

# Clinical Mentoring in Médecins Sans Frontières’ Non-Communicable Diseases Project in Embu, Kenya

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Photo: Luca Sola (MSF 2017)

## INTRODUCTION

### BACKGROUND

This snapshot report summarises an evaluation<sup>1</sup> of the Clinical Mentoring (CM) component of the Embu, Kenya NCD project. This project was delivered by Médecins Sans Frontières' Operational Centre Brussels (MSF-OCB), in collaboration with the Division of Non-Communicable Diseases (NCDs), and the Embu County Ministry of Health (MoH), **aiming to reduce NCD-related mortality and morbidity in the Embu County.**

A key component of the project focused on **reinforcing competencies of care providers and CM has been chosen as the learning implementation strategy.** This CM component is the object of the present evaluation. MSF's current mentoring framework (described in the MSF "Clinical Mentoring Programme Guide") informs the implementation of mentoring activities within this project.

MSF's CM framework in Embu focuses on **developing MoH clinical staff** – Nurses, Clinical Officers, and Community Health Volunteers (CHVs) – to **better manage patients with Hypertension, Diabetes Mellitus, Asthma/COPD, and/or Epilepsy.** The CM is framed around classroom training sessions for all clinical staff, and mentoring sessions where mentors attend mentees' patient consultations to provide advice and support. Once staff in a group of facilities have completed the mentoring activity modules, the CM framework is replicated in another group of facilities.

### EVALUATION OBJECTIVE

The **overall evaluation objective was to assess the appropriateness and effectiveness of the CM framework** as a mechanism for developing the medical competence of healthcare staff within the Embu municipality. Three specific evaluation objectives were identified:

- To assess the extent to which the approach used in Embu has been sufficiently **adapted to the local context;**
- To examine the extent to which the **mentees' medical competences** (knowledge, skills and attitudes, or KSA) **have improved;**
- To explore how the **mentoring component** of the project **is currently being implemented** and to **identify possible improvements/amendments.**

### EVALUATION PURPOSES

Three main evaluation purposes were derived from the above specific objectives:

- To **guide any necessary operational and/or technical adaptations** to the ongoing CM implementation;
- To **define any required adaptations** to the CM framework (described in the MSF "CM Programme Guide");
- To **inform any decisions about scaling-up** or implementing a similar intervention elsewhere.

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<sup>1</sup> The original evaluation and report were researched and delivered independently by Dr Paul Stokes of Sheffield Hallam University, UK. Full report can be downloaded [here](#).

## METHODOLOGY

The evaluation design is a mixed methods design. Quantitative methods included analysis of objective assessments of mentees' KSA. Qualitative methods included interviews, Focus Group Discussions (FGDs), and direct observation. Mentors, mentees, MoH officials, MSF staff and patients were included as study participants. Purposive sampling was used to determine who would participate in the evaluation.

Data was collected during two field visits to Embu: July-August 2019, hereafter referred to as V1; and February 2020, hereafter referred to as V2. Seven sites were visited: Gategi, Kabuguri, Kairuri, Kanja, Kiambere, Kiritiri, and Machanga.

The appropriateness and effectiveness of CM in Embu were examined: appropriateness is the extent to which the clinical mentoring approach used in Embu has been sufficiently adapted to the local context; effectiveness is the extent to which the mentees' medical KSA were improved by CM.

Three sources were consulted for ethical approval for the evaluation: MSF, the Kenya Medical Research Institute (KEMRI), and Sheffield Hallam University's ethical review process. All evaluation participants were given an information sheet detailing the evaluation process and were invited to sign a consent form confirming that they understood what the evaluation was about, what would happen to their data, and their rights in relation to that data. This included agreeing to the audio recording of all interviews, FGDs, teaching observations, and mentoring observations. Mentees were invited to give permission for the evaluation team to have access to their pre- and post-test and Weekly Observation Grid (WOG) scores.

Two potential biases were anticipated in the data. Firstly, the interview cohort consisted of groups who may demonstrate vested interest in the Embu project's success; patient FGDs exploring end outcomes were partly intended to adjust for this. Secondly, MSF staff selected candidates for interviews and FGDs, and may have subconsciously selected more positive candidates.

At V1, direct observation of mentoring sessions was not logistically possible. At V2, direct observations of teaching and mentoring sessions were possible, enabling some triangulation across the two data sets. Further, the two data sets were collected at very different stages of the delivery cycle, so cross-comparison between the visits is difficult.

As a translator (who speaks English, Kiambu and Swahili) was consulted for some mentee interviews, mentoring observations, and patient FGDs, some meanings may have been adapted or influenced to facilitate effective communication.

## FINDINGS

Cadre abbreviations are used: **CHV** = Community Health Volunteer; **CO** = Clinical Officer; **N** = Nurse.

***In summary, Embu mentoring programme was found to be an effective learning and teaching strategy*** that has enabled mentees to develop new NCD knowledge, skills, and attitudes.

MSF mentoring was framed in four levels: mentoring theory in literature; MSF's internal mentoring perceptions practices; the mentoring design in Embu; and the mentoring experience and practice in Embu. ***The experience and practice of mentoring in Embu was largely well-adapted to the cultural and clinical context***, thanks to mentors adapting mentoring materials to core mentoring principles and to field constraints and needs.

***The CM implementation in Embu corresponded with the CM outlined in the MSF CM Programme Guide***, however there were questions as to whether mentoring relationships were fully adult-to-adult. Since the teaching and learning content was defined by protocols and guidelines and not by the mentees' own learning agendas, it may not be accurate to describe the intervention as mentoring scheme/programme per se.

***Teaching of medical knowledge was conducted didactically with limited active input from participants***. Mentees did lead mentoring sessions with patients, but ***mentor-mentee pairs differed in whether or how they practiced post-patient session debriefs or pre-patient session meetings***. It was suggested that mentors deploy a wider range of more interactive teaching methods, and for a consistent and collective approach to mentor-mentee feedback to be adopted.

***Mentees displayed clear improvements in medical competence***, as demonstrated by pre- and post-test scoring and WOGs; and supported by interviews. Interviews additionally indicated that mentees experienced increased confidence in their skills. Mentees reported that the benefits of mentoring had positive impacts beyond clinical settings, also affecting families and communities. It was suggested to ensure the continuous professional development of mentees, e.g. by expanding to more NCDs. In addition, it was suggested that mentors be given further support to expand and develop their methods on teaching, mentoring, and education. It was also suggested that accreditation for mentees and mentors be introduced, potentially improving motivation, and increasing the likelihood of the programme's sustainability post-MSF departure.

***The positive enabling factors*** were the positive working relationship with MoH, engaging early with mentors, the relative stability of the social context, and the strong mentor performance.

***The main obstacles encountered*** were the administrative burden, staffing shortages, and MoH payment regimes.

Among ***the main achievements*** are the following: measurable outputs regarding mentee progression, improved mentee confidence, reported improvements in patient management, and improved patient education.

Finally, there are some ***areas for improvement***, such as better involvement of support staff (e.g. pharmacy, data processing), more focus on mentees' career development, to expand mentee reach by empowering them to disseminate their learnings among colleagues, and address length and workload concerns, as well as to bring in more staff to facilities.

## CONCLUSIONS

***The CM programme in Embu County is an effective learning and teaching model that is adding to MoH staff capacity to deal with NCDs*** in level two and three facilities. This is corroborated by mentors, mentees, MSF staff and patients, as well as MoH officials looking at its systemic impact. This is also supported by direct observation of mentoring sessions with patients and teaching sessions at V2. These views and observations have not been corroborated by medical data, as this was out of the scope of this evaluation.

***Initial concerns about the Eurocentric CM model needing considerable adaptation for a sub-Saharan African context can be allayed by the data***, which show that there was good adaptation and contextualisation. Implementing staff were themselves Kenyan and already embedded in the Embu context and, as the MoH was involved from the project outset, there was little resistance to the programme. Mentors had time to adapt materials and processes before implementation to better fit field constraints and realities. However, the teaching approach seems grounded in traditional pedagogical approaches perhaps familiar to MSF Kenyan staff. This may represent a departure from the CM model outlined in MSF CM Programme Guide mentoring materials. However, evidence does suggest successful transfer of medical knowledge and skills.

***Implementation faced early challenges***. A national medical staff strike delayed matters, and high mentee turnover in the first cycle resulted in fewer mentees being fully developed than had been hoped. V2 data still suggest that key lessons have been learnt on implementing the process at new facilities.

***Mentees' medical competence has been demonstrably improved by this programme***. V1 data are conclusive here; as V2 was conducted earlier in the learning cycle, its quantitative data are less definitive on this – however, V2 qualitative data from new facilities ostensibly support this conclusion. It is less clear whether simply offering teaching and observation sessions on mentees' practice would have achieved the same outcome. Hence, ultimate conclusions on the programme's effectiveness must recognise possible alternative approaches that might achieve similar or better outcomes. A comparative analysis of mentoring with other pedagogical approaches is beyond the scope of this evaluation.

***Some key lessons have been learnt regarding how best to implement mentoring in new facilities*** that arose from challenges surrounding contextualisation and implementation. The Embu team's navigation of these experiences revealed the importance of **preparation** and **involvement** as key factors to successful implementation: it is critical to extensively prepare teaching materials and assessment of mentees' progress. Knowledge and teaching processes must be adapted specifically in recognition of the contexts faced by many MoH staff when learning new material, e.g. competing patient priorities, work volume, or impact of night shifts on learning ability. Reflection and action clearly occurred between V1 and V2 to address challenges highlighted in the initial cycle regarding work volume and better contextualisation. Equally, the operation runs more smoothly when all stakeholders are involved in the process.

***How to embed and ensure the sustainability of this learning process after a potential MSF departure from Embu has not been fully addressed***. MoH officials confirm that they will implement appropriate measures should MSF leave, however it is important to consider specifically how the mentoring process will be sustained and its reach improved. Many mentees at V1 and V2 noticed their new KSA have an impact on colleagues and the broader community as well as their patients; and did not seem to have previously recognised their potential wider impact here. Some steps have already been taken in order to do this by involving more people in each facility and the creation of Training of Trainers (ToT) interventions. However, moving forward, mentors and mentees may benefit from further development to understand how to strengthen this potential broader reach.

***Mentors should be given additional tools and processes to benefit more facility staff.*** While non-mentee staff are now invited to teaching sessions, the principal mechanisms for developing KSA were patient consultations and one-to-one debriefs after consultations, on which non-mentee staff miss out. Equally, teaching sessions do not demonstrably enable mentees to bring in or apply their own personal experiences. The interim report thus recommended mentors running Action Learning Sets<sup>2</sup> of 6-8 mentees and non-mentees, thus encouraging greater group learning of applied medical knowledge and inter-mentee learning during collective case examination. Despite initial concern regarding time constraints and less efficient knowledge transmission, most mentors interviewed saw merit in incorporating this methodology. This could be formalised and offered to facilities.

***Mentees could be encouraged to educate patients on personal care, e.g. via lifestyle changes,*** with mentors acting as role models. While this is part of the CHV role, it could also be incorporated into patient consultations using mentoring skills or questioning/listening techniques outlined in CM models, to communicate a sense of personal responsibility to patients. The present model risks perpetuating dependency relationships between patients and healthcare workers, where patients expect to be 'fixed' through drug dispensation from their 'expert' healthcare professionals. Patients are often not used to playing active roles in their treatment, and mentees may not be used to less didactic, 'adult-to-adult' patient-carer relationships. At some observed sessions, patients were not clear on why they were there or what condition they had; however, mentees did often seek to educate patients here and increase lifestyle choice ownership. Patients at V2 FGD demonstrated increasing awareness and ownership of their conditions. At their core, mentoring relationships work best when relationship between the pair is adult-to-adult, as described in the MSF Clinical Mentoring Program Guide.

***There is little evidence that mentees are encouraged to think about their personal career development*** and how they might take initiative here, despite this being in the spirit of both CM and DM. Debriefs observed at V2 were quite brief and focused on summarising medical aspects from the patient session; perhaps because the purpose of competence development has been clearly communicated by the scheme organizers. However, the sustainability of a learning and development ethos of the facilities would be strengthened if mentors were encouraged to dedicate time to discuss mentees' development and highlight mentee responsibility therein. This could be done, for example, by asking mentees what they had learned in the preceding patient session and how they would act differently with future patients.

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<sup>2</sup> An Action Learning set is a group of colleagues/ peers who choose to work together, often with a facilitator, to reflect on actions they have taken or are going to take. Each individual in the group is given a slot within which each person is helped by the group to work on their issue. All group members are invited to reflect on what learning comes out for them from each of the sessions.

## RECOMMENDATIONS

- ⇒ **Recommendation 1: Train and develop mentors in teaching skills to help diffuse knowledge more widely.** Mentors' techniques for teaching professional adults could be developed by drawing on the experiences of group members within the teaching sessions. Mentors should retain some input, but also give each participant in the group an opportunity to reflect on the previous patient. Participants' NCD knowledge may benefit and develop from working through cases with support from the mentor and the group. This in turn would encourage mentees' involvement and engagement with the teaching sessions and maximising their ability to apply their knowledge with patients.
- ⇒ **Recommendation 2: Encourage mentors to give mentees more responsibility for their own learning and development.** Mentors could make a point of asking DM questions during mentoring conversations, e.g. 'What will you do differently in the future?'; 'What actions will you take to develop your understanding of x further?'. By regularly being given space within existing mentoring relationships for longer term learning, mentees could be encouraged to take more ownership of their own learning and development. This might be supported by engaging in regular reviews of the approaches and methods used in the programme, involving all stakeholders and participants, thus consequently creating more collective ownership of and responsibility for the learning process.
- ⇒ **Recommendation 3: Continue to involve the wider MSF team and broader support functions in facilities in the mentoring programme.** Recognising the importance and role of the wider MSF team and broader support functions may enable identification of bottlenecks or synergies in the delivery pattern so that challenges (e.g. staff or drug shortages) might be anticipated. This could be done by involving key representatives of these functions in mentor team meetings and involving broader services (e.g. pharmacy, data management) in the mentoring programme itself.
- ⇒ **Recommendation 4: Provide support to mentees so that they can share their new skills and knowledge more widely in the facilities.** To embed the knowledge deeper and wider within the facilities, it's suggested to support mentees to (a) become mentors themselves (within their facilities rather than through MSF), or (b) become more effective disseminators of medical knowledge (using a Training of Trainers (ToT) approach). This could be an additional offer to mentees as part of their development and included in the application process to be mentored.
- ⇒ **Recommendation 5: Create 'NCD Champions' within facilities.** MSF should work with MoH management staff in each facility to create this role, responsible for encouraging dissemination of new knowledge about NCDs and new knowledge of/updates to NCD protocols. This does not need to be a new formal post but can be a designated role taken on by an existing mentee. It would aim to create a focal point within each facility to whom MoH can disseminate information, also and to provide each facility with a connection to MoH NCD coordinators. This would both complement the embedment of new knowledge from the mentoring process and increase NCD understanding.
- ⇒ **Recommendation 6: Explore the possibility of accreditation for mentors and mentees at divisional/national level.** The mentoring programme should have formal recognition by national-level NCD functions. This would help embed the programme within MoH facilities, while enabling mentors and mentees to earn credibility and potentially to transfer their skills and knowledge to other facilities (or even countries). It is important to consider precisely what is accredited (i.e. new mentoring knowledge and/or mentoring skills), and to consider who or what will be accredited (i.e. mentors, mentees, or facilities).
- ⇒ **Recommendation 7: Encourage mentees to work with patients in a mentoring way.** Mentors should try to use mentor-mentee relationships as a resource to demonstrate how mentees should operate with NCD patients. When giving feedback, mentors could draw mentees' attention to the parallel between how mentors treat them when teaching about NCDs, and how mentees may seek to educate patients on their conditions. This could empower both mentees and patients as learners. This is highly relevant to the attitude skillset outlined in the mentoring programme and could be built into the Embu programme and mentoring materials.

Stockholm Evaluation Unit

<http://evaluation.msf.org/>

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Abbreviated version is based on  
the evaluation report independently written by  
Dr Paul Stokes of Sheffield Hallam University, UK (July 2020)