Project Final Report: Expand availability of tobacco dependence treatment services in the Eastern Mediterranean Region through building sustainable evidence-based in-country training programs

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Abstract:
Purpose and Scope: TDT services in the EMR continue to be limited, partially due to the scarcity of trained HCPs. To address this we established training hubs in Oman, Egypt, Tunisia, and Morocco, and made TDT curricula and content available in Arabic, English, and French.

Methods: Component I focused on setting the stage and understanding needs and uniqueness of each country. Component II defined target audiences and designed programs for countries. Component III focused on building capacity of faculty through remote engagement and an on-site ToT workshop.

Results: The project brought together 76 faculty of which 68 are physicians; 71 have clinical experience; more than half have experience in teaching, training, and research; 64 have had some previous training in TDT; and 39 have TDT experience. Component III improved TDT-specific competencies, and enhanced confidence in ability to treat and train. Faculty intend to offer TDT services, transfer knowledge, and engage in advocacy and research. The majority believe they will have an opportunity to train within 6 months of receiving the ToT, and those reporting barriers focused on system-related barriers and the need for more experience. To date the established training hubs have conducted 9 training workshops, collaborated with 2 academic programs to include TDT, and conducted several predisposing sessions to introduce HCPs to the concept. Based on feedback received from faculty, a follow up phase is necessary to address gaps that may negatively influence confidence and competence.
**Purpose:**
In order to meet an evident gap in the field of tobacco dependence treatment (TDT) in the Eastern Mediterranean Region (EMR), this project ultimately seeks to increase the number of trained healthcare providers (HCPs) in the EMR who can integrate TDT into their practice. To achieve this goal, the project built on training programs offered to date and on previously fostered relationships to establish four self-sustaining training hubs across the region (in addition to the incumbent hub at King Hussein Cancer Center (KHCC) in Jordan). Between all five hubs, TDT curricula and content was made available in all three languages that are in use in the region; Arabic, English, and French.

**Scope:**

*Background and context*
Despite the proven value of TDT services and the interest of smokers in quitting, TDT services in the EMR continue to be limited with marginal growth.\textsuperscript{1,2,3} Data depict low rates of offering advice to quit; for example only 20\% of smokers in Jordan and 11\% of smokers in Egypt report receiving such advice.\textsuperscript{4,5}

As is the case in other parts of the world, this shortage may be attributed to several barriers. These include the scarcity of trained HCPs, the lack of national policies to promote tobacco cessation, and the prevalence of tobacco use among HCPs themselves.\textsuperscript{3}

Training and capacity building of service providers is a key low-cost strategy to develop an infrastructure that supports cessation.\textsuperscript{6} In general, training of HCPs has a measurable effect on the continuous abstinence and on the point prevalence of smoking.\textsuperscript{7} TDT training and education enhance physicians’ confidence and their readiness to advise, counsel, and offer TDT services,\textsuperscript{7} and trained HCPs are more likely to ask patients to set a quit date, make follow-up appointments, and counsel smokers.\textsuperscript{8} Accordingly, article 14 of the Framework Convention on Tobacco Control (FCTC) mandates effective programs to promote TDT, including training and capacity building of HCPs.\textsuperscript{6}

Yet, tobacco education and training in healthcare disciplines continues to be lacking in the EMR as is the case in other parts of the world.\textsuperscript{3} For example, in 2007 there were only four programs in the EMR which trained a total of 98 individuals on TDT, and in 2008 only 9\% of medical schools in the Middle East taught a specific module on tobacco. Generally, results from the Global Health Professions Student Survey (GHPSS) indicate a shortage of formal training in smoking cessation approaches in medical schools and in other healthcare disciplines.

**Setting and participants**
In addition to King Hussein Cancer Center (KHCC) from Jordan, the project engages a host organization from each of the participating countries: Ain Shams University-Institute of Psychiatry (Cairo-Egypt), Ministry of Health (MoH; Tunis-Tunisia), Sidi
Mohamed Ben Abdellah University – Faculty of Medicine - Hospitalier Universitaire Hassan II (CHU Hassan II; Fez – Morocco), and Sultan Qaboos University – College of Medicine and Health Sciences (SQU; Muscat – Oman).

The collaborators bring in extensive value and expertise to the project. KHCC, through its experience serving as the regional partner for Global Bridges in EMR, brings in experience in designing and running a TDT training program in the EMR since 2011.9 Partner organizations bring in TDT service expertise, and a diversity of backgrounds, including public health, psychiatry, epidemiology, and occupational medicine. Partners come in with extensive access to networks in their pertinent countries including universities, teaching hospitals, tobacco control research groups, national tobacco control programs, and civil society organizations. Finally, the group collectively masters three languages (Arabic, English, and French).

Methods:
The project was executed through three components. Component I set the stage through formalizing collaborations between KHCC and host organizations in the participating countries through signing memoranda of understanding (MoUs); presenting collaborators with a comprehensive report on KHCC’s previous work; and sharing scientific literature to help the collaborators build a common understanding. It further utilized a needs assessment exercise to inform country-specific decisions regarding selection of audience, program design, and distribution strategies. This component was concluded with a kick-off meeting that brought collaborators together to allow them to solidify relationships, consult with each other on country-specific decisions, and agree on a common direction and a plan of action.

Component II established the base for country-specific programs through defining target audiences, and designing the program to be delivered in each country. As part of this component, responsibilities for material translation and material development were allocated among the collaborators, and content development and translation were performed.

Component III focused on building the capacity of faculty who will be responsible for delivering the training in their pertinent countries. It involved remote (online) engagement of faculty and utilized pre-training assessments and pre-training reading assignments. However, the main activity under this component was conducting an on-site training of trainers (ToT) workshop in each of the participating countries aiming to strengthen the belief of candidate faculty in TDT as a public health intervention; build their capacity to offer TDT services; build their capacity to establish TDT services and continue their own professional development in the field; and introduce them to principles of adult education and methods for delivering training. The ToT workshops also aimed to provide the faculty with a forum to discuss next steps in their pertinent
countries. The ToT workshops concluded with the assessment of benefit and confidence as reported by the faculty themselves.

**Results:**
The project succeeded in bringing together 76 faculty from four different countries. In terms of background, most (68/76) of the faculty are physicians (various specializations), none are current tobacco users although some have some past experience with tobacco products, and most are active users of social media platforms.

In terms of experience, about half of the faculty (35/76) have more than 10 years of experience in their fields. Almost all (71/76) have clinical experience, and more than half have experience in teaching (50/76), training (43/76), and research (45/76). Specifically in TDT, the majority (64/76) have had some previous training in TDT and more than half (39/76) of the group have some experience in practicing TDT.

Participants’ feedback with respect to the ToT component indicates that the workshops induced a positive change in self-reported TDT-specific competencies, and were successful in enhancing confidence in ability to treat and train. Specifically, the ToT component was able to achieve an improvement in participants’ competence to apply motivational interviewing techniques (16%), integrate pharmacotherapy in the treatment plan (13%), and incorporate relapse prevention (15%).

In general, participants left with desirable post-training intentions. These include intentions to engage in TDT service offering and training, to transfer knowledge to others, to engage in tobacco control and TDT advocacy, and to engage in TDT-related research. When asked about their beliefs of whether they will be able to treat and train within six months from attending the workshops, the majority responded positively and those reporting barriers focused on system-related barriers and the need for more experience.

The workshops concluded with discussions to highlight specific priorities and plans of action for individual hubs. In general, countries focused on establishing new services to be handled by the faculty, setting clear targets for training, and addressing shortage of medications in their markets.

As part of evaluating the workshops, the faculty provided suggestions for improvements and listed topics they believe are needed to strengthen their capacity and confidence. Some of those comments may be diverted to country programs as learning that ensures pre-empting and addressing participant needs (e.g. timing and allocation of sessions over days). However, other comments necessitated a follow up intervention (Phase II of the same project) to address potential gaps in knowledge that may negatively influence confidence and competence (e.g. addressing TDT in light of comorbidities, assessing effectiveness of TDT services, and advancing content on training design and delivery).
To date the established training hubs have conducted 9 training workshops, collaborated with 2 academic programs to include TDT, and conducted several predisposing sessions to introduced HCPs to the concept.

List of Publications and Products:

To date, project outcomes have been publicized through:

A. Presenting the experience as part of Global Bridges grantee meeting in Tokyo-Japan:
   • Building a successful tobacco control network and capacity in the EMR

B. Presenting the experiences at the World Conference on Tobacco or Health 2018:
   • Poster (click here)

C. Presenting the experience at Mayo Clinic’s Global Tobacco Treatment Summit:
   • Video (click here)
   • Poster (click here)

D. Appearance on www.globalbridges.org (circulated to regional networks through email digests):
   • KHCC Advancing Tobacco Control (click here)
   • KHCC and Ain Shams University Institute of Psychiatry conduct TDT training of trainers for Egyptian champions (click here)
   • Sultan Qaboos University & KHCC prepare to conduct first TDT training fully delivered by Omani faculty (click here)
   • Moroccan Sidi Mohamed Ben Abdellah University and Tunisian Ministry of Health spearhead TDT training in North Africa (click here)
   • KHCC participates in the 2016 Global Tobacco Dependence Treatment Summit (click here)
   • Tobacco control success stories in Tunisia (click here)

Plans are underway to document the experience in a peer-reviewed publication.
References:

7 Muramoto ML, Lando H. Faculty development in tobacco cessation: Training health professionals and promoting tobacco control in developing countries. Drug Alcohol Rev 2009.