

Advancing Tobacco Dependence Treatment Services in the Eastern Mediterranean Region

International collaboration for training and capacity-building

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النهوض بالخدمات العلاجية لإدمان التبغ في منطقة الشرق المتوسط تعاون دولي للتدريب وبناء القدرات

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ABSTRACT: Tobacco use negatively affects health and is a major risk factor for non-communicable diseases (NCDs). Today, tobacco use ranks third among risk factors in North Africa and the Middle East in terms of disease burden. Despite the established need for these services, tobacco dependence treatment (TDT) services are still inadequate in the Eastern Mediterranean region (EMR). Among the main challenges hindering their expansion is the current lack of training opportunities. The provision of training and capacity-building—a key enabler of TDT—offers an excellent catalyst to launch TDT services in the region. This review discusses the need for TDT training in the EMR and describes a model for providing regional evidence-based training in line with international standards. The King Hussein Cancer Center in Amman, Jordan, is the regional host for Global Bridges, a worldwide TDT initiative. Using this model, they have trained 1,500 professionals and advocates from the EMR over the past three years.

Keywords: Chronic Diseases; Tobacco Dependence; Smoking Cessation; Education; Capacity Building; Eastern Mediterranean Region.

المخلص: يعتبر التبغ ذا تأثيرات سلبية على الصحة و عامل خطر كبير للأمراض غير السارية. يحتل التبغ المرتبة الثالثة لعوامل الخطر من ناحية عبء المرض في شمال أفريقيا و الشرق الأوسط. بالرغم من الحاجة المعتمدة لهذه الخدمات، تعتبر خدمات علاج إدمان التبغ في الوقت الحالي غير كافية في منطقة شرق المتوسط. ويعتبر النقص الحالي في فرص التدريب من أهم التحديات التي تعيق توسع هذه الخدمات. الاستعداد المسبق للتدريب وبناء القدرات هما المفتاح لتمكين علاج إدمان التبغ حيث تعطي حافزا ممتازا لانطلاق الخدمات العلاجية لإدمان التبغ في المنطقة. يناقش هذا المقال الاستعراضي الحاجة للتدريب في علاج إدمان التبغ في منطقة شرق المتوسط وتصف نموذج اعطاء تدريب إقليمي قائم على الأدلة و موازي للمعايير الدولية. مركز الحسين للسرطان بعمان، الأردن، هو مضيف إقليمي لمبادرة الجسور العالمية، كالمبادرة العالمية لعلاج إدمان التبغ. بإستخدام هذا النموذج، تم تدريب 1500 من المهنيين ومؤيدي المبادئ من منطقة شرق المتوسط خلال الثلاث سنوات الماضية.

مفتاح الكلمات: الأمراض غير السارية؛ التدريب؛ إدمان التبغ؛ الإقلاع عن التدخين؛ بناء القدرات؛ شرق المتوسط.

SMOKING TOBACCO-BASED PRODUCTS HARMS nearly every organ in the body and has been linked causally to a diminished health status in general. Specifically, smoking is linked to several non-communicable diseases (NCDs) which have recently advanced their ranking among the most frequently reported causes of death in the Arab world.¹ Tobacco-related cancers include lung cancer, head and neck cancers, bladder cancers and leukaemia.² New evidence has emerged suggesting that colorectal and liver cancers are also caused by smoking.² In addition, smoking is a common risk factor for other NCDs, namely cardiovascular diseases and respiratory illnesses and is an independent risk factor for diabetes mellitus; in fact, smoking raises an individual's risk

of developing diabetes by 30–40% compared to non-smokers.²

The annual death toll caused by tobacco use, which stood in 2008 at five million, is expected to rise to eight million by 2030, with individuals from low- and middle-income countries making up approximately 80% of these deaths.³ Tobacco smoking, including second-hand smoke inhalation, ranked third in terms of the global burden of disease in 1990; today, it is now ranked second within an array of risk factors.⁴ In North Africa and the Middle East, tobacco smoking, including second-hand smoke inhalation, ranked third in 2010 only after high blood pressure and a high body mass index (BMI), based on the attributable burden of disease.⁴ Results from the World Health

Organization (WHO) Report on the Global Tobacco Epidemic in 2008 indicate that the age-standardised prevalence of tobacco smoking among men in the Eastern Mediterranean region (EMR) ranged from 63% in Jordan and 51% in Tunisia to 25% in Oman.³ In 2012, the estimated age-standardised prevalence of daily smoking among men in the EMR ranged from 43% in Jordan and 45% in Tunisia to 13% in Oman.⁵

For an individual, quitting smoking brings about immediate health benefits, including the normalisation of heart rate and blood pressure and a decrease in coughing and the production of phlegm.⁶ In the long term, quitting tobacco generally reduces the risk of disease and premature death by 90% for those who quit before the age of 30 and by 50% for those who quit before the age of 50.⁶ Five years after quitting, the risk of stroke falls to that of a non-smoker and the risk of head, neck and bladder cancers is reduced by half.⁷ One of the six policies recommended by the WHO to counter the tobacco epidemic is a country-level initiative in offering help to smokers in quitting tobacco use; these measures are intended to assist in reducing the demand for tobacco.³ However, despite this policy and the documented short- and long-term benefits of quitting smoking, tobacco dependence treatment (TDT) services continue to be scarce and inconsistent across the EMR. Many factors contribute to this shortage of TDT services, including the lack of training opportunities for healthcare providers (HCPs) in the basic skills needed to deliver these services. This review justifies the urgent need for establishing TDT services across the EMR and describes a model of international collaboration that addresses one of the most important limitations for establishing these services—the training of HCPs in delivering effective and relevant TDT to interested smokers.

Tobacco Dependence Treatment

TDT is an integral component of any comprehensive tobacco control effort. In Article 14 of their Framework Convention on Tobacco Control (FCTC), the WHO mandates that parties should design and implement effective programmes to promote the cessation of tobacco use and provide adequate treatment for tobacco dependence.⁸ They furthermore recommend the inclusion of cessation advice in primary healthcare services, establishing accessible and free ‘quitlines’ and making low-cost pharmacotherapy available to interested smokers.^{3,8} Likewise, in a report issued in 1999, the World Bank urged governments seeking health and economic gains to encourage smokers to quit.⁹ Building on previously published data, the

World Bank estimated that 200 million deaths could be prevented by 2050 if adult tobacco consumption were to be halved by 2020.⁹ In comparison, halving the number of young people who take up smoking would have a negligible effect on short-term mortality rates.⁹

The inclusion of smoking cessation advice in primary healthcare settings has proven to be a low-cost strategy since the only major investment required is in training providers and availing informational materials to tobacco users.³ However, pharmacotherapy, while more expensive than offering cessation advice, has been shown to double or triple quit rates.³ In general, TDT interventions are extremely cost-effective when compared to the treatment of other chronic diseases. For example, compared to treatments for hypertension, TDT saves three times as many lives and takes on average only around two hours of a specialist’s time, which is much quicker than the time required to treat a case of hypertension.¹⁰ In general, the cost-effectiveness of TDT exceeds that of other commonly provided clinical preventative services, including Pap tests, mammographies and screening for colon cancer, as well as treatment for high serum cholesterol levels and mild to moderate hypertension.¹¹

Different countries have adopted different systems for offering TDT, building on variables such as income level, as was observed in a case series on TDT implementation in Brazil, England, India, South Africa and Uruguay.¹² Not all of the studied countries had national policies mandating that this treatment be offered, and furthermore, while some of the countries’ TDT policies relied on offering broadly available brief advice, others were dependent on specialist support which was often limited in availability. In addition, the extent of medication coverage and reimbursement of provider time varied from one country to another.¹² However, training and skill-building are integral to various models of TDT provision. For example, England, a high-income country, offers TDT as part of their National Health Service (NHS) plan. Both widely available brief advice and more intensive specialist support are offered to smokers, with the majority of the costs covered by the NHS. In this model, significant emphasis is placed on the training and skills of service providers and England has accordingly established a national centre to address training, certification and performance evaluation for TDT providers.¹² In Uruguay, an upper-middle-income country of 3.5 million, 100 TDT programmes were established by 2010. These programmes offer training to HCPs and provide free TDT medication to smokers. Moreover, Uruguayan law mandates that public and private service providers record the smoking status of all patients in their medical notes, incorporate a diagnosis

of tobacco dependence and offer relevant treatment through primary care programmes.¹² National guidelines are in place and efforts are underway to ensure that the national treatment programmes have complete population coverage.¹² Brazil and India, two lower-middle-income countries, have focused on establishing a limited number of specialised treatment units.¹² These services, while not necessarily wide-reaching, act as training hubs for HCPs. Although only Brazil currently has a national TDT policy, both countries have developed and adopted national TDT guidelines.^{12,13} Medication is available through treatment units in both countries but is only reimbursed in Brazil.¹²

The situation in the EMR is similar to that in other parts of the world; while a significant number of smokers have shown interest in quitting, the availability of TDT services continues to be limited and grows only marginally from year to year.^{3,14-16} Accordingly, TDT services are not consistently available across the EMR and are not yet integrated within the healthcare system. While some countries, including Kuwait, the United Arab Emirates (UAE) and Iran, offer a 'quitline' and cover costs for cessation services and nicotine replacement therapies (NRTs), most EMR countries offer partial to no coverage for smokers attempting to quit.¹⁴ Correspondingly, the data on screening for tobacco use demonstrate that there is insufficient screening and advice for smokers. For example, data from 2009 indicated that only 22% of smokers in Egypt had visited an HCP in the previous 12 months.¹⁷ Among smokers, only 74% were screened for smoking and, of those screened, only 67% were advised to quit smoking.¹⁷ In Qatar, data from 2013 revealed that only 71% of smokers in the country had been advised in the previous 12 months to quit smoking.¹⁶

Training and Capacity-Building

The training and capacity-building of service providers is a key measure in developing an infrastructure that supports smoking cessation and TDT, as highlighted by the guidelines for the implementation of Article 14 of the FCTC.⁸ At a minimum, the guidelines recommend that HCPs be trained to record tobacco use among patients, provide brief advice, encourage attempts to quit and refer smokers to specialised TDT services. Additionally, the FCTC states that cessation training be incorporated into the curricula of all health professions as well as within continuous professional development programmes.⁸ Muramoto *et al.* noted that training and education in general enhances physicians' confidence and their readiness to offer TDT services as well as advise and counsel patients on smoking cessation.¹⁸

In spite of the clear need for such programmes, there continues to be a lack of education and training programmes concerning TDT in healthcare disciplines. This was demonstrated during a survey of 171 countries in 2009 which found that only 27% of medical schools taught a specific module on tobacco.¹⁹ Specifically in the EMR countries, results from the Global Health Professions Student Survey indicated a shortage of formal training in smoking cessation approaches in medical schools.²⁰ The percentage of medical students who reported receiving training ranged from approximately 40% in Kuwait, Tunisia and Bahrain to approximately 9% in Morocco.²⁰ Similar gaps in training and education were revealed in other healthcare disciplines.²⁰ In a survey of medical students in the USA, respondents who reported receiving instruction, modelling and feedback on TDT by their preceptors in medical school had a higher self-reported skill level compared to those who recalled receiving less comprehensive training.²¹ However, a lack of staff, incentive and financial resources to support TDT teaching appears to present major barriers to its implementation, preventing less developed countries from incorporating a tobacco module into their medical curricula.¹⁹ To that end, developing the capacity of faculty members becomes critical in attempts to institutionalise TDT education and training for students in health professions.¹⁸

A systematic review of educational- and practice-based programmes concluded that HCPs could be better engaged in TDT if they were intercepted both during their education and once they became healthcare professionals; while the first affects quit rates among their patients, the latter is effective in increasing screening rates.²² A recent Cochrane review looked at randomised trials with interventions involving the training of HCPs in smoking cessation techniques.²³ The review concluded that such training had a measurable effect on the continuous tobacco abstinence among patients and the point prevalence of smoking. Additionally, trained HCPs were more likely to make follow-up appointments, provide smoking cessation counselling and ask patients to set a quit date.²³ Yet, and despite the proven value of such training programmes, an international survey of TDT training programmes could identify only four programmes in the EMR, training a total of 98 individuals in 2007.²⁴

Model for Tobacco Dependence Treatment: King Hussein Cancer Center

The King Hussein Cancer Center (KHCC) is a comprehensive cancer care facility in Amman, Jordan. Since 2008, KHCC has offered TDT services to

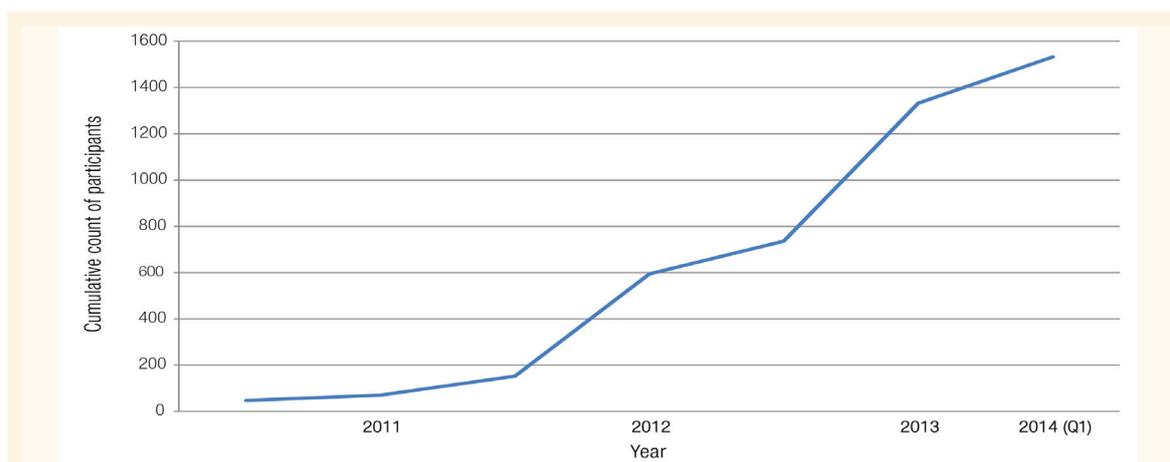


Figure 1: Graph indicating the recent cumulative growth in the number of trained healthcare providers and advocates attending tobacco dependence treatment training conducted by the King Hussein Cancer Centre in the Eastern Mediterranean region.

cancer patients and the general public, endeavouring to address the gaps in capacity and competence that limit the reach of TDT services and patients' access to help. Realising the importance of training HCPs in evidence-based treatment, KHCC started offering TDT training to HCPs in EMR countries in 2011. This was done via a collaboration with Global Bridges, an international healthcare TDT alliance that was co-founded by the Mayo Clinic, the American Cancer Society and the University of Arizona. The Global Bridges initiative seeks to create opportunities to share treatment and advocacy expertise and to provide state-of-the-art training to countries around the world in order to help them fulfill Article 14 of the FCTC. While other organisations represent Global Bridges throughout Latin America, Africa and Europe, KHCC is the regional host and partner for this initiative in the EMR.

In this capacity, KHCC developed a standard TDT curriculum designed to respond to the identified needs and gaps in the region. The training curriculum content was built on internationally recognised standards and is implemented during a three-day workshop which aims to enhance the participants' understanding of TDT as an integral component of tobacco control and to equip trainees to practice TDT and handle various cases. The topics covered include a general introduction to tobacco and its products; tobacco and NCDs; the process of addiction, withdrawal and relapse; conducting counselling and motivational interviews; pharmacotherapies, and building individualised treatment plans. Additional training sessions seek to present TDT in the context of tobacco control in general; highlight ethical issues in TDT; present the water-pipe as a regional and global health hazard, and guide participants through establishing and sustaining

TDT services. The methods employed vary between teaching, interactive exercises and case studies derived from the trainers' own treatment practices. Pre- and post-workshop tests are utilised to gauge the benefits of the training while a workshop evaluation is used to collect feedback in order to inform any updates and upgrades to the curriculum. Workshops are conducted in close coordination with in-country partners who understand the situation within the local context and can influence the programme's design and execution, in addition to providing continuing medical education accreditation for the workshops.

The international collaboration demonstrated within the Global Bridges initiative is testimony to how a regional problem can be successfully addressed through global partnerships. To date, KHCC has trained over 1,500 HCPs and advocates from the EMR on tobacco control and TDT [Figure 1]. A total of 20 workshops and conferences have been held in six

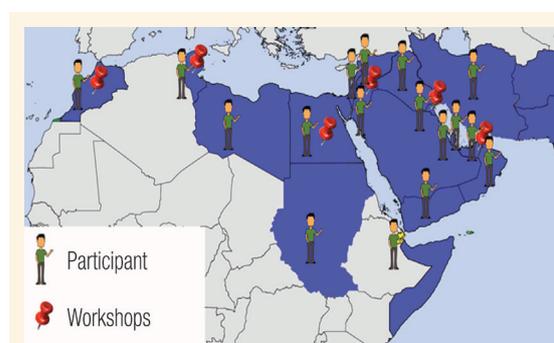


Figure 2: Distribution map representing the geographic reach of the tobacco dependence treatment training conducted by the King Hussein Cancer Centre in the Eastern Mediterranean region (EMR). Jordan, Tunisia and the United Arab Emirates have hosted three or more workshops to date. Most countries in the EMR region have been represented at these workshops.

countries in the EMR; participants attended from a total of 19 countries, spanning Morocco to the UAE, as well as Iran and Afghanistan [Figure 2]. Additionally, the participants had varying professional backgrounds, including cardiology, oncology, pulmonology, general medical practice, nursing and pharmacology, among others. This diversity highlights the level of interest in such training and the enthusiasm for establishing these programmes across the region.

Other Challenges Facing Tobacco Dependence Treatment in the Eastern Mediterranean Region

While training programmes such as the one described above seek to bring about significant progress, the EMR continues to face other challenges that hinder service expansion. Political commitment across the region to tobacco control is not uniform and the tobacco industry has been gaining traction in some EMR countries.^{25–27} As developed nations around the world tighten their regulations on the tobacco industry, the developing nations of the EMR, with their relaxed tobacco control regulations, may present a safe haven for this industry.^{25–27} Tobacco companies are state-owned in eight EMR countries, while multinational corporations have recently established operations in other Middle Eastern countries, such as in Jordan and Egypt.^{26–28}

Another challenge that may hinder the expansion of TDT services in the region is the prevalence of tobacco use among physicians and other healthcare workers. In 2010, 24–42% of medical students in the EMR were either current smokers or had previously been smokers.²⁰ This undermines the role that HCPs should play in diminishing the social acceptability of tobacco use; it also reduces their credibility in promoting TDT services.⁸ It is therefore imperative that teaching and training programmes for HCPs address tobacco control and TDT early on and that special attention is given to first helping these professionals quit tobacco use themselves.

In general, the infrastructure necessary to enable TDT services is not yet available in many EMR countries, particularly as there are no national policies to promote tobacco cessation. Screening for and recording tobacco use is not yet common practice among HCPs and the availability of TDT medication may be interrupted. Inadequate accessibility to services and treatment coverage present more barriers. In particular, the lack of treatment coverage is a key obstacle that needs to be addressed in parallel to any attempts to increase TDT services. Experiences

in other countries have shown that the extent of treatment coverage influences the utilisation rate of cessation services; the rate of usage has the potential to quadruple if full coverage is provided.^{29–31} Finally, population-level strategies that promote cessation and encourage smokers to quit, such as price measures and pictorial warnings on tobacco products, are either not in place or are only in the early stages of implementation, adding to the challenges facing the expansion of TDT services in this region.³²

Conclusion

In summary, the rise in the prevalence of tobacco use in the region is alarming and calls for quick and decisive action in EMR countries, specifically the implementation of WHO-recommended strategies for tobacco control. In the short term, helping smokers to quit is highly feasible. Enabling and training HCPs, potentially through international collaborations, should help build the skills needed to deliver effective TDT measures to smokers throughout the EMR.

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