

## From the international tobacco control arena to the local context

Tselengidis, Arsenios; Adams, Sally; Freeman, Becky; Mostafa, Aya; Astuti, Putu Ayu Swandewi; Cranwell, Jo

DOI:

[10.1136/bmjopen-2022-066528](https://doi.org/10.1136/bmjopen-2022-066528)

License:

Creative Commons: Attribution-NonCommercial (CC BY-NC)

### Document Version

Publisher's PDF, also known as Version of record

### Citation for published version (Harvard):

Tselengidis, A, Adams, S, Freeman, B, Mostafa, A, Astuti, PAS & Cranwell, J 2023, 'From the international tobacco control arena to the local context: a qualitative study on the tobacco advertising, promotion and sponsorship legislative environment in Sudan and the challenges characterising it', *BMJ open*, vol. 13, no. 6, e066528. <https://doi.org/10.1136/bmjopen-2022-066528>

[Link to publication on Research at Birmingham portal](#)

### General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.




When citing, please reference the published version.

### Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact [UBIRA@lists.bham.ac.uk](mailto:UBIRA@lists.bham.ac.uk) providing details and we will remove access to the work immediately and investigate.

# BMJ Open From the international tobacco control arena to the local context: a qualitative study on the tobacco advertising, promotion and sponsorship legislative environment in Sudan and the challenges characterising it

Arsenios Tselengidis ,<sup>1,2</sup> Sally Adams,<sup>3</sup> Becky Freeman,<sup>4</sup> Aya Mostafa ,<sup>5</sup> Putu Ayu Swandewi Astuti ,<sup>6</sup> Jo Cranwell<sup>1</sup>

**To cite:** Tselengidis A, Adams S, Freeman B, *et al.* From the international tobacco control arena to the local context: a qualitative study on the tobacco advertising, promotion and sponsorship legislative environment in Sudan and the challenges characterising it. *BMJ Open* 2023;**13**:e066528. doi:10.1136/bmjopen-2022-066528

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2022-066528>).

Received 11 July 2022  
Accepted 19 April 2023



© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

For numbered affiliations see end of article.

**Correspondence to**  
Arsenios Tselengidis;  
at2261@bath.ac.uk

## ABSTRACT

**Objectives** The aim of the study was to assess the Sudanese tobacco advertising, promotion and sponsorship (TAPS) legislative environment and the challenges characterising it. We formulated three research questions: What is the TAPS policy context in Sudan? What circumstances led to the development of the current legislative text? Finally, what was the involvement of the different actors in these events?

**Design** We conducted a qualitative analysis using the Health Policy Triangle model to frame the collection and extraction of publicly available information from academic literature search engines, news media databases or websites of national and international organisations, as published by February 2021. The thematic framework approach was employed to code and analyse the textual data and the generated themes were used to map connections across the data and to explore relationships among the generated subthemes and themes.

**Setting** Sudan.

**Data** Using a combination of the keywords “Sudan” and “tobacco advertising” (or “tobacco marketing” or “tobacco promotion”), we collected publicly available documents in the English language. We included 29 documents in the analysis.

**Results** Three themes underpin the Sudanese legislative environment on TAPS: (1) limited and outdated TAPS data, (2) stakeholder involvement and tobacco industry interference and (3) TAPS legislation not aligned with the WHO Framework Convention on Tobacco Control Secretariat recommendations.

**Conclusions** Findings from this qualitative analysis suggest that recommendations to move forward in Sudan should include the systematic and periodic collection of TAPS surveillance data, addressing any remaining legislative content loopholes and protecting policy-making from tobacco industry interference. In addition, best practices from other low-income and middle-income countries with good TAPS monitoring systems, such as Egypt, Bangladesh and Indonesia, or with protective provisions against tobacco industry interference, such

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Article 13 (tobacco advertising, promotion and sponsorship (TAPS)) of the WHO Framework Convention on Tobacco Control requires parties to prohibit deceptive promotion of tobacco products; comprehensively ban TAPS in the media; prohibit tobacco sponsorship of international events and/or the participation therein; restrict direct or indirect incentives encouraging tobacco product purchase; and, in case of a non-comprehensive ban adoption, the disclosure to the governmental authorities of the tobacco industry's expenditures on TAPS not yet prohibited.
- ⇒ This study is the first study assessing the challenging context for implementation of Article 13 in Sudan, a low-income country which is beset by internal political conflicts and health emergencies that create disruption in normal governance processes.
- ⇒ We used the Health Policy Triangle, a conceptual framework specifically designed for the analysis of health sector policies in low-income and middle-income countries, and the thematic framework analysis to present the identified challenges within each of the Health Policy Triangle's component (context, process, content and actors).
- ⇒ Limited to data in English language, which were publicly available or to documents provided to the authors.
- ⇒ Any documents assessing, discussing or criticising issues relevant to the ‘Executive Regulation of Tobacco Control for the Year 2021’ are not addressed as no data was retrieved after its adoption.

as Thailand and the Philippines, could be considered for adaptation and implementation.

## INTRODUCTION

Article 13 of the WHO's (WHO) Framework Convention on Tobacco Control (FCTC)<sup>1</sup>

aims to achieve a complete ban of tobacco advertising, promotion and sponsorship (TAPS). The Convention has already been signed and ratified by 180 jurisdictions worldwide. Despite the magnitude of the support, the contexts for implementing the WHO Framework Convention on Tobacco Control (WHO FCTC) differ,<sup>2</sup> with low-income and middle-income countries (LMICs) lagging behind on the implementation<sup>3</sup> and enforcement<sup>4</sup> of Article 13. LMICs are active supporters during the international tobacco control coalition negotiations, only to return to a less favourable domestic environment where they encounter a series of obstacles,<sup>2</sup> such as the allocation of the resources to infectious diseases (eg, malaria, polio, cholera)<sup>5</sup>; weaker legislation; limited capacity building for regulation and greater reliance on international donor funds.<sup>6</sup>

Sudan is a case study example. Even before the adoption of the WHO FCTC in 2005, Sudan had adopted health warnings on cigarette packages since 1983 (although not to the WHO FCTC standards)<sup>7</sup> and had participated actively in the international dialogue about TAPS. Sudan participated in a draft resolution<sup>8</sup> calling all nations to prohibit tobacco advertisements during the World No-Smoking Day of 1988, and also in a 1990 resolution<sup>9</sup> urging the WHO member states to adopt a comprehensive ban on all direct and indirect forms of TAPS. After the WHO FCTC international adoption, Sudan also was among the nations suggesting text changes within the treaty, such as; the application of a ban on all advertising content aimed at all age groups (and not only that children or adolescents, as the text initially stated),<sup>10</sup> the prohibition of manufacturing and selling sweets that resemble tobacco products,<sup>11</sup> as well as other minor language modifications.<sup>12</sup>

Despite the significant contribution at an international level, domestically the picture differs. Sudan is encountering several internal political conflicts (eg, independence of South Sudan in 2011, intercommunal armed violence in the 2019–2020, military coup in 2021), floods (eg, swelling of the Blue Nile in 2020) and health emergencies (eg, SARS-CoV-2 infection pandemic, malaria and polio), which impact on tobacco use.<sup>13 14</sup> Specifically, three forms of tobacco use prevail; cigarettes smoking (9.6% of the adult in 2016 and 4.5% of the school-aged youth population in 2014),<sup>15 16</sup> the emergence of shisha smoking among the youth (13.4% in 2019),<sup>17</sup> and toombak—a non-combusted oral tobacco used widely by the Sudanese men (14.3% in 2016)<sup>15</sup> and youth (10.9% in 2014).<sup>18</sup> Furthermore, increases in youth exposure to advertising of cigarettes on the Sudanese media through to 2014,<sup>16 19 20</sup> as well as toombak promotion at points-of-sale,<sup>18 21</sup> become matters of government concern.

Alongside the WHO's FCTC ratification in 2005, the Sudanese government adopted the 'Tobacco Control Law of 2005',<sup>22</sup> to ban the direct and indirect forms of TAPS. However, the comprehensiveness of the TAPS-related provisions had not been improved for more than a decade,<sup>23</sup> mainly with the inclusion of further explicit

bans on direct and indirect forms of TAPS (eg, marketing activities at points of sale, sponsorships and corporate social responsibility activities).<sup>24</sup> This changed in February of 2021, when the Sudanese Minister of Health signed a new tobacco control regulation,<sup>25</sup> which introduced TAPS prohibitions in all media and commercial stores or any other place, banned both the distribution of free samples in any forum for advertisement purpose and the sponsorship of any social, academic, health, sports or other activities.

An in-depth investigation into the adopted legislation can highlight any potential loopholes in the legislative text that might be exploited by the tobacco industry, inform compliance monitoring agencies about any forms of TAPS requiring surveillance, and facilitate civil organisations to identify TAPS policy advocacy priorities. However, a stand-alone investigation of the new policy content is unlikely to be adequate. It is important to acknowledge and present the situational environment, the involvement of stakeholders that formulated the policies, and the historical progress of policy implementation that has helped to shape the current legislative text.

This policy research study aims to illustrate the current TAPS policy environment in Sudan, and to better understand the mechanisms and processes underlying it. For this purpose, we formulated three research questions: What is the TAPS policy context in Sudan? What circumstances led to the development of the current legislative text? Finally, what was the involvement of the different stakeholders (eg, policy-makers, advocates, tobacco industry) in these events?

## METHODS

### Study design, public policy model and procedure

We employed a qualitative health policy analysis to explore the TAPS situational context in Sudan, in order to explain how and why the current policy was developed, and to identify areas for improvement.

We used the Health Policy Triangle (HPT) model,<sup>26</sup> as a conceptual approach informing this investigation. The HPT model, consisting of four components, investigates the contextual factors that influence the policy (the context component), the processes by which the policy was initiated, formulated, developed, implemented and enforced (the policy progress component), the content of the health policy (the policy content component) and finally, the actors involved in the policy-making and implementation (the actors component).<sup>27</sup>

The Readying the materials, Extracting data, Analysing data and Distilling findings (READ) technique<sup>28</sup> informed the study procedure for collecting relevant documents and eliciting information, and is further detailed below.

### Data collection

We searched for information, in the English language, from academic literature search engines (PubMed, Embase, Scopus, Science Direct and Web of Science), a

website containing tobacco industry documents (Truth Documents: <https://www.industrydocuments.ucsf.edu/tobacco/>), news media databases (Nexis and ProQuest), websites containing tobacco control policy documents for Sudan (eg, Campaign for Tobacco-Free Kids (CTFK)-Tobacco Control Laws), websites of key transnational tobacco industries operating domestically (eg, Japan Tobacco International), websites of international organisations and non-governmental organisations (NGOs) (eg, WHO, EpiLab) (see detailed list in online supplemental file 1). We also extracted references in all the acquired documents (snowballing) and used identified key information items (eg, specific legislation) to find additional information (pearl growing).<sup>29</sup> To identify the literature, we used the combination of the keywords “Sudan” and “tobacco advertising” (or “tobacco marketing” or “tobacco promotion”). We used the same keyword combinations within the documents to confirm their relevance to the study’s research questions. In summary, the document inclusion criteria were: English language, published by December 2020 and relevant to the HPT conceptual framework (context, process, content and actors) for TAPS.

The study data collection time frame was November–December of 2020, no retrospective chronological limit was set. A Sudanese tobacco control governmental official facilitated with the identification and retrieval of additional policy documents. In February 2021, this official informed us about the adoption of the new Executive Regulation. Hence, we included it in our database, and we extended the data collection period for relevant news media until the end of February 2021, to gain an overview of the public discussions taking place around the legislative change, but no additional documents were identified and retrieved.

### Data analysis

We drew on the thematic framework approach, as described by Gale *et al*,<sup>30</sup> to inform the analysis of 29 documents. The framework approach aims to identify commonalities or differences within the investigated policy data and seeks to draw descriptive and/or exploratory relationships clustered around themes.<sup>30</sup> Its defining feature is the ‘matrix’ output, a spreadsheet that summarises data by codes and analysed units. This benefits the comparison and contrasting of the views expressed from the data sources connected both within the individual source and across all analysed sources. Furthermore, unlike other qualitative methods, the thematic framework is not underpinned by any particular epistemological, theoretical or philosophical idea which shapes the analytical approach, making it a flexible and adaptable tool.<sup>30</sup>

We started the analytical procedure<sup>30</sup> with data familiarisation and then we applied a descriptive label (a ‘code’) to text passages with thematic relevance to the HPT’s model concepts and the research questions. We particularly focused on how the TAPS environment is formulated

(eg, advertising activities, exposure, existing policies), what factors had supported or obscured the adoption of a TAPS policy in Sudan, and how these had influenced the adopted legislative text. All data were coded using NVivoV. 12.0 software.

After coding 40% of the collected documents to ensure that we would cover the most important aspects described within the total volume of the documents, we grouped together similar codes into categories. This formed a ‘working analytical framework’,<sup>30</sup> which we applied to the rest of documents (‘indexing’), while iteratively expanding and amending until reaching the final format (‘framework index’) (see table 1). Following this, we ‘charted’ the data on a spreadsheet (summary of data per category from each document) and generated a ‘framework matrix’ (see online supplemental file 2). The final stage involved the ‘data interpretation’, where we mapped connections across the categories and explored any relationships (as clustered around ‘subthemes’ and ‘themes’).

AT, SA, BF and JC conceptualised, designed and planned the study procedure. AT collected and analysed the data. PASA reviewed all coded documents, data and the developed themes. The involvement of ‘insiders’ (local or regional tobacco control experts who are familiar to the examined context) can make the data analysis process rich and more comprehensive,<sup>6</sup> as they can see the interpretations and the implications of the research findings differently from the ‘outsiders’ point of view. AM fulfilled this role and ensured that the reported information was complete, and any important thematic parameter was not ignored. All authors (AT, SA, BF, AM, PASA and JC) reviewed the developed themes, edited the reporting of the work and approved the final version.

### Patient and public involvement

No patient or member of the general public was involved in the design, or conduct, or reporting, or dissemination plans of the research.

## RESULTS

Twenty-nine documents were analysed: seven academic studies, six documents (reports, weblinks) produced by tobacco control advocative organisations, two tobacco industry weblinks, two documents from the Tobacco Industry Library, one report produced by the WHO FCTC Secretariat, five WHO created materials (reports and weblinks), two news media articles and four governmental documents (see coded text and documents’ references in online supplemental file 2). Three themes were identified that underpin the Sudanese legislative environment on TAPS: (1) limited and outdated TAPS data, (2) stakeholder involvement and tobacco industry interference and (3) TAPS legislation unaligned with WHO FCTC Secretariat recommendations (see table 1).

### Policy context

#### Limited and outdated TAPS data

Our investigation revealed limited documentation of tobacco industry advertising practices in Sudan. And the



**Table 1** Framework index for the TAPS policy in Sudan

Themes	Subthemes	Categories
Limited and outdated TAPS data	Limited TAPS monitoring evidence	<ul style="list-style-type: none"> <li>▶ TAPS at points of sales</li> <li>▶ Corporate political responsibility (CSR) activities</li> </ul>
	Outdated TAPS exposure evidence	<ul style="list-style-type: none"> <li>▶ National school-based surveys for 2009–2014 period</li> <li>▶ Khartoum state surveys</li> </ul>
Stakeholder involvement and tobacco industry interference	Development and undermining of Regulation of Smoking (1983)	<ul style="list-style-type: none"> <li>▶ Governmental pressure by Society of Physicians</li> <li>▶ Tobacco industry's policy undermining</li> </ul>
	Criticism and recommendations on Tobacco Control Law (2005)	<ul style="list-style-type: none"> <li>▶ Studies' and advocacy group's criticism of policy loopholes</li> <li>▶ Policy recommendations</li> </ul>
	Tobacco industry's involvement in Khartoum's policy (2012)	<ul style="list-style-type: none"> <li>▶ Interference in policy implementation</li> </ul>
	Development of Executive Regulation (2021)	<ul style="list-style-type: none"> <li>▶ FCTC's policy assessment: loopholes and recommendations</li> <li>▶ STOP watchdog's focus on CSR and protecting policy-making</li> </ul>
TAPS legislation unaligned with WHO FCTC Secretariat recommendations	TAPS definitions and ban coverage	<ul style="list-style-type: none"> <li>▶ Legislative texts</li> </ul>

TAPS, tobacco advertising, promotion and sponsorship; WHO FCTC, WHO Framework Convention on Tobacco Control.

documentation identified is primarily restricted to TAPS at point of sale (PoS) and TAPS in the form of corporate social responsibility (CSR) activities. At PoS, vendors deploy advertising practices which have been ongoing since the 1970s,<sup>31</sup> such as the use of toombak brand names to attract buyers,<sup>32</sup> and the promotional promises for change to the consumer's mood.<sup>21</sup>

Data published after 2018 by the WHO FCTC Secretariat,<sup>24</sup> Japan Tobacco International<sup>33,34</sup> and the tobacco control advocacy organisations African Tobacco Control Alliance,<sup>35</sup> GGTC (Global Center for Good Governance in Tobacco Control)<sup>36</sup> and STOP (Stopping Tobacco Organizations and Products)<sup>37</sup> indicate that tobacco industry is also involved in CSR activities. Japan Tobacco International, for example, runs literacy programmes designed for the Sudanese community<sup>33</sup> and sponsors charities supporting people with disabilities.<sup>34</sup> The tobacco industry also involves former governmental officials (eg, President, Minister of Industry) in public relations events, such as the BAT's ceremony for its sponsored scholarship programme in 2019,<sup>35,36</sup> the construction of a university city in Omdurman (funded by Haggag Cigarette and Tobacco Factory),<sup>37</sup> and inaugurations of public houses built.<sup>24</sup> Furthermore, the Union of Toombak Traders, an industry's affiliate, has provided financial contributions to the Trade Chamber (2019)<sup>24</sup> and has also provided free toombak to the governing party.<sup>37</sup>

TAPS exposure data, comes mainly from the school-based Global Tobacco Youth Survey (GYTS)<sup>16,38,39</sup> which was conducted in three rounds between 2005 and 2014. These sources indicate that Sudanese youth are heavily exposed to TAPS, especially via billboards, in press, at PoS and to tobacco use depictions in movies or television. However, the findings from the GYTS may still

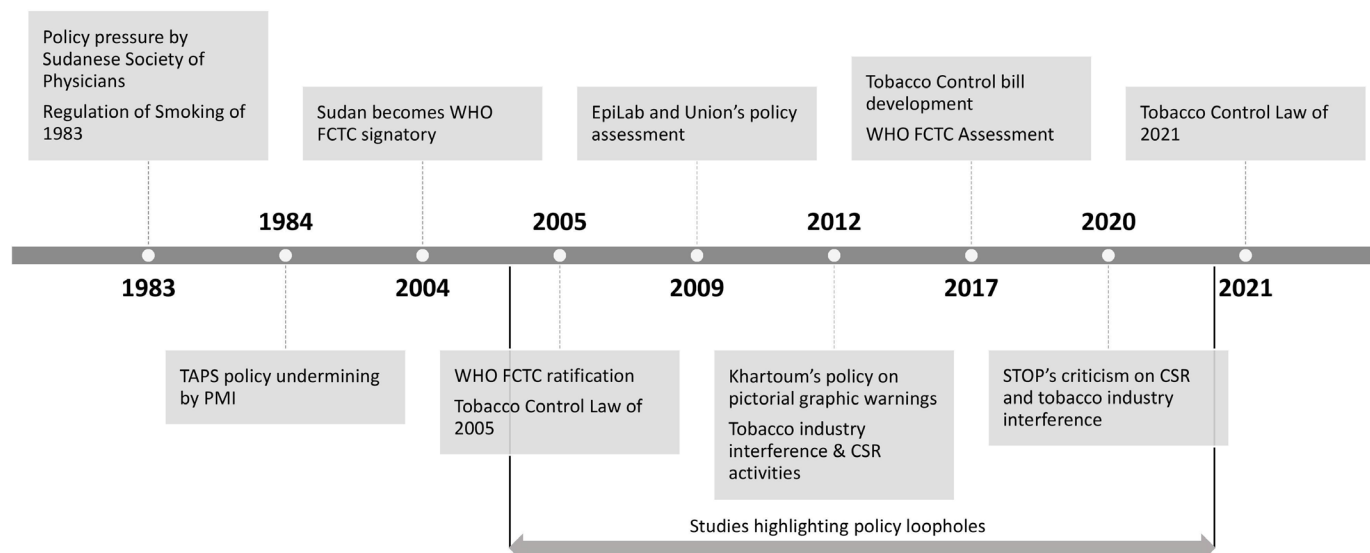
underestimate<sup>20</sup> the actual exposure, as school enrolment rates are low in Sudan,<sup>40</sup> and as some advertising practices (eg, cars that sell tobacco on the streets)<sup>24</sup> are not recorded in such standardised surveys. Subnationally, non-school-based studies<sup>18,21</sup> from within the capital state of Khartoum also indicate high exposure to toombak advertisements among adolescents (41.8% in 2014) at PoS.<sup>18,21</sup> The only adult population focused study which was also conducted in the same state, found a low exposure (6.7% in 2016) to TAPS at PoS.<sup>15</sup> All the above indicate that nationwide data have not been updated since 2014 and have focused only on adolescents and not adults.

## Policy progress and actors

### Stakeholder involvement and tobacco industry interference

Several influential stakeholders (such as doctors, academics, tobacco industry, international organisations) have delayed or progressed TAPS policies in Sudan. Stakeholder involvement is presented below based on the TAPS policy timeline (see figures 1 and 2), until the adoption of the latest changes, 'Executive Regulation of 2021'.<sup>25</sup>

For example, the first Regulation of Smoking in 1983 was the outcome of pressure exercised by a group of doctors, Sudan Society of Physicians,<sup>41</sup> who advocated for the government to focus on banning cigarette advertisements in the media and public places.<sup>42</sup> Philip Morris International undermined the policy by replacing the cigarette packages on outdoor billboard advertisements with Marlboro lighters.<sup>43</sup> Andrew Whist, the then vice-president of corporate affairs of the company, defended the action by stating: 'I think that is the greatest hoax perpetrated on mankind to suggest that an advertisement for a Marlboro lighter is aggressive advertising'.<sup>43</sup>



**Figure 1** Tobacco advertising, promotion and sponsorship (TAPS) policies' timeline and dynamics in Sudan between 1983 and 2021 period. CSR, corporate political responsibility; PMI, Philip Morris International; STOP, Stopping Tobacco Organizations and Products; WHO FCTC, WHO Framework Convention on Tobacco Control.

In the next iteration of TAPS policy (Tobacco Control Law of 2005),<sup>22</sup> academic studies criticised some of legislative loopholes, such as: the lack of advertising compliance monitoring data<sup>21</sup> and the impracticality of some tobacco product packages, such as waterpipe tobacco products or toombak (the latter is sold in small personalised plastic bags or metal containers) to bear warning labels.<sup>44</sup> One protective measure proposed<sup>45</sup> was the implementation of tobacco control campaigns which would improve adolescent awareness of the tobacco industry's deceptive promotional activities. Similarly, EpiLab (a tobacco control advocacy group), through a policy assessment<sup>46</sup> in 2009, highlighted the need for such educational campaigns and criticised the lack of political commitment and financial resources as the main barriers for tobacco control policy implementation.

The tobacco industry also exploited opportunities for policy involvement. Khartoum's policy on pictorial graphic warnings on cigarette packages<sup>47</sup> was introduced in 2012 but not enforced until 2016, after the tobacco industry instigated implementation delays.<sup>37</sup> Specifically, it achieved a judicial decision which postponed the implementation date for 4 years (February 2016)<sup>37</sup> and then it lobbied for a governmental grace period which delayed<sup>37</sup> implementation another 4 months.<sup>24</sup>

Another influential stakeholder for the Sudanese TAPS policies' development was the WHO FCTC Secretariat. In 2017, the Sudanese government drafted a new overall tobacco control regulation and then invited the Secretariat to conduct a policy assessment (on both the Tobacco Control Law of 2005 and the drafted regulation). The WHO FCTC Policy Assessment<sup>24</sup> suggested three TAPS-related areas requiring improvement within the new legislation: the TAPS policy-related content, the protection of policies from tobacco industry interference

and the preparation for policy implementation (see table 2).

In respect of the legislative text, the assessment recommended the explicit prohibition of PoS advertising and visible product displays, sponsorship (both in kind contributions and in the form of advertising) and CSR activities (both by direct and in-kind contributions) in Sudan. Additionally, it suggested the explicit ban on the depiction of tobacco or tobacco use in entertainment media produced abroad, the explicit ban on TAPS through the internet, and the explicit ban on brand sharing and brand extension (eg, toys or candies mimicking tobacco products). For protecting Sudanese children and youth, the Secretariat suggested a ban on the use of misleading descriptors and a ban of flavoured tobacco products (including toombak and waterpipes). In regard to the protection of policies from tobacco industry interference, it suggested the introduction of relevant provisions, such as a code of conduct for government officials and civil servants, and a disclosure of meetings with the tobacco industry if these cannot be avoided. Finally, for the policy implementation preparation, it recommended collaboration with civil society organisations for raising awareness of tobacco industry interference in policy-making among all government agencies and public officials.<sup>24</sup>

In 2020, STOP provided additional criticism<sup>37 48</sup> on the lack of comprehensiveness within the Sudanese legislation. STOP is a tobacco industry watchdog which conducts annually a tobacco industry interference investigation globally in several countries, including Sudan. This organisation, criticised the absence of a legislative provision prohibiting tobacco industry contributions to Sudanese political parties or candidates (in a form of gifting, assistance offering or policy drafting) and the absence of a law requesting the disclosure of the value of

### Sudan Society of Physicians

- Advocated for banning cigarette advertisements in the media and public places.
- Its advocacy led to the development of the first Regulation of Smoking (1983).

### Philip Morris International (PMI)

- After the adoption of the Regulation of Smoking (1983) replaced the cigarette packages on outdoor billboard advertisements with Marlboro lighters.
- Vice-president of corporate affairs of PMI attempted to undermine the importance of this action.

### Academic studies

- Provided criticism on legislative loopholes within the Tobacco Control Law of 2005.

### EpiLab (local tobacco control advocacy organisation)

- In 2009, promoted the need for educational campaigns to improve adolescent awareness of the tobacco industry's deceptive promotional activities.
- Also, criticised the lack of political commitment and financial resources for tobacco control policy implementation.

### Tobacco industry (not specific corporation mentioned)

- Delayed enforcement (from 2012 to 2016) of Khartoum's state policy on pictorial graphic warnings on cigarette packages.

### WHO FCTC Secretariat

- After an invitation by the Sudanese government (2017), conducted a needs policy assessment on the Tobacco Control Law of 2005 and the drafted Executive Regulation of 2021.

### STOP (international tobacco control advocacy organisation)

- In 2020, provided criticism on the lack of protection of policy making from tobacco industry interference.
- Also, suggested the ban of all tobacco related corporate social responsibility activities.

**Figure 2** Summary of the different stakeholders' involvement during the Sudanese TAPS policy-making period 1983–2021. STOP, Stopping Tobacco Organizations and Products; TAPS, tobacco advertising, promotion and sponsorship; WHO FCTC, WHO Framework Convention on Tobacco Control.

the contributions paid by the industry.<sup>37</sup> Among STOP's recommendations<sup>48</sup> were the ban of all tobacco-related CSR activities, the adoption of a code of conduct guiding public officials about limiting their interactions with the tobacco industry to when strictly necessary, and the establishment of a procedure disclosing the records of these interactions.

#### Policy content

##### TAPS legislation unaligned with WHO FCTC Secretariat recommendations

The content of the TAPS-related provisions adopted in Sudan (in 'Regulation of Smoking, 1983', 'Tobacco Control Law of 2005' and 'Executive Regulation of

Tobacco Control for the Year 2021')<sup>22 25 49</sup> has evolved over time (see details in [table 3](#)). For example, the 1983 regulation uses the term 'cigarettes' for any smoked product. The ratification of the FCTC treaty<sup>1</sup> broadened the definition of 'tobacco' within the 2005 legislation and made it more comprehensive to include all tobacco products used for any use (eg, inhalation, chewing or placement in the mouth) as well as any products with tobacco components therein.<sup>22</sup> The WHO FCTC Secretariat recommended in its assessment,<sup>24</sup> the explicit inclusion of non-cigarette products, such as toombak and water-pipe tobacco, within the definition. However, this recommendation was not included in the Executive Regulation

**Table 2** Policy gaps and recommendations as drawn by the WHO FCTC Secretariat's tobacco control policy assessment<sup>24</sup> in 2017

Areas	Gaps identified	Recommendations
TAPS policy-related content in the drafted regulation	<ul style="list-style-type: none"> <li>▶ No regulation for the non-cigarette products (eg, toombak or waterpipes) and their marketing</li> <li>▶ No explicit ban on advertisements at PoS or product display and visibility</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ban to include sponsorship and corporate social responsibility activities</li> <li>▶ Establish clear enforcement mechanisms preventing such activities</li> <li>▶ Explicit ban on depiction of tobacco or tobacco use in entertainment media produced abroad</li> <li>▶ Explicit ban on TAPS through the internet</li> <li>▶ Explicit ban on brand sharing and brand extension</li> <li>▶ Ban misleading descriptors and flavours</li> <li>▶ Ban flavoured tobacco products including toombak and waterpipes</li> </ul>
Protection from tobacco industry interference	<ul style="list-style-type: none"> <li>▶ Absence of any related provision</li> </ul>	<ul style="list-style-type: none"> <li>▶ Introduction of provisions protecting public health policies from the tobacco industry's interference (eg, code of conduct, disclosure of meetings with industries if cannot be avoided, raise awareness among all government agencies and public officials)</li> </ul>
Preparation for a successful implementation		<ul style="list-style-type: none"> <li>▶ Before official adoption, raise awareness, conduct staff trainings and set clear responsibilities for the enforcement</li> </ul>

TAPS, tobacco advertising, promotion and sponsorship; WHO FCTC, WHO Framework Convention on Tobacco Control.

of 2021 which retained the previous, 2005 definition (see [table 3](#)).

The first Sudanese regulation also mentioned specific advertising platforms, which allowed the industry to exploit loopholes (eg, TAPS at PoS, brand sharing on billboard advertisements). Inspired by the WHO FCTC,<sup>1</sup> the Tobacco Control Law of 2005 generalised these terms ('by direct or indirect means') and introduced a ban on the free distribution of tobacco products.<sup>22</sup> The WHO FCTC assessment found the Tobacco Control Law of 2005 adequate in meeting the standards of the WHO FCTC, as it was covering all forms of direct and indirect advertising.<sup>24</sup> However, the wording in the Executive Regulation of 2021 became more coherent with the prohibition of TAPS in 'all media and executive media' and 'media platforms',<sup>25</sup> and introduced bans on single stick sales, the distribution of free samples in any forum, and tobacco industry sponsorship of any activity. The latter changes reflect the response to the gaps identified by the WHO FCTC assessment (as presented in the previous theme and also shown in [table 3](#)).

The Executive Regulation of 2021, however, left out the Secretariat recommendations for the inclusion of a provision protecting policy-making from tobacco industry interference.<sup>24</sup> The STOP recommendations<sup>48</sup> on the same issues (as stated in the previous theme) had the same unsuccessful outcome. This could be explained because of the late publication of the latter (November 2020 vs the policy adoption in February 2021). Instead, the government announced in late 2020,<sup>50</sup> its plans to conduct training for all government sectors, NGOs and parliament members focused on protecting public health from industry interference and from potential legal challenges.

## DISCUSSION

Our study used the HPT model<sup>26</sup> as a guiding framework and drew on the health policy analysis literature.<sup>51 52</sup> Although the HPT model was effective in identifying relevant data, the results were overly descriptive and did not provide a deep understanding of policy change processes. As this was expected to an extent,<sup>53</sup> a thematic framework analysis was employed to uncover the challenges within each component of the HPT model. For example, the lack of a comprehensive overview of tobacco advertising practices and population exposure in Sudan (the context component) was due to limited and outdated data. Similarly, the progressing or obscuring activities of the different policy actors impacted the evolution of the TAPS legislation content (policy progress component). Lastly, in examining the Executive Regulation of 2021 (content component), comparisons were needed with previous legislation and the recommendations of the WHO FCTC Secretariat. Summarising, the evidence outlined in this study indicates the need for the systematic and periodic collection of TAPS surveillance data in Sudan and for closing the remaining legislative content loopholes, especially in terms of protection of policy-making from tobacco industry interference. Below, we explore the implication of these challenges, both in Sudan and in other LMIC contexts, and we provide relevant policy recommendations.

During our research, we did not identify a single source monitoring and presenting comprehensively compliance with TAPS ban provisions. This phenomenon is not unique to Sudan, as other LMICs, such as the Federated States of Micronesia,<sup>54</sup> also have limited involvement of local tobacco control advocacy groups within the TAPS policy arena.<sup>54</sup> In such contexts, civil organisations



**Table 3** Tobacco advertising, promotion and sponsorship-related provisions covered by the Sudanese tobacco control regulations (1983–2021)<sup>22 25 49</sup>

	Regulation of Smoking, 1983	Tobacco Control Law of 2005	Executive Regulation of Tobacco Control for the Year 2021
<b>Subject</b>	<b>Provisions</b>		
Definition of tobacco products	‘Cigarettes’ this includes cigars and cigarettes made from tobacco of various kinds and covers tobacco for pipes and other inventions used for smoking tobacco’ (Article 2)	‘Tobacco: This means all tobacco products whether prepared for smoking, inhalation, chewing, or placement in the mouth for any other use and any product whereby tobacco components partially enter therein’ (Article I)	(The definitions given in Tobacco Control of 2005 apply here too)
Ban of tobacco advertisements	‘Absence of Cigarette Advertisements: It is not permitted to advertise cigarettes in the press, in broadcasting, on television, on advertising poster boards, in the cinema, in the theatre, by oral advertising, or by any other medium of advertising which originates in Sudan or for which there is a publishing base in the country.’ (Article 4)	‘Tobacco-related announcements are not permitted by direct or indirect means using any method of advertising or announcements, just as it is not permitted to distribute tobacco products freely as means of advertising or by using any other method mentioned as means of promoting in order to use tobacco.’ (Article II, 6)	‘Prohibiting advertising, sponsorship or promotion of all tobacco products Prohibiting advertising and promotion: (1) It is prohibited that all media, and executive media to directly or indirectly advertise or promote tobacco and its product in the media platforms. (2) It is prohibited to put advertising and promotional signs for tobacco products on commercial stores or any other place. Prohibiting advertising and sponsorship: (1) All forms of advertisement are prohibited for all tobacco products (2) It is prohibited to distribute free samples in any forum for advertisement purpose. (3) Manufacturers and importers of tobacco are prohibited from sponsoring any social, academic, health, sports or other activities.’ (Chapter 7, Articles 21–22)
Sanctions	Imprisonment up to 3 months or a fine up to three hundred pounds or a combination of both (Article 7-ii)	Any member of the civil society can report violations to any prosecutor who will arrest and present the violator in the court. (Article IV, 13) If found guilty, the sanctions include imprisonment up to 3 years or a fine set by the court or the combination. It also adds that in case of repeated violations, the location can be closed and the business permit to be revoked. (Article IV, 14–15)	(No mention) ‘Violation and Sanctions: Whoever violates the regulation of this law is perceived as a criminal based on the provisions of the ‘Tobacco Control Law for the Year 2005’ (Chapter 8)

and the academic community, acknowledging possible funding challenges, could be involved in the collection of such evidence from different parts of the country on a regular basis. Experienced international tobacco control funding organisations, such as The International Union Against Tuberculosis and Lung Disease (The Union) and the CTFK could transfer knowledge and provide financial and/or administrative support with this task through the Bloomberg Philanthropies’ grant scheme.<sup>55</sup>

An example of a systematic approach is Egypt, a neighbouring country to Sudan, which has introduced a tobacco control observatory, monitoring and reporting system<sup>56</sup> of tobacco industry’s activities and tactics. On a

related section of its website,<sup>57</sup> any member of the public can contribute to the discovery of tobacco industry violations by capturing photos and uploading the evidence. Such systematic reporting of any TAPS-related violations provides simultaneously effective monitoring data from all parts of the country.<sup>58</sup> This data collection alone may not be enough to improve policy, however, it could track and enhance enforcement. For example, local tobacco control advocates could also propose the adoption of mobile courts (formal courts that conduct proceedings in remote areas) as part of the legal system. Mobile courts have been already been used in Bangladesh<sup>59</sup> and Indonesia<sup>60</sup> for tobacco control enforcement by prosecuting

any violations, administering fines, and removing tobacco advertisements.

The legislative TAPS text adopted in 2021 deviates from the recommendations provided by the WHO's FCTC Secretariat team assessment in 2017. Despite this limitation, the invitation of the WHO FCTC Secretariat by the Sudanese government, to conduct a policy needs assessment should be applauded. Around another 68 LMICs have followed this practice<sup>61</sup> and have used the reports as a roadmap to the WHO FCTC Articles.<sup>62</sup> For example, in the Federated States of Micronesia, the assessment has led to the improvement of the legislative content on TAPS bans.<sup>54</sup> Countries that are struggling to update their TAPS legislation may also benefit from conducting in-depth interviews with policy-makers and tobacco control advocates to help understand the obstacles that block progression.

The WHO FCTC (via its Article 5.3) mandates the introduction of provisions protecting public health policies from the tobacco industry's interference (eg, code of conduct, disclosure of meetings with industries if cannot be avoided).<sup>24</sup> However, relevant to Article 5.3 provision is still absent in the newest legislative text. The Sudanese case is not unique. A similar challenge has also been observed in other LMIC settings, such as Bangladesh,<sup>63</sup> where the tobacco industry has interfered in TAPS-related policy-making processes (eg, delaying enactment of policy which would ban the promotion of CSR activities and marketing at PoS).<sup>64</sup> The inclusion of such a protective provision within national tobacco control laws should be government policy agenda priority. The WHO FCTC Secretariat and the GGTC have documented<sup>65 66</sup> good country practices in the implementation of related policies from other LMICs (eg, Uganda, Gabon, Republic of Moldova, Panama, Thailand, Philippines) which the policy-makers, from Sudan and other LMICs, can adjust to the local context.

## Limitations

This study comes with several limitations. The authors were limited to data that were publicly available and to documents provided to them. Only documents available in English language were considered for the study analysis. Furthermore, no data were retrieved after the policy adoption of the Executive Regulation of 2021 (February 2021), hence any documents assessing, discussing or criticising issues relevant to that policy are not addressed in this study and should be explored in future investigations. To the best of the authors' knowledge, this is the first academic paper conducting this assessment after the adoption of the 'Executive Regulation of Tobacco Control' of 2021.

## Author affiliations

<sup>1</sup>Department for Health, University of Bath, Bath, UK

<sup>2</sup>Tobacco Control Research Group, University of Bath, Bath, UK

<sup>3</sup>School of Psychology, Institute for Mental Health, University of Birmingham, Birmingham, UK

<sup>4</sup>School of Public Health, The University of Sydney, Sydney, New South Wales, Australia

<sup>5</sup>Department of Community, Environmental, and Occupational Medicine, Faculty of Medicine, Faculty of Medicine, Ain Shams University, Cairo, Egypt

<sup>6</sup>Department of Public Health and Preventive Medicine, Faculty of Medicine, Udayana University, Bali, Indonesia

**Twitter** Becky Freeman @no\_smoking\_chik

**Acknowledgements** We would like to thank Dr Sara Elmalik for informing the authors and providing the access to the Executive Regulation of Tobacco Control of 2021.

**Contributors** AT, SA, BF and JC conceptualised, designed and planned the study procedure. AT collected and analysed the data. PASA reviewed all coded documents, data and the developed themes. AM fulfilled the role of a 'context insider' and ensured that the reported information was complete, the interpretations were accurate for the specific context and any important thematic parameter was not ignored. All authors (AT, SA, BF, AM, PASA and JC) reviewed the developed themes, edited the reporting of the work and approved the final version. AT, guarantor.

**Funding** AT acknowledges the support of Bloomberg Philanthropies Stopping Tobacco Organizations and Products project funding ([www.bloomberg.org](http://www.bloomberg.org)).

**Disclaimer** The opinions expressed are those of the authors' alone. The funders played no role in the study design, analysis and interpretation of data, nor writing of the report or the decision to submit the article for publication.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** All data relevant to the study are included in the article or uploaded as online supplemental information.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

## ORCID iDs

Arsenios Tselengidis <http://orcid.org/0000-0001-8071-3614>

Aya Mostafa <http://orcid.org/0000-0002-2803-2608>

Putu Ayu Swandewi Astuti <http://orcid.org/0000-0002-4723-212X>

## REFERENCES

- 1 World Health Organization. WHO framework convention on tobacco control. Geneva, Available: <https://fctc.who.int/publications/item/9241591013> [Accessed 01 Jul 2021].
- 2 Mamudu H, Cairney P, Studlar D. Global public policy: does the new venue for transnational tobacco control challenge the old way of doing things? *Public Admin* 2015;93:856–73.
- 3 WHO Framework Convention on Tobacco Control. 2021 global progress report on implementation of the WHO framework convention on tobacco control. Geneva, Available: <https://fctc.who.int/publications/item/9789240041769> [Accessed 23 Jan 2023].
- 4 World Health Organization. WHO report on the global tobacco epidemic 2021: addressing new and emerging products. Geneva, Available: <https://www.who.int/publications/item/9789240032095> [Accessed 23 Jan 2023].

- 5 Jallow IK, Britton J, Langley T. Exploration of policy makers' views on the implementation of the framework convention on tobacco control in the Gambia: a qualitative study. *Nicotine Tob Res* 2019;21:1652–9.
- 6 Walt G, Shiffman J, Schneider H, et al. 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy Plan* 2008;23:308–17.
- 7 Mostafa A, Kashiwabara M. Tobacco packaging and labelling policies in countries of the eastern Mediterranean and Western Pacific regions: post-deadline assessment of the time-bound measures of WHO FCTC article 11. *Tob Prev Cessation* 2016;2.
- 8 World Health Organization. WHA40/A/Conf.Paper No.9. Geneva, Available: [https://apps.who.int/iris/bitstream/handle/10665/164227/WHA41\\_B-Conf.Paper-9\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/164227/WHA41_B-Conf.Paper-9_eng.pdf?sequence=1&isAllowed=y) [Accessed 22 Feb 2021].
- 9 World Health Organization. WHA43/A/Conf.Paper No.7. Geneva, Available: [https://apps.who.int/iris/bitstream/handle/10665/173431/WHA43\\_A-Conf.Paper-7\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/173431/WHA43_A-Conf.Paper-7_eng.pdf?sequence=1&isAllowed=y) [Accessed 22 Feb 2021].
- 10 WHO framework convention on tobacco control, intergovernmental negotiating body on the WHO framework convention on tobacco control. First session summary records. Geneva World Health Organization; 2000. Available: [https://apps.who.int/gb/fctc/PDF/inb1/FINAL\\_FCTC\\_INB1\\_SR\\_COMPILATION.pdf](https://apps.who.int/gb/fctc/PDF/inb1/FINAL_FCTC_INB1_SR_COMPILATION.pdf) [Accessed 22 Feb 2021].
- 11 WHO framework convention on tobacco control, intergovernmental negotiating body on the WHO framework convention on tobacco control. Second session summary records. Geneva World Health Organization; 2001. Available: [https://apps.who.int/iris/bitstream/handle/10665/75418/FINAL\\_FCTC\\_INB2\\_SR\\_COMPILATION.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/75418/FINAL_FCTC_INB2_SR_COMPILATION.pdf?sequence=1&isAllowed=y) [Accessed 22 Feb 2021].
- 12 WHO framework convention on tobacco control, intergovernmental negotiating body on the WHO framework convention on tobacco control. Third session summary records. Geneva World Health Organization; 2001. Available: [https://apps.who.int/gb/fctc/PDF/inb3/FINAL\\_FCTC\\_INB3\\_SR\\_COMPILATION.pdf](https://apps.who.int/gb/fctc/PDF/inb3/FINAL_FCTC_INB3_SR_COMPILATION.pdf) [Accessed 22 Feb 2021].
- 13 World Health Organization. WHO report on the global tobacco epidemic 2019: offer help to quit smoking. Geneva, Available: <https://www.who.int/teams/health-promotion/tobacco-control/who-report-on-the-global-tobacco-epidemic-2019&publication=9789241516204> [Accessed 09 Nov 2020].
- 14 WHO Regional Office for the Eastern Mediterranean. Regional strategy and action plan for tobacco control 2019–2023. Cairo, Available: <https://applications.emro.who.int/docs/EMTF1195E.pdf?ua=1> [Accessed 22 Feb 2021].
- 15 World Health Organization. Sudan stepwise survey for non-communicable diseases risk factors: 2016 report. Sudan World Health Organization; 2017. Available: [https://www.who.int/ncds/surveillance/steps/Sudan\\_STEPwise\\_SURVEY\\_final\\_2016.pdf?ua=1](https://www.who.int/ncds/surveillance/steps/Sudan_STEPwise_SURVEY_final_2016.pdf?ua=1) [Accessed 22 Feb 2021].
- 16 World Health Organization. Global youth tobacco survey (GYTS): Sudan 2014. Geneva World Health Organization; 2014. Available: [http://www.emro.who.int/images/stories/tfi/documents/gyts\\_fs\\_sud\\_2014.pdf?ua=1](http://www.emro.who.int/images/stories/tfi/documents/gyts_fs_sud_2014.pdf?ua=1)
- 17 Othman M, Aghamohammadi N, Nik Farid ND. Determinants of shisha use among secondary school students in Sudan. *BMC Public Health* 2019;19:1390.
- 18 Almahdi HM, Ali RW, Nasir EF, et al. Socio-cognitive correlates of intention to use toombak: a cross-sectional study among students (13–16 years) in Khartoum state, Sudan. *BMC Public Health* 2017;18:88.
- 19 Usmanova G, Mokdad AH. Results of the global youth tobacco survey and implementation of the WHO framework convention on tobacco control in the WHO Eastern Mediterranean Region (EMR) countries. *J Epidemiol Glob Health* 2013;3:217–34.
- 20 Madkour AS, Ledford EC, Andersen L, et al. Tobacco advertising/promotions and adolescents' smoking risk in northern Africa. *Tob Control* 2014;23:244–52.
- 21 Almahdi HM, Ali RW, Nasir EF. Exposure to the advertisement of toombak at the point-of-sale among adolescents in Khartoum state, Sudan: a cross-sectional study. *Tob Prev Cessat* 2020;6:19.
- 22 Government of Sudan. Tobacco control law 2005. 2005. Available: <https://www.tobaccocontrollaws.org/files/live/Sudan/Sudan%20-%20Tobacco%20Control%20Act.pdf> [Accessed 09 Nov 2020].
- 23 Heydari G. A decade after introducing MPOWER, trend analysis of implementation of the WHO FCTC in the eastern Mediterranean region. *Lung India* 2020;37:120–5.
- 24 WHO Framework Convention on Tobacco Control, Convention Secretariat. *Needs assessment for implementation of the WHO framework convention on tobacco control in Sudan*. Geneva, 2018.
- 25 Government of Sudan. Executive regulation of tobacco control for the year 2021; 2021.
- 26 Walt G, Gilson L. Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy Plan* 1994;9:353–70.
- 27 El-Jardali F, Bou-Karroum L, Ataya N, et al. A retrospective health policy analysis of the development and implementation of the voluntary health insurance system in Lebanon: learning from failure. *Soc Sci Med* 2014;123:45–54.
- 28 Dalgligh SL, Khalid H, McMahon SA. Document analysis in health policy research: the read approach. *Health Policy Plan* 2021;35:1424–31.
- 29 Schlosser RW, Wendt O, Bhavnani S, et al. Use of information-seeking strategies for developing systematic reviews and engaging in evidence-based practice: the application of traditional and comprehensive pearl growing. A review. *Int J Lang Commun Disord* 2006;41:567–82.
- 30 Gale NK, Heath G, Cameron E, et al. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol* 2013;13:117.
- 31 Idris AM, Ibrahim YE, Warnakulasuriya KA, et al. Toombak use and cigarette smoking in the Sudan: estimates of prevalence in the Nile state. *Prev Med* 1998;27:597–603.
- 32 Idris AM, Ibrahim SO, Vasstrand EN, et al. The Swedish snus and the Sudanese toombak: are they different? *Oral Oncol* 1998;34:558–66.
- 33 Japan Tobacco Inc. Creating shared value around our leaf supply. 2020. Available: 2020.<https://www.jti.com/news-views/creating-shared-value-around-our-leaf-supply> [Accessed 22 Feb 2021].
- 34 Japan Tobacco Inc. We care about our communities around the world. 2020. Available: <https://www.jti.com/about-us/sustainability/we-care-about-our-communities-around-world> [Accessed 22 Feb 2021].
- 35 Sessou LD. Opinion: stopping big tobacco from deeper interference in Africa. 2020. Available: <https://atca-africa.org/en/stopping-big-tobacco-from-deeper-interference-in-africa> [Accessed 22 Feb 2021].
- 36 Assunta M. Global tobacco industry interference index 2020. Bangkok Global Center of Good Governance in Tobacco Control (GGTC); 2020. Available: [https://exposetobacco.org/wp-content/uploads/GlobalTIIIndex2020\\_Report.pdf](https://exposetobacco.org/wp-content/uploads/GlobalTIIIndex2020_Report.pdf) [Accessed 22 Feb 2021].
- 37 Stopping tobacco organizations and products. Indicators of influence. 2020. Available: <https://exposetobacco.org/country/sudan/> [Accessed 22 Feb 2021].
- 38 World Health Organization. Sudan 2005 (ages 13–15) global youth tobacco survey (GYTS) fact sheet. Geneva World Health Organization; 2005. Available: [https://extranet.who.int/ncdsmicrodata/index.php/catalog/345/related\\_materials](https://extranet.who.int/ncdsmicrodata/index.php/catalog/345/related_materials) [Accessed 22 Feb 2021].
- 39 World Health Organization. Sudan 2009 (ages 13–15) global youth tobacco survey (GYTS) fact sheet. Geneva World Health Organization; 2009. Available: <https://extranet.who.int/ncdsmicrodata/index.php/catalog/344> [Accessed 22 Feb 2021].
- 40 The World Bank. Secondary school enrolment (% gross). 2020. Available: <https://data.worldbank.org/indicator/SE.SEC.ENRR> [Accessed 22 Feb 2021].
- 41 Arabi M, Ball K. Third World review: Sudan puts up a smokescreen/ cigarette advertising banned. In: *The Guardian*. 1984: 1–3.
- 42 Industry Documents Library. East African smoking control workshop. 1986. Available: <https://www.industrydocuments.ucsf.edu/docs/yxvp0195> [Accessed 22 Feb 2021].
- 43 Mironowicz M. Puffing up trade in third World. In: *Globe Mail*. 1984: 1–6.
- 44 Zaatari GS, Bazzi A. Impact of the WHO FCTC on non-cigarette tobacco products. *Tob Control* 2019;28:s104–12.
- 45 Atari DO. Gender differences in the prevalence and determinants of tobacco use among school-aged adolescents (11–17 years) in Sudan and South Sudan. *Pan Afr Med J* 2014;18:118.
- 46 Salleh M, Bashir S, Elmoussa HK, et al. Participating in global tobacco research: the experience of a low-income country, Sudan. Paris International Union Against Tuberculosis and Lung Disease; 2009. Available: [https://site.theunion.org/what-we-do/publications/english/pub\\_sudan-global-tobacco-research\\_eng.pdf](https://site.theunion.org/what-we-do/publications/english/pub_sudan-global-tobacco-research_eng.pdf) [Accessed 22 Feb 2021].
- 47 State of Khartoum. Tobacco control law of Khartoum for year 2012; 2016.
- 48 Stopping tobacco organizations and products. Recommendations. 2020. Available: <https://exposetobacco.org/country/sudan/> [Accessed 22 Feb 2021].
- 49 Government of Sudan. Act of regulation of smoking, 1983; 1983.
- 50 WHO Regional Office for the Eastern Mediterranean. Sudan creates national awareness and bans waterpipes during COVID-19. 2020. Available: 2020.<http://www.emro.who.int/tfi/news/sudan-creates-national-awareness-and-bans-waterpipes-during-covid-19.html> [Accessed 22 Feb 2021].

- 51 Exworthy M. Policy to tackle the social determinants of health: using conceptual models to understand the policy process. *Health Policy Plan* 2008;23:318–27.
- 52 Walt G, Gilson L. Can frameworks inform knowledge about health policy processes? Reviewing health policy papers on agenda setting and testing them against a specific priority-setting framework. *Health Policy Plan* 2014;29 Suppl 3:iii6–22.
- 53 O'Brien GL, Sinnott S-J, Walshe V, *et al.* Health policy triangle framework: narrative review of the recent literature. *Health Policy Open* 2020;1:100016.
- 54 Tselengidis A, Adams S, Freeman B, *et al.* Tobacco control legislation in small island nations: adoption of WHO FCTC article 13 in the federated states of Micronesia. *Asia Pac J Public Health* 2023;35:65–8.
- 55 Campaign for Tobacco-Free Kids. Previously funded projects-tobacco control grants. 2020. Available: [https://tobaccocontrolgrants.org/What-we-fund?who\\_region=SEARO&country\\_id=29&date\\_type=&date\\_from=&date\\_to=&submit=Search](https://tobaccocontrolgrants.org/What-we-fund?who_region=SEARO&country_id=29&date_type=&date_from=&date_to=&submit=Search) [Accessed 22 Oct 2021].
- 56 Egypt tobacco control observatory. 2020. Available: <https://egypttobaccoobservatory.com/joomla/index.php/en/> [Accessed 23 Mar 2022].
- 57 Egypt tobacco control observatory. detect a violation. 2020. Available: <https://egypttobaccoobservatory.com/joomla/index.php/en/report> [Accessed 23 Mar 2022].
- 58 Framework Convention Alliance. Bangladesh mobile Court fines smokers. 2010. Available: <https://fctc.org/bangladesh-mobile-court-fines-smokers/> [Accessed 29 Aug 2021].
- 59 Jackson-Morris AM, Chowdhury I, Warner V, *et al.* Multi-stakeholder taskforces in Bangladesh -- a distinctive approach to build sustainable tobacco control implementation. *Int J Environ Res Public Health* 2015;12:474–87.
- 60 World Health Organization. Bogor case study: city action: pioneering the use of bans on tobacco advertising, promotion and sponsorship (TAPS). Jakarta, Indonesia World Health Organization; 2020. Available: <https://www.who.int/nepal/activities/supporting-elimination-of-kala-azar-as-a-public-health-problem/docs/default-source/Documents/the-power-of-cities/bogor-case-study-final> [Accessed 26 Jan 2022].
- 61 WHO Framework Convention on Tobacco Control, Convention Secretariat. WHO FCTC Secretariat needs assessment missions. 2023. Available: <https://www.zeemaps.com/view?group=1884768> [Accessed 29 Jan 2023].
- 62 Drope J. Evaluation of the WHO framework convention on tobacco control needs assessment process. Geneva WHO Framework Convention on Tobacco Control DGO; 2021. Available: <https://fctc.who.int/publications/m/item/evaluation-of-the-who-framework-convention-on-tobacco-control-needs-assessment-process> [Accessed 29 Jan 2023].
- 63 Tselengidis A, Adams S, Freeman B, *et al.* n.d. Achieving a tobacco-free Bangladesh by 2040: a qualitative analysis of the tobacco advertising environment and prohibitions in Bangladesh [Univ Bath Submitted for publication].
- 64 Campaign for Tobacco-Free Kids. Bangladesh enacts landmark tobacco control law. 2013. Available: [https://www.tobaccofreekids.org/blog/2013\\_05\\_10\\_bangladesh](https://www.tobaccofreekids.org/blog/2013_05_10_bangladesh) [Accessed 22 Oct 2021].
- 65 WHO Framework Convention on Tobacco Control, Convention Secretariat. Good country practices in the implementation of WHO FCTC article 5.3 and its guidelines. 2018. Available: <https://fctc.who.int/publications/m/item/good-country-practices-in-the-implementation-of-who-fctc-article-5.3-and-its-guidelines> [Accessed 18 Mar 2022].
- 66 Global Center for Good Governance in Tobacco Control. Handbook on implementation of WHO FCTC article 5.3: policies and practices that protect against tobacco industry interference. 2021. Available: <https://landing.ggtc.world/dmdocuments/Article%205.3%20Handbook%20GGTC2021.pdf> [Accessed 18 Mar 2022].