Open access **Protocol**

BMJ Open Tobacco prevention and control interventions in humanitarian settings: a scoping review protocol

Nachiket Gudi , ¹ Ansuman Swain, ² Muralidhar M Kulkarni, ³ Sanjay Pattanshetty (1), 4 Sanjay Zodpey⁵

To cite: Gudi N, Swain A, Kulkarni MM, et al. Tobacco prevention and control interventions in humanitarian settings: a scoping review protocol. BMJ Open 2022;12:e058225. doi:10.1136/ bmjopen-2021-058225

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-2021-058225).

Received 28 October 2021 Accepted 14 July 2022



Check for updates

@ Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by

¹Public Health Evidence South Asia, Department of Health Information, Prasanna School of Public Health, Manipal Academy of Higher Education, Manipal. Karnataka, India ²Independent Researcher, Bhubaneshwar, Odisha, India ³Department of Community Medicine, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, Karnataka, India ⁴Department of Global Health. Prasanna School of Public Health, Manipal Academy of Higher Education, Manipal, Karnataka India ⁵Public Health Foundation of India, New Delhi, India

Correspondence to

Dr Sanjay Pattanshetty; sanjay.pattanshetty@manipal. edu

ABSTRACT

Introduction Tobacco has been a complex global problem that has adversely affected almost all the sectors of society. However, the ill-effects are often most reflected in humanitarian settings, which inadvertently are surmounted by fragile systems. We aim to map tobacco prevention and control intervention in humanitarian settings.

Methods and analysis This scoping review will follow the guidelines of the Joanna Briggs Institute. A comprehensive search strategy was designed using Medical Subject Heading terms, subject experts and pertinent reviews. The search was conducted on Medline (through PubMed and Ovid), EMBASE (through OVID), ProQuest Health and Medical Complete, EBSCO (through CINAHL Complete), Scopus and Web of Science databases. Two reviewers will independently screen the identified studies on removing duplicates, which shall be followed by data extraction using a pretested data extraction form. A narrative synthesis approach will be employed to collate the findings from the studies and tabular formats would be used to aid the representation.

Ethics and dissemination This review will identify, map and synthesise the interventions for tobacco prevention and control in the humanitarian settings. An ethics committee approval was not sought for this body of work as it does not include human subjects. Results from the study will be disseminated through conference presentations and peer-reviewed publications.

INTRODUCTION

Tobacco products are known to influence human, social and economic tragedy in the society. The unprecedented impact tobacco imposes on the society is estimated to cost 8 million deaths a year around the world. According to the 2019 report of Global Burden of Disease study, there are 1.14 billion current smokers. Current smokers consumed 7.41 trillion cigarette equivalents of tobacco. Consequently, a disproportionate share of 86.9% of all deaths is among current smokers. However, among former smokers, risks associated with smoking has decreased as a function of duration of time since cessation.² In 2012, the direct and in-direct economic cost of smoking-attributable diseases was

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The review will attempt to map diverse tobacco prevention and control interventions in the humanitarian settings.
- ⇒ The review will include both epidemiological and evaluative study designs to map the evidence.
- ⇒ The review will capture the grey literature to supplement the database search.
- ⇒ The review will include the literature published in English language only.
- ⇒ Considering the scoping review approach, providing contextualised recommendations would be limited.

estimated using the cost of illness approach. Around 5.7% of global health expenditure was due to smoking-attributable diseases. Economic cost due to both health expenditures and productivity losses from morbidity and mortality accounted for 1.8% of the world's annual gross domestic product. Inequity in economic cost was staggeringly high (40%) in developing countries.³ Important sociodemographic disparities exist in tobacco smoking prevalence. Low-income and middleincome countries (LMICs) report the highest number of tobacco-related illness and death. Out of over 1 billion tobacco users globally, over 80% live in LMICs leading to premature mortality and morbidity.

'The 2012 political declaration at the meeting of the United Nations General Assembly on the Prevention and Control of Non-communicable Diseases' as well as 'the 2030 Agenda for Sustainable Development' gave greater emphasis to curb the tobacco menace globally. One of the targets of the goal 3 is to 'strengthen the implementation of the WHO Framework Convention on Tobacco Control (FCTC) in all countries, as appropriate' as means of reaching the goal by 2030. In addition to the non-binding declarations, the first international public health treaty, the WHO FCTC emerged as an international binding law in 2005.3-5 The WHO FCTC not only combines measures to reduce demand (price, tax and non-price measures) for tobacco, but also the supply of tobacco products including measures to prevent interference by commercial and other vested interests of the tobacco industry. According to the 2017 WHO report on the global tobacco epidemic, approximately two-thirds of countries have introduced at least one of the following 1 Monitoring tobacco consumption and the effectiveness of preventive measures; 2 Protect people from tobacco smoke; 3 Offer help to quit tobacco use; 4 Warn about the dangers of tobacco; 5 Enforce bans on tobacco advertising, promotion and sponsorship; and 6 Raise taxes on tobacco" (MPOWER) measure Despite considerable progress, there remain implementation gaps in humanitarian settings.

One understudied area related to sociodemographic disparities is the relationship between tobacco use and humanitarian settings. Humanitarian settings are defined as 'a range of situations including natural disasters, conflict, slow-onset and rapid-onset events, rural and urban environments, and complex political emergencies in all countries'8 and for the purpose of this study we consider the countries as humanitarian settings if the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) has listed it. 9 There is lack of evidence pertaining to the trend of tobacco usage patterns, tobacco interventions and implementation challenges among civilians in humanitarian settings affected by armed conflict, despite key vulnerability factors prevailing in those settings. Due to the lack of structure in governance, poor policy-making, underdeveloped health systems and weak regulatory environments, it is challenging to implement tobacco control measures. 10 11 Consequently, the prevalence of tobacco usage is almost always higher in these settings as compared with nonhumanitarian regions. For instance, the smoking prevalence among refugees in Syria, Palestine and Lebanon is higher as compared with their neighbours. 12 In countries without a stable government and political will, tobacco issues have been prominent due to the industry influence and monetary support that the lobby offers to the unstable government. 13 14 Against this background, we aim to map the tobacco prevention and control interventions in humanitarian settings.

METHODOLOGY

We will use a scoping review approach to achieve the objectives as it is commonly used for clarifying definitions, conceptual boundaries and to map the status of an object or subject of interest within a particular field. This scoping review will be conducted based on the updated framework provided by the Joanna Briggs Institute. The framework consists of the following steps carried in sequence: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data and (5) collating, summarising and reporting the results. The scoping review will be reported

according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for scoping reviews (PRISMA- ScR).¹⁸

Identifying the research question

A recent systematic review examined the patterns of tobacco usage among several conflict-affected settings, specifically in populations such as refugees, internally displaced population and population dwelling in conflict and postconflict areas. Among the reviewed studies, there is a large discrepancy regarding the prevalence of tobacco use ranging from 2.18% to 66.4%. However, there is lack of evidence pertaining to the trend of tobacco usage patterns over time in postconflict settings. Besides, there is lack of evidence globally on tobacco use, tobacco interventions and implementation challenges among civilians in humanitarian settings affected by armed conflict, despite key vulnerability factors prevailing in those settings. We found few studies addressing the burden and dynamics of tobacco usage and control in humanitarian settings. A systematic review by Lo et al revealed substantially higher instances of tobacco usage in conflict affected regions across the world. For instance, Bosnian refugees in the USA have smoking prevalence of 66.4%. Likewise, the smoking prevalence among war-affected Serbian adults was reported to be about 70.7%. 19 Another review, by Reiss et al, highlighted the increased prevalence of tobacco usage among immigrants as compared with natives.²⁰ This finding was supported by another study that reported Palestine refugees having two times the odds of tobacco usage compared with non-refugees. 12 Furthermore, evidence pointed towards the lack of tobacco-control policies and measures for such vulnerable populations and directed the need for research on this domain. 21 22 While this may be true, tobacco control strategies have been successful in postconflict settings in Iraq, thus demonstrating both the necessity and effectiveness of specific policies for vulnerable populations.²³ By demonstrating a paucity in the literature and understanding the scattered evidence of interventions to prevent and control tobacco in the humanitarian settings, all the authors were involved in brainstorming and reached a consensus on the research question as outlined below.

Research question

What are the tobacco prevention and control interventions in humanitarian settings?

Identifying the relevant studies

We follow the Population, Intervention, Context, Outcome and Study design criteria for identifying the studies.

Population

We will include studies that are conducted on all age groups, gender and ethnicity. We will include studies carried out among general population in the humanitarian settings regardless of their tobacco usage status. We will include studies conducted on current tobacco users



(smoke or smokeless), former tobacco users (smoke or smokeless), never tobacco users (smoke or smokeless) and ever tobacco users (smoke or smokeless). Individuals who have used tobacco in the last 30 days are termed as current tobacco users. Former tobacco users are those who have tried consuming/using tobacco but not in the past 30 days. Ever tobacco users are those who have used, have tried consuming/using tobacco in the past. We will exclude studies that do not specify the age groups and tobacco usage status of the study participants.

Intervention

We will include studies that contribute to control and prevention of the use of tobacco products, delivered either through in person, using technology or both.

Context

We will include studies conducted in the regions classified as humanitarian settings by OCHA. If there are studies in which there are multiple settings, then we will extract data for only those countries as listed by OCHA.

Outcome

We will include studies that report on maintenance and cessation of tobacco use, change in the frequency of/intensity of and quantity of tobacco (smoke and smokeless) consumption.

Study designs

Database

We will include both interventional (randomised controlled trials, cluster randomised trials, quasi-randomised trials, non-randomised trials, controlled before and after studies, pre-post designs), observational (cross-sectional studies) and participatory research appraisals, action research, operational research and implementation research designs would be included. We will further include studies that follow regression discontinuity design, propensity score matching and difference-in-difference analysis. In case of mixed-method or multimethod studies, we will consider the qualitative and quantitative phases separately. We will not include study protocols, conference proceedings and studies published in language other than English.

Search strategy and searches

A comprehensive search strategy was developed by identifying terms from the Medical Subject Heading library, discussion with subject-matter experts and relevant reviews. ^{19 22 24} The search was carried out for the period March 2005 until May 2022 by NG. Although the WHO FCTC was opened for signature from 16 June 2003, it entered into force only in February 2005, and thus we have carried out the searches for the afore-mentioned time period. ^{25 26}

To identify countries from the humanitarian settings, we have used the list of countries as mentioned in the United Nations OCHA.²⁷ A list of countries and the corresponding regions are provided in the online supplemental appendix 1. The grey literature forms an important body of the literature to provide contextual information on a given topic, ²⁸ provides insights from the literature not published by commercial agencies, gives a balanced view of the literature, and therefore we plan to employ the grey literature searches. 29 Hand-searching of references from the studies included at the full-text stage will also be carried out to gather the relevant literature. The key terms identified from literature are '(Smoke*, tobacco*, cigarette*, nicotine, beedi, bidi, papirosi, dip, chew, snuff, snus, e-cigarette, ENDS) AND (armedconflict, conflict-affected, conflict, war, refugee, internally displaced, forcibly displaced, asylum, humanitarian) AND (prevention, cessation, quit, control) AND (list of countries as per OCHA) AND (study designs as per inclusion criteria)'. 19 22 24 The search terms were combined using Boolean operators and adapted according to the needs of the respective database. A detailed list of databases and websites is presented in table 1. Of the listed databases, Scopus and WOS contain both commercially published and grey literature.²⁹ Search for the grey literature will be carried out by more than two authors due to its inexhaustive nature. The databases were searched from 23 May 2022 until 25 May 2022. A complete list of search strategy used along with corresponding databases and number of articles found is presented in online supplemental appendix 2.

Table 1 List of databases and organisational websites

'Medical Literature Analysis and Retrieval System Online' (MEDLINE (through PubMed and OVID), 'Excerpta Medica dataBASE' (through OVID) (EMBASE), 'SCOPUS', 'ProQuest Health and Medical Complete', EBSCO (through Cumulative Index of Nursing and Allied Health Literature Complete (CINAHL Complete)), Web of Science (WOS).

Website

OCHA, 'United Nations Children's Fund' (UNICEF), 'World Health Organization' (WHO), 'World Food Program' (WFP), The United Nations Relief and Works Agency for Palestine Refugees (UNRWA), 'The United Nations High Commissioner for Refugees' (UNHCR), 'Médecins Sans Frontières' (MSF), The Centre for Global Development, United Nations Development Programme (UNDP), Food and Agriculture Organization (FAO), The Gates Foundation, The Global Fund, The Abdul Latif Jameel Poverty Action Lab (J-PAL), The RAND Corporation, 'United States Agency for International Development' (USAID) and The Aga Khan Foundation.



Study selection

All the identified studies from the electronic search will be exported to EndNote X8 software (Clarivate Analytics, USA). On removing the duplicates, the studies will be exported to Rayyan (https://www.rayyan.ai/), where two reviewers will independently screen the records at two stages: title, abstract and full text. The reasons for excluding studies at the full-text stage will be presented as an appendix. In cases where the reviewers fail to reach a consensus, the arbitration will be done by the senior author (SP). The records at each stage of the review will be represented using the PRISMA flowchart.³⁰

Charting the data and collating, summarising and reporting the results

Data shall be extracted independently by a couple of reviewers using a standardised, pretested data extraction form on Microsoft Excel 2007. All differences of opinions shall be resolved in consultation with other authors (AS and NG). The data extraction sheet (DES) shall be developed by the authors and pilot tested on 5% of the studies included after the full-text stage. A preliminary DES is provided in online supplemental appendix 3. The DES will be modified as the need arises and the same will be mentioned in the completed review. Data will be extracted initially for the setting, study design, type of intervention (face-to-face or group or population based), target population (age group, gender, type of tobacco usage, status of tobacco usage), mode (peer led or health worker led), digital/non-digital intervention, duration of intervention delivery, outcomes of intervention and challenges faced during the delivery of these interventions. Further information will be captured based on the need as the topic is emergent in nature. We will not perform a quality appraisal of included studies as the aim of this review is to only map the interventions and record the challenges. The study objective will not be influenced by the quality of included studies as we are not aiming to estimate the efficacy of these interventions.

Plan for analysis

The analysis will include mapping the interventions to the respective settings. A tabular format will be used to present the data for interventions and the populations they were implemented in. Type of intervention, mode of intervention delivery and duration of the same will be presented with the aid of tables and figures. The results will be summarised using narrative synthesis.

Patient and public involvement

Patients and public were not involved in the review.

DISCUSSION

Tobacco consumption is both health and social issue. Burden of tobacco and its consumption patterns are context specific. Although, the WHO FCTC was ratified in the year 2005, there remains gap in the implementation

of strategic interventions specific to tobacco prevention and control. The WHO FCTC provided broad guidelines for countries to prevent, manage and evaluate tobacco control programmes with a broader aim of reducing global morbidity and mortality associated with tobacco use. To assist in the implementation of prevention and control measures, the WHO suggested MPOWER approach covering broad domains related to monitoring and evaluation, education, awareness, ban on marketing and advertisement; other regulatory and legislative tax measures. MPOWER interventions intended to reduce both supply and demand for tobacco consumption, production and distribution. In addition to these measures, there is need for sustainable and robust implementation strategies to achieve the adherence to the Protocol to Eliminate Illicit Trade in Tobacco Products and implementation of WHO FCTC 2019-2025 Global Strategy to accelerate tobacco control.³¹ Understanding and implementing tobacco prevention and control interventions in humanitarian settings is important to achieve equity in global tobacco control measures. Although considerable achievements have been gained over the past 10 years in humanitarian settings, many challenges remain ahead to achieve compliance to smoke-free policy and the prevalence of consumption in humanitarian settings.⁷ Humanitarian context is different in terms of fragile governance and regulations, and thus implementation of interventions need to be understood, mapped and evaluated considering the social and economic context in these regions. Mapping of interventions to MPOWER strategy in humanitarian setting and understanding the challenges/enablers of implementation will assist in preparing comprehensive tobacco control strategies in humanitarian settings.

Twitter Sanjay Pattanshetty @SanjayPattansh1

Contributors Conceptualisation: SP, NG, AS, SZ and MMK. Design: NG, SP, AS and SZ. Draft: NG, SP, AS and SZ. Revision: NG, SP and AS.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

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.

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

Nachiket Gudi http://orcid.org/0000-0003-3322-2964 Sanjay Pattanshetty http://orcid.org/0000-0003-2854-2613

REFERENCES

- 1 World Health Organization. Tobacco, 2020. Available: https://www. who.int/news-room/fact-sheets/detail/tobacco [Accessed 10 Apr 2022]
- 2 Reitsma MB, Kendrick PJ, Ababneh E, et al. Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990–2019: a systematic analysis from the global burden of disease study 2019. The Lancet 2021;397:2337–60.
- 3 Goodchild M, Nargis N, Tursan d'Espaignet E, d'Espaignet ET. Global economic cost of smoking-attributable diseases. *Tob Control* 2018;27:58–64.
- 4 United Nations General Assembly. Resolution adopted by the general assembly political Declaration of the high-level meeting of the general assembly on the prevention and control of noncommunicable diseases, 2012. Available: https://www.who.int/nmh/ events/un_ncd_summit2011/political_declaration_en.pdf [Accessed 10 Apr 2022].
- 5 Sivaramakrishnan K, Parker RG. The United nations high level meeting on the prevention and control of noncommunicable diseases: a missed opportunity? Am J Public Health 2012;102:2010–2.
- 6 The SDGs in action United nations development programme, 2021. Available: https://www.undp.org/sustainable-development-goals# good-health [Accessed 10 Apr 2022].
- 7 World Health Organization. Who report on the global tobacco epidemic, 2017: monitoring tobacco use and prevention policies World Health Organization; 2017.
- 8 Sphere Association. *Humanitarian charter and minimum standards in humanitarian response*. Geneva, Switzerland, 2018.
- 9 OCHA-Presence. Available: https://www.unocha.org/where-we-work/ ocha-presence [Accessed 10 Apr 2022].
- 10 Greene MC, Haddad S, Busse A, et al. Priorities for addressing substance use disorder in humanitarian settings. Confl Health 2021:15:71
- 11 Abu-Rmeileh NME, Khader YS, Abdul Rahim H, et al. Tobacco control in the eastern mediterranean region: implementation progress and persisting challenges. *Tob Control* 2022;31:150–2.
- Jawad M, Khader A, Millett C. Differences in tobacco smoking prevalence and frequency between adolescent palestine refugee and non-refugee populations in Jordan, Lebanon, Syria, and the West bank: cross-sectional analysis of the global youth tobacco survey. Confl Health 2016;10:1–8.

- 13 Chapter 4 Factors That Influence Tobacco Use. Available: https://www.cdc.gov/tobacco/data_statistics/sgr/1998/complete_report/pdfs/chap4.pdf [Accessed 10 Apr 2022].
- 14 Lawrence F. Big tobacco, war and politics. Nature 2019;574:172-3.
- 15 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
- 16 Davis K, Drey N, Gould D. What are scoping studies? a review of the nursing literature. *Int J Nurs Stud* 2009;46:1386–400.
- 17 Peters MDJ, Godfrey CM, Khalil H, et al. Guidance for conducting systematic scoping reviews. Int J Evid Based Healthc 2015;13:141–6.
- 18 Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. Ann Intern Med 2018:169:467–73.
- 19 Lo J, Patel P, Roberts B. A systematic review on tobacco use among civilian populations affected by armed conflict. *Tob Control* 2016:25:129–40.
- 20 Reiss K, Lehnhardt J, Razum O. Factors associated with smoking in immigrants from non-western to western countries – what role does acculturation play? a systematic review. *Tob Induc Dis* 2015;13:1–23.
- 21 Greaves L, Johnson J, Bottorff J, et al. What are the effects of tobacco policies on vulnerable populations? a better practices review. Can J Public Health 2006;97:310–5.
- 22 Higgins ST, Kurti AN, Palmer M, et al. A review of tobacco regulatory science research on vulnerable populations. Prev Med 2019:128:105709.
- 23 Hussain Z, Sullivan R. Tobacco in post-conflict settings: the case of Iraq. *Ecancermedicalscience* 2017;11:735.
- 24 Frazer K, Callinan JE, McHugh J, et al. Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption. Cochrane Database Syst Rev 2016;2:CD005992.
- 25 National Health Mission. Who framework convention on tobacco control (who FCTC). Available: https://nhm.gov.in/index1.php?lang= 1&level=3&sublinkid=1126&lid=636 [Accessed 10 Apr 2022].
- 26 World Health Organization. Who framework convention on tobacco control. Conv-Cadre OMS pour Lutte Antitabac; 2003: 36. https:// apps.who.int/iris/handle/10665/42811 [Accessed 10 Apr 2022].
- 27 United Nations Office for the Coordination of Humanitarian Affairs. About OCHA. Geneva OCHA; 2022. https://www.unocha.org/about-ocha [Accessed 10 Apr 2022].
- 28 Adams J, Hillier-Brown FC, Moore HJ, et al. Searching and synthesising 'grey literature' and 'grey information' in public health: critical reflections on three case studies. Syst Rev 2016;5:1–11.
- 29 Paez A. Gray literature: an important resource in systematic reviews. J Evid Based Med 2017;10:233–40.
- 30 Page MJ, McKenzie JE, Bossuyt PM. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Bmj* 2021;372.
- 31 World Health Organization. WHO report on the global tobacco epidemic, 2019: offer help to quit tobacco use, 2019