

MPOWER, needs and challenges: trends in the implementation of the WHO FCTC in the Eastern Mediterranean Region

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Abstract

Background: WHO MPOWER aims to help countries prioritize tobacco control measures in line with the WHO Framework Convention on Tobacco Control.

Objectives: This paper assessed the progress and challenges in implementing the 6 priority policies of MPOWER in countries of the WHO Eastern Mediterranean Region since 2011.

Methods: A checklist was developed and scores assigned based on the MPOWER indicators (maximum score 37). MPOWER data for the Region in the 2015 and 2017 tobacco control reports were extracted and scored. Data from similar analyses for 2011 and 2013 were also included. Countries were ranked by scores for each indicator for 2015 and 2017 and for overall scores for 2011 to 2017.

Results: The Islamic Republic of Iran, Egypt and Pakistan had the highest scores in 2015 (33, 29 and 27 respectively) and the Islamic Republic of Iran, Pakistan and Yemen had the highest scores in 2017 (34, 31 and 27 respectively). The indicators with the highest and lowest combined score for all countries were for advertising bans and compliance with smoke-free policies: 67 and 18 respectively in 2015, and 73 and 15 respectively in 2017. Most countries (15/22) had higher total scores in 2017 than 2015: Afghanistan, Bahrain and Syrian Arab Republic had the greatest increases. The total score for the Region increased from 416 out of a maximum score of 814 in 2011 to 471 in 2017.

Conclusions: Although notable achievements have been made in the Region, many challenges to policy implementation remain and require urgent action by governments of the countries of the Region.

Keywords: Tobacco; smoking; media; noncommunicable diseases; control

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Introduction

The WHO Framework Convention on Tobacco Control (WHO FCTC) is the first international treaty to provide new legal dimensions for international health cooperation in combating the global tobacco epidemic (1).

The Eastern Mediterranean Region (EMR) of the World Health Organization (WHO) consists of 22 high-, middle- and low-income countries. Tobacco use is one of the greatest public health challenges facing this Region. Smoking rates among men are high and are projected to increase. Furthermore, EMR is one of two WHO regions with the fastest growing consumption of tobacco products and where the prevalence of use is expected to increase 25% by the year 2025, compared with a decrease in Asia, North America and Europe (2). There is a need, therefore, for comprehensive tobacco control programmes (3,4). A major barrier however to implementing tobacco control programmes worldwide is the tobacco industry, which typically uses its financial power to expand its production, distribution and sale of tobacco products, and to influence policy-makers (2).

In 2008, WHO introduced a package of measures under the acronym of MPOWER with the aim of helping Member States to prioritize tobacco control measures while implementing the various provisions of the WHO FCTC with the ultimate aim of reducing the global morbidity and mortality from tobacco use. This package focuses on 6 evidence-based measures that have been found to have the greatest effect on reducing tobacco consumption, namely: **M**onitoring tobacco use and prevention policies; **P**rotecting people from tobacco smoke; **O**ffering help to quit tobacco use; **W**arning about the dangers of tobacco; **E**nforcing bans on tobacco advertising, promotion and sponsorship; and **R**aising taxes on tobacco (2). Global experience shows that implementation of these measures reduces tobacco consumption and its harmful health effects (5–7).

WHO published 4 reports on the global tobacco epidemic in 2011, 2013, 2015 and 2017, which included data on the activities of the EMR countries in relation to these 6 policies (8–11). Two studies, based on the 2011 and 2013 WHO MPOWER reports, showed different levels of implementations of the 6 elements of

MPOWER (12,13). For example, the lack of adherence to the smoking ban in public places was alarmingly high. The studies also demonstrated the poor compliance of the tobacco industry with tobacco control laws, and the sale of tobacco products is still almost unregulated. This contrasts with the experiences in other WHO regions where implementation has been better than the EMR (14–16).

Lessons can be learned from 10 years of implementing WHO FCTC and the demonstrated benefit in combating noncommunicable diseases (17,18). Cairney and Mamudu (19) report that the best approach to tobacco control in a country requires specific policy processes, namely: the department of health takes the policy lead; tobacco is 'framed' as a public health problem; public health groups are consulted at the expense of tobacco control interests; socioeconomic conditions are conducive to policy change; and the scientific evidence is 'set in stone' within governments. No country can meet all these requirements in a short period and there is a wide gap between the expectations of implementing such programmes and the actual situation in many countries, particularly in the EMR. In 2016 and 2017, 2 studies showed that the WHO FCTC implementation in the Region had not improved greatly over the past 6 years (20,21); countries had failed to adopt stronger and more effective policies; and reinforce the already existing laws.

Our study therefore aimed to compare the performance of EMR countries over time in implementation of MPOWER policies, and discuss some of the challenges

facing the countries in adopting these effective measures.

Methods

This study was conducted during May–September 2017. Published literature, official reports on MPOWER and communications with regional experts in the field of tobacco control were the source of our data. Two researchers searched and summarized the papers and reports, screened studies, extracted data independently and resolved any discrepancies under the supervision of the first author. The checklist was designed previously (12,13) by Iranian and international tobacco control specialists and contained 10 indicators based on the main elements of MPOWER [Monitoring, Smoke-free policies, Cessation programmes, Warnings (health warning on cigarette packets, and mass media campaigns), Advertising bans, and Taxation], and 3 other MPOWER indicators: smoking prevalence, smoke-free policy compliance and advertising ban compliance. The cut-offs were set according to the scoring of the indicators in the 2015 Report on the Global Tobacco Epidemic (8). Seven indicators had 5 options and we assigned a score of 0 up to a maximum of 4; 3 indicators had 4 possible options and were assigned a score of 0 up to a maximum of 3. Higher scores indicate better level of implementation of MPOWER policies. Thus, the maximum possible score was 37 (Table 1). If data were not available for an indicator, it was scored as zero. As with the two previous studies (12,13), two trained assessors conducted the assessment (correlation coefficient between them = 0.8). Data entry was done independently by the first assessor and

Table 1 Matrix used to assess tobacco control in EMR countries based on the 2015 WHO MPOWER report (8)

Indicator	Score
Adult daily smoking prevalence	4
Estimates not available	0
> 30%	1
20–29%	2
15–19%	3
< 15%	4
Monitoring: prevalence data	3
No known or recent data or data that are not both recent and representative	0
Recent and representative data for either adults or adolescents	1
Recent and representative data for both adults and adolescents	2
Recent, representative and periodic data for both adults and adolescents	3
Smoke-free policies (protecting people from second-hand smoke)	4
Data not reported	0
Up to 2 public places completely smoke free	1
3–5 public places completely smoke free	2
6 or 7 public places completely smoke free	3
All public places completely smoke free	4
Cessation programmes	4
Data not reported	0
None	1

Table 1 Matrix used to assess tobacco control in EMR countries based on the 2015 WHO MPOWER report (8) continued

Indicator	Score
Nicotine replacement therapy and/or some cessation services (neither cost-covered)	2
Nicotine replacement therapy and/or some cessation services (≥ 1 of which is cost-covered)	3
National quit line, and both nicotine replacement therapy and some cessation services cost-covered	4
Health warnings (on cigarette packages)	4
Data not reported	0
No warnings or small warnings	1
Medium-size warnings missing some appropriate characteristics	2
Medium-size warnings with all appropriate characteristics	3
Large warnings with all appropriate characteristics	4
Mass media warnings through anti-tobacco campaigns	4
Data not reported	0
No campaign conducted	1
Campaign conducted with 1–4 appropriate characteristics	2
Campaign conducted with 5–6 appropriate characteristics	3
Campaign conducted with all appropriate characteristics	4
Ban on tobacco advertising, promotion and sponsorship	4
Data not reported	0
Complete absence of a ban in print media	1
Ban on national television, radio and print media only	2
Ban on national television, radio and print media as well as on some but not all other forms of direct and/or indirect advertising	3
Ban on all forms of direct and indirect advertising	4
Tax on tobacco products	4
Data not reported	0
$\leq 25\%$ of retail price is tax	1
26–50% of retail price is tax	2
51–75% of retail price is tax	3
$> 75\%$ of retail price is tax	4
Compliance with bans on advertising	3
Complete compliance (8/10 to 10/10)	3
Moderate compliance (3/10 to 7/10)	2
Minimal compliance (0/10 to 2/10)	1
Not reported	0
Compliance with smoke-free policies	3
Complete compliance (8/10 to 10/10)	3
Moderate compliance (3/10 to 7/10)	2
Minimal compliance (0/10 to 2/10)	1
Not reported	0
Total	37

was checked by the second. The principal investigator randomly selected 2 or 3 of the data entered to monitor the ratings.

Results

Countries were ranked by scores for each indicator for 2015 and 2017 as shown in Tables 2 and 3 respectively. The highest scores were attained by Egypt, the Islamic Republic of Iran and Pakistan (scores 33, 29 and 27 respectively) in 2015; and Islamic Republic of Iran,

Pakistan and Yemen (scores 34, 31 and 27 respectively) in 2017, while the score for Somalia was 4 in 2015 and 7 in 2017. Thirteen countries did not report adult daily smoking prevalence in 2015, which had decreased to 8 countries in 2017. The indicators with the highest and lowest combined score for all countries were for advertising bans and compliance with smoke-free policies: 67 and 18 respectively in 2015, and 73 and 15 respectively in 2017. Most countries (15/22) had higher total scores in 2017 than 2015, with the greatest increases seen in

Table 2 Countries of the World Health Organization Eastern Mediterranean Region ranked by total WHO MPOWER score for tobacco control, 2015

Country	Smoking prevalence	Monitoring	Smoke-free policies	Smoke-free policy compliance	Cessation programmes	Health warning on cigarettes packets	Mass media campaigns	Advertising bans	Advertising ban compliance	Taxation	Total scores (2015)
Islamic Republic of Iran	4	3	4	2	4	4	4	4	3	1	33
Egypt	2	3	2	2	3	4	3	4	2	4	29
Pakistan	3	3	4	1	3	3	3	3	1	3	27
Lebanon	2	2	4	1	3	2	4	3	1	2	24
Kuwait	0	3	3	1	4	3	3	3	1	2	23
Saudi Arabia	4	2	4	3	3	3	1	1	1	1	23
Libya	0	2	4	1	3	1	4	4	3	1	23
Yemen	0	2	3	1	2	3	2	4	2	3	22
West Bank and Gaza Strip	0	3	4	1	2	1	2	3	1	4	21
Morocco	3	1	2	2	2	1	1	3	3	3	21
Tunisia	0	1	1	0	3	1	4	3	4	3	20
Djibouti	0	2	3	0	2	4	3	4	0	2	20
Jordan	1	1	2	1	3	2	1	3	1	4	19
Qatar	0	3	1	0	3	3	1	3	3	1	18
United Arab Emirates	0	1	0	0	4	3	3	4	0	1	16
Sudan	0	1	1	0	1	1	3	3	3	3	16
Bahrain	2	0	0	0	3	3	1	4	0	2	15
Oman	4	1	1	0	3	3	1	1	0	1	15
Iraq	0	1	2	1	3	2	1	3	1	1	15
Syrian Arab Republic	0	1	3	0	3	1	1	3	0	0	12
Afghanistan	0	0	2	1	2	1	1	3	1	1	12
Somalia	0	0	1	0	1	1	0	1	0	0	4
Total	25	36	51	18	60	50	47	67	31	43	428

Table 3 Countries of the World Health Organization Eastern Mediterranean ranked by total WHO MPOWER score for tobacco control, 2017

Country	Smoking prevalence	Monitoring	Smoke-free policies	Smoke-free policy compliance	Cessation programmes	Health warning on cigarette packets	Mass media campaigns	Advertising bans compliance	Advertising bans compliance	Taxation	Total scores	Difference from 2015
Islamic Republic of Iran	4	4	4	3	4	4	3	4	3	1	34	+1
Pakistan	3	4	4	1	3	3	4	3	3	3	31	+4
Yemen	4	3	3	1	2	3	1	4	3	3	27	+5
Saudi Arabia	4	3	2	1	3	3	2	3	3	2	26	+3
Egypt	2	4	2	0	3	4	1	3	3	3	25	-4
Lebanon	2	4	4	1	3	2	1	3	2	2	24	0
Jordan	0	2	2	1	3	2	4	3	2	4	23	+4
Morocco	3	2	2	1	2	1	4	3	1	3	22	+1
Djibouti	4	3	3	0	2	4	0	4	0	2	22	+2
Qatar	3	4	1	0	3	3	0	4	3	1	22	+4
Kuwait	3	4	2	0	4	3	1	4	0	1	22	-1
Bahrain	2	2	0	0	3	3	2	4	3	2	21	+6
West Bank and Gaza Strip	0	2	4	1	2	1	1	3	2	4	20	-1
Oman	4	1	1	0	3	3	1	3	3	1	20	+5
Syrian Arab Republic	0	1	3	2	3	1	1	3	3	3	20	+8
United Arab Emirates	2	2	0	0	4	3	3	4	0	1	19	+3
Afghanistan	0	0	4	2	2	3	1	4	3	0	19	+7
Iraq	0	2	2	1	3	2	2	3	1	3	19	+4
Tunisia	2	1	1	0	3	2	3	3	0	3	18	-2
Libya	0	1	4	0	3	1	1	4	3	1	18	-5
Sudan	0	1	2	0	1	1	1	3	0	3	12	-4
Somalia	0	1	1	0	1	1	1	1	0	1	7	+3
Total	42	51	51	15	60	53	38	73	41	47	471	+43

Afghanistan, Bahrain and the Syrian Arab Republic. However, 5 countries had lower scores, including Egypt, Libya and Sudan.

Table 4 shows the total scores for the countries for 2011, 2013, 2015 and 2017. The total score for the Region increased from 416 in 2011 to 471 in 2017. The Islamic Republic of Iran had the highest scores in the 4 years the MPOWER data were analysed. Afghanistan, Lebanon, Pakistan, Saudi Arabia and Yemen showed the biggest increase in their total scores in this time.

Discussion

From our assessment of the implementation of the MPOWER package in EMR countries over a 7-year period, it is clear that the overall implementation of the FCTC in the EMR remains suboptimal. Some countries have improved their scores in tobacco control while others have failed to show substantial improvement. From 2015 to 2017, the scores of Pakistan, Yemen and Saudi Arabia and Yemen increased and they ranked second, third and fourth in 2017, while the scores of Libya and Sudan were among the lowest. Egypt's overall score decreased and its ranking dropped, but it still had the fifth highest score of the EMR countries. The scores of Afghanistan, Bahrain, Djibouti, Iraq, Jordan, Morocco, Oman, Qatar,

Somalia, Syrian Arab Republic and United Arab Emirates also all increased from 2015 to 2017. More tobacco control programmes have recently been introduced in the EMR (20,21), but they need more time for their effectiveness to be felt.

It is therefore important that EMR countries, particularly those with a decrease in their scores from 2015, to re-examine their performance in order to have stronger national tobacco control plans that incorporate the 6 key policies of MPOWER. In 2006, Joossens and Raw compared tobacco control scores in European countries (22). The same methodology was followed to compare the 22 EMR countries; the study showed Egypt, Jordan and the Islamic Republic of Iran had the highest scores (20). Two previous studies which compared tobacco control programmes among EMR countries and based on the WHO MPOWER reports were published in 2011 and 2013 (12,13). These used the same checklist and scoring system and so offered an opportunity to monitor trends in the increase or decrease of tobacco control indicators from 2011. Comparing the total scores of EMR countries in 2011, 2013 and 2015, we found a 25-point decrease in 2015 compared with 2013 in contrast to the 37-point increase in 2013 compared with 2011. Of particular importance is the fact that tobacco taxation programmes have been

Table 4 Trend in WHO MPOWER scores in tobacco control based on WHO tobacco control reports in Eastern Mediterranean Region countries (8–11)

Country	Total score	Total score	Total score	Total score
	2017	2015	2013	2011
Islamic Republic of Iran	34	33	31	29
Pakistan	31	27	21	20
Yemen	27	22	17	17
Saudi Arabia	26	23	23	19
Egypt	25	29	28	28
Lebanon	24	24	26	17
Jordan	23	19	22	21
Morocco	22	21	17	17
Djibouti	22	20	25	20
Qatar	22	18	21	18
Kuwait	22	23	28	21
West Bank and Gaza Strip	20	21	25	20
Oman	20	15	21	16
Syrian Arab Republic	20	12	17	18
United Arab Emirates	19	16	17	24
Bahrain	21	15	22	21
Afghanistan	19	12	13	9
Tunisia	18	20	21	17
Iraq	19	15	18	17
Libya	18	23	22	21
Sudan	12	16	13	19
Somalia	7	4	6	7
Total scores	471	428	454	416

unsuccessful, even in countries with high overall scores, such as the Islamic Republic of Iran. Ten of the 22 EMR countries were unsuccessful in implementing a tobacco taxation programmes during 2011 to 2015.

All countries need to increase taxation rates to improve the overall performance in effective tobacco control measures. Another example is Egypt, which had a high overall score in 2017 but did not score well in smoke-free policies; consequently, more effective reinforcement measures need to be taken. The 2017 data show some challenges in implementing MPOWER policies in certain countries; for example in Kuwait and Saudi Arabia there was a decrease in compliance with smoke-free policies. At the same time, other policies remain unchanged in the countries, such as the inclusion of graphic health warnings on cigarette packets. There is also little steady progress in implementation of other policies, for example the policy on raising taxes. Some countries have gone below the 75% level of tax and, while some countries increased taxes, they did not reach the highest level, which was reported in a previous analysis (23,24). It is important that countries of the Region not only move forward and not backwards in policy-making, but also aim for the highest policy level, which is the most effective.

This study has some limitations. The MPOWER reports do not refer specifically to waterpipe and other forms of tobacco smoking. Political, social and economic variables that support or act as barriers to tobacco control were not investigated in this study. These factors should be investigated in future studies. The interference of the

tobacco industry with the implementation of the control programmes is not well reflected in such surveys. It is well known that the tobacco industry typically uses its large profits to expand its production, distribution and sale of tobacco products as well to influence policy-makers in order to impede tobacco control programmes (2).

Conclusion, EMR countries have introduced tobacco control laws after ratifying/acceding to the WHO FCTC, but there has been variable commitment by governments and policy-makers in enacting and reinforcing laws that would lead to effective control measures as assessed by the implementation of MPOWER policies. Although remarkable achievements have been made over the past 7 years, many challenges remain. To overcome them and catch up with the progress of other WHO regions, stronger measures need to be implemented and reinforced as part of comprehensive national plans that take into consideration all social and economic variables. A better outcome can be achieved by greater coordination and cooperation between the countries of the Region to draw up common control strategies. This has already been done successfully in other WHO regions in their fight against the global tobacco epidemic, as for example in the European region (25).

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Programme MPOWER – besoins et défis : tendances dans la mise en œuvre de la Convention-cadre de l'OMS pour la lutte antitabac dans la Région de la Méditerranée orientale

Résumé

Contexte : Le programme MPOWER de l'OMS vise à aider les pays à accorder la priorité aux mesures de lutte antitabac, conformément à la Convention-cadre de l'OMS pour la lutte antitabac.

Objectif : La présente étude a évalué les progrès et les défis de la mise en œuvre des six politiques prioritaires du programme MPOWER dans les pays de la Région OMS de la Méditerranée orientale depuis 2011.

Méthodes : Une liste de contrôle a été mise au point et des scores ont été assignés sur la base des indicateurs MPOWER (score maximum de 37). Des données sur le programme MPOWER dans la Région en 2015 et en 2017 publiées dans des rapports sur la lutte antitabac ont été extraites et se sont vues attribuer une note. Des données issues d'analyses similaires pour les années 2011 et 2013 ont également été incluses. Les pays ont été classés selon les notes attribuées pour chaque indicateur pour 2015 et 2017, et pour l'ensemble des scores pour 2011 et 2017.

Résultats : La République islamique d'Iran, l'Égypte et le Pakistan ont obtenu les scores les plus élevés pour 2015 (33, 29 et 27 respectivement), et la République islamique d'Iran, le Pakistan et le Yémen ont obtenu les scores les plus élevés pour 2017 (34, 31 et 27 respectivement). Les indicateurs comportant les scores combinés les plus élevés et les plus bas pour l'ensemble des pays concernaient les interdictions de publicité et la conformité avec les politiques non-fumeur en 2015 (67 et 18 respectivement) et en 2017 (73 et 15 respectivement). La plupart des pays (15/22) ont obtenu des scores totaux plus élevés en 2017 qu'en 2015 : l'Afghanistan, Bahreïn et la République arabe syrienne, affichaient les augmentations les plus importantes. Le score total pour la Région a connu une augmentation, passant de 416 pour un score maximum de 814 en 2011, à 471 en 2017.

Conclusions : Bien que des réalisations considérables soient à noter dans la Région, de nombreux défis entravant la mise en œuvre des politiques demeurent et requièrent une intervention de toute urgence au niveau des gouvernements des pays de la Région.

مبادرة التحرر من التبغ، الاحتياجات والتحديات: الاتجاهات السائدة في تنفيذ اتفاقية منظمة الصحة العالمية الإطارية بشأن مكافحة التبغ في إقليم شرق المتوسط

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الخلاصة

الخلفية: تهدف مبادرة منظمة الصحة العالمية للتحرر من التبغ إلى تحديد الأولويات المتعلقة بتدابير مكافحة التبغ تمشياً مع اتفاقية منظمة الصحة العالمية الإطارية بشأن مكافحة التبغ. ولقد قامت هذه الدراسة بتقييم التقدم المحرز والتحديات المصادفة في تنفيذ السياسات الست ذات الأولوية لمبادرة التحرر من التبغ في بلدان إقليم شرق المتوسط منذ عام ٢٠١١.

طرق البحث: تم تصميم قائمة مرجعية وإسناد درجات على أساس مؤشرات مبادرة التحرر من التبغ (بحد أقصى ٣٧ درجة). واشتقت بيانات المبادرة المتعلقة بالإقليم في عامي ٢٠١٥ و ٢٠١٧ والواردة في تقارير مكافحة التبغ وأسندت إليها درجات. كما أدرجت بيانات مشتقة من تحليلات مماثلة لعامي ٢٠١١ و ٢٠١٣. وصنفت البلدان حسب الدرجات المسندة لكل مؤشر لعامي ٢٠١٥ و ٢٠١٧ وحسب المجموع الكلي للدرجات في الفترة من ٢٠١١ إلى ٢٠١٧.

النتائج: سجّلت جمهورية إيران الإسلامية ومصر وباكستان أعلى الدرجات في عام ٢٠١٥ (٣٣ و ٢٩ و ٢٧ درجة على التوالي)، في حين سجّلت جمهورية إيران الإسلامية وباكستان واليمن أعلى الدرجات في عام ٢٠١٧ (٣٤ و ٣١ و ٢٧ درجة على التوالي). وسجّل مؤشراً حظر الإعلان عن التبغ والامتنال لسياسات حظر التدخين أعلى وأدنى درجة مجمعة لجميع البلدان (٦٧ و ١٨ على التوالي) في عام ٢٠١٥ و (٧٣ و ١٥ على التوالي) في عام ٢٠١٧. وحقق معظم البلدان (٢٢ / ١٥) مجموع درجات أعلى في عام ٢٠١٧ منه في عام ٢٠١٥: حيث سجّلت الجمهورية العربية السورية وأفغانستان والبحرين أعلى الزيادات. وارتفع مجموع درجات الإقليم من ٤١٦ درجة، من أصل ٨١٤ وهي الدرجة القصوى في عام ٢٠١١، إلى ٤٧١ درجة في عام ٢٠١٧.

الاستنتاجات: على الرغم من الإنجازات المهمة التي تحققت في الإقليم، لا يزال هناك الكثير من التحديات القائمة على مستوى تنفيذ السياسات، وهو ما يتطلب اتخاذ إجراءات عاجلة من جانب حكومات دول الإقليم.

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