E-LEARNING AND MENTORING TO FIGHT AGAINST ANTIMICROBIAL RESISTANCE

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BACKGROUND
MSF Academy for Healthcare and the British Society for Antimicrobial Chemotherapy (BSAC) developed the Antimicrobial Resistance (AMR) Learning Initiative with 2 online diploma courses:
• Antimicrobial Stewardship (AMS).
• Infection Prevention and Control (IPC) Supervision and Management
This initiative was created to respond to the AMR global challenges, by strengthening capacities of the AMS & IPC professionals working in MSF-supported healthcare facilities located mostly in low and middle incomes countries, including in conflict areas.

AIM
To assess the effectiveness of these courses in building competencies in AMS and IPC management, enhancing participants' confidence in performing IPC or AMS skills, and integrating it into their daily work practices.

METHODS
85 participants out of the 91 enrolled in the first & second cohorts completed the course between July 2021 and February 2023.
• Knowledge but also technical know-how (through skills confidence self-assessment) evaluated during pre- and post-course Competency Gap Assessments.
• Participant feedback on course content and pedagogical methods collected along the course.
• Implemented AMS or IPC interventions, obstacles faced and recommendations were gathered through electronic surveys sent 6 months post-graduation to participants, their line managers and headquarters technical advisors.

RESULTS
• Self-reported CONFIDENCE LEVELS to perform SKILLS in implementing AMS and IPC interventions substantially increased, with averages rising from 41% to 94%, and 57% to 96% respectively.
• The 6 months post-course survey revealed successful IMPLEMENTATION of AMS and IPC ACTIVITIES:

<table>
<thead>
<tr>
<th>AMS Activities</th>
<th>IPC Activities</th>
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<tr>
<td>77% Functional Committee</td>
<td>86% HAI outbreak response</td>
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<tr>
<td>65% Action plan</td>
<td>91%</td>
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<tr>
<td>81% Audits</td>
<td>84%</td>
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<tr>
<td>62% Educational activities</td>
<td>88%</td>
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<tr>
<td>73% Implement guidelines</td>
<td>50%</td>
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<td>47% Technical advice</td>
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<td>42%</td>
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• Insufficient drugs and limited human resources were the MAIN OBSTACLES in AMS implementation, while IPC faced challenges primarily due to resistance to behavior change and inadequate infrastructure.
• The most IMPACTFUL LEARNING ACTIVITIES fed-back by the participants was the mentoring, either in individual (100%) or in group session (99%):

**CONCLUSION**
By combining e-learning with clinical mentorship, the courses effectively bridge theoretical knowledge and practical application. Despite the reported obstacles to implementation, this approach demonstrates a clear benefit: increased skills confidence among participants and a boost in AMS & IPC interventions in the working environment.

The findings highlight the pivotal role of the AMR learning initiative in supporting and strengthening AMS and IPC capacity and expertise on a global scale, therefore contributing to enhance healthcare quality and reduce the risk of AMR transmission.

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