexually Transmitted Infections, and Prevention of Mother to Child Transmission in order guarantee provider ownership.

**Discussion**

Global efforts to improve Family Planning services are ongoing as exemplified in the Botswana MEC wheel adaptation process. By improving the quality of Family Planning services, the potential to increase its uptake, and the consequent positive impact on women’s reproductive health is enhanced. Botswana’s approach to improving the quality of their FP services includes availing FP tools and offering effective contraceptive options for women and couples seeking these services.

Although the focus of this commentary was on the stakeholders’ workshop, it is important to note that the preceding stages provided essential foundational material for the workshop. Active participation by the stakeholders also contributed to successful adaptation of the MEC wheel. The field testing completed the process and informed the next steps in utilizing the wheel.

This adaptation process was an itinerant process, taking new forms as it progressed. Nevertheless several important messages were gleaned from the process.

1. Adhering to evidence based recommendations as defined in the WHO MEC guidelines was imperative to maintaining the accuracy of the adapted wheel. Offering contraceptive technology updates ensured that these recommendations were applied to the product.
2. Recognizing and prioritizing the needs of target populations and offering services responsive to special needs e.g. mental retardation and alcohol abuse, were considered as critical elements of high quality FP services.
3. Involving a multi-disciplinary group of stakeholders and clearly defining the next steps promoted ownership and guaranteed continued engagement.
4. Allocating adequate time to the adaptation process was imperative, as was reiterated in the workshop evaluations.

Through this effort, Botswana has succeeded in adapting the MEC wheel to meet their specific needs. This process serves as an example to other countries seeking to adapt WHO recommendations to strengthen FP services.

**Acknowledgements**

The authors would like to acknowledge Charles Djoleto, Lucy Maribe, and Therese Nzomo for their invaluable help and support during the adaptation process.

**Contribution of Authors**

All authors (CK, NK, MKR, LM, MLG) contributed to the conception and design of the study. CRK, NK, and MLG collected and analysed the data. CRK prepared the manuscript; NK and MLG assisted with the preparation and editing of the manuscript. All authors assisted in reviewing the manuscript prior to submission. All authors approved the manuscript.

**References**