REVIEW ARTICLE

Constraints Related to Smoke-Free Policy Implementation: A Review

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ABSTRACT

Smoke-free policies have been enacted and enforced either by law or voluntarily adopted by countries in order to protect their people from the harms of second-hand smoke. However, the mere adoption of smoke-free policies does not guarantee success in fully achieving smoke-free environments due to the many issues and challenges in implementing the policies. The purpose of this review was to ascertain the issues and challenges in the implementation of smoke-free policies worldwide. A review was conducted on published research studies from four databases which included Ovid Medline, PubMed, Scopus, and ScienceDirect, using combination MeSH keywords of smoke-free policy OR smoking policy AND issues OR challenges OR constraints. Articles included were observational study designs which were published between 1999 and 2019. Articles of irrelevant topics or outcomes that were not written in English were excluded. Twenty articles were included in this review after the filtering and screening process. The smoke-free policy implementation issues were discussed according to the health-policy framework (Content, Context, Actors, and Process). Most of the barriers identified were related to the actor construct, reflecting the important role of smokers specifically and the community in general to support the implementation of the policy. The process was found to be the least important construct. The review highlights the important role of actors (smokers, community, and premises/tobacco industry) in successfully implementing a smoke-free policy.

Keywords
Constraints, Smoke-Free, Policy, Implementation, Health policy Framework

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Received: 1st November 2021; Accepted: 17th March 2022

Doi: https://doi.org/10.31436/imjm.v21i3

INTRODUCTION

The tobacco crisis is one of the world's greatest challenges to public health taking the lives of over eight million people a year globally. Smoking is known to be the second leading risk factor for death globally with the majority of smokers living in Low- and Middle-Income Countries.[1] Nearly seven million of these deaths result from heavy use of cigarettes, while about 1.2 million are the result of non-smokers having exposure to second-hand smoke (SHS).[2] Secondhand smoke is the smoke released from the burning of tobacco products consisting of gases, particulate matter, nicotine, and other substances, some of which are carcinogenic.[3] SHS has been linked not only to morbidities such as lung cancer, acute coronary syndromes, and stroke but also causing more than 0.6 million deaths annually, of which 28% were among children.[4]

Acknowledging the risks of smoking and SHS exposure, various measures pertaining to smoking bans were proposed and implemented, including the enforcement of a smoke-free policy. A smoke-free policy is a health policy, that consisted of a policy package document developed to serve as a reference to countries who have committed themselves to the World Health Organisation Framework Convention on Tobacco Control (WHO FCTC) that was published in 2003 by the WHO.[5] It stemmed from the "Protect people from tobacco smoke" package by enacting and enforcing a smoke-free environment policy either by law or voluntarily adopted by the countries. Smoke-free law was first drafted to protect workers in occupational settings such as hospitality avenues, which then expanded to a wide range

of public settings including recreational facilities and others.[6] Various scientific research has shown that second -hand smoke is a serious health hazard, and this is the primary argument being used by the tobacco control advocates in supporting the smoke-free policies implementation.

The health policy is the government's prescriptive interventions aimed to promote, prevent, restore and preserve the wellbeing of the population in the political, economic, social, and cultural structural determinants of good health.[7] In general, the health policy concerns the distribution of power and interaction process within the health policy framework between institutions, interests, and ideas.[8] The application of health policy in the public health context involved the distribution of influencing power within the policy triangle framework (Figure 1), which has a reciprocal relationship between the elements of content, context, process, and role of actors in the health policy.[8,9] The health policy triangle (HPT) is a policy analysis framework developed in the late 20th century to analyse a large number of health-related issues. By using the health policy triangle framework, this paper aimed to review the issues and challenges related to the implementation of smoke-free policy across the continents. The framework helped identify the contextual factors related to the policies, the people who influenced the policy formulation, the policy contents, and the processes whereby the policy was formulated, implemented, and evaluated.

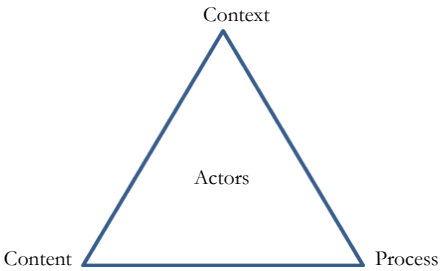

Figure 1. Health policy triangle framework

MATERIALS AND METHODS

This review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.[10] We systematically searched for relevant articles published in four electronic databases (Ovid Medline, PubMed, Scopus, and ScienceDirect) and general search engines such as Google Scholar. Articles that were written in non-English language were excluded. Four authors independently assessed the titles and abstracts of a defined set of articles using a combination of MeSH terms. Each study was recorded as included, excluded, or unclear. The full articles were retrieved to further assess the included and unclear categorized articles. Eligible studies were identified based on the pre-determined inclusion criteria: 1) all scholarly journals and English articles that were published between 1999 and 2019; 2) All types of literature including research reports, literature reviews, journal articles, fact sheets, government documents, decrees, and thesis; 3) Population: Smokers/ consumers, policymakers/ stakeholders, general community, premises' owners and dealers/ traders/ merchants; 4) Exposure: Smoke-free policy; 5) Comparison: Non-smokers/ second-hand smokers; 6) Outcome: The challenges and strategies related to the smoke-free policies extracted according to the constructs of the health policy triangle framework.

The initial duration of the search strategy was only 10 years but was extended to 20 years due to the limited number of related articles within the recent 10 years. A combination of MeSH keywords of smoke-free policy OR smoking policy AND issues OR challenges OR constraints were used to allocate related articles. Discussion between authors was conducted to identify discrepancies throughout the screening process, in order to achieve consensus on the final articles that should be included in the review. The data from the selected studies were extracted and analysed based on the Walt and Gilson's policy triangle framework.[11]

RESULTS

We identified 65 articles through electronic search and 25 from additional sources. A total of 78 articles were further screened after the removal of 12 duplicates. Screening based on the title and abstract led to further removal of 52 articles due to non-observational study designs, unrelated outcomes, non-English articles, and unrelated smoking policy. Only 26 full articles were retrieved for secondary screening with 6 articles being further excluded due to the

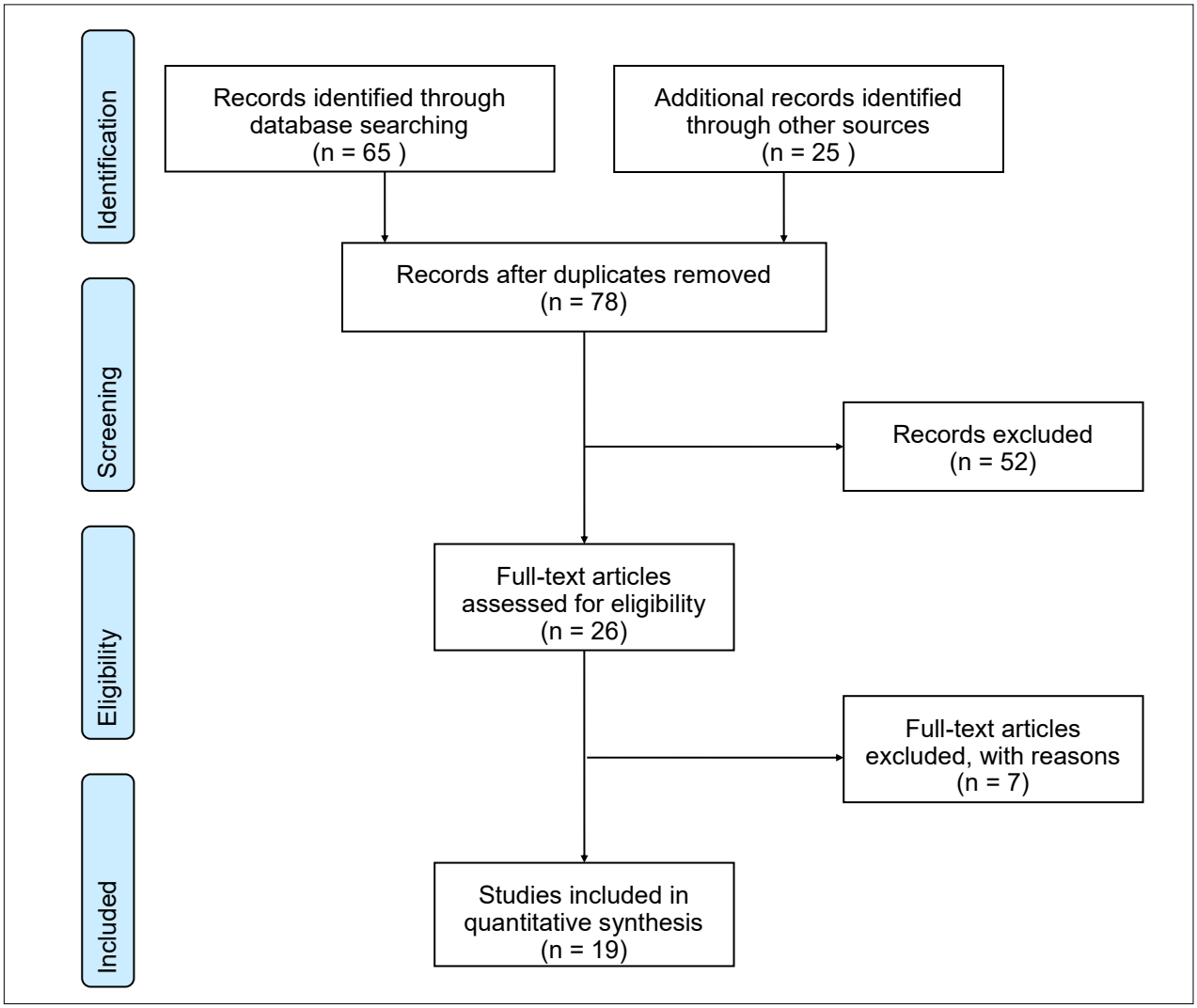

Figure 2. PRISMA flowchart for systematic search on issues and challenges of smoke-free policies implementation

smoke-free policy was not discussed directly in the article. Figure 2 shows the PRISMA flowchart.

The detailed characteristics and findings of all 19 articles reviewed are illustrated in Table I. The review involved seven cross-sectional study designs[12–18], four qualitative studies [19–22], two experimental[23,24] and cohort studies[25,26], as well as review articles[27,28] and also an evaluation research[29] and commentary article each.[30] Most of the studies were conducted in the United States of America (seven studies), followed by Australia (three articles).

The issues related to the implementation of the smoke-free policy were grouped according to policy triangle analysis framework constructs: Content, Context, Actors, and Process, as summarised in Figure 3. The most frequent issues and challenges related to the implementation of the smoke-free policy were categorised under the actor and context constructs of the policy triangle framework, indicating the need to address the potential difference in the levels of compliance with the policy according to the diverse background of the community, and different type of premises.

DISCUSSION

Policy implementation is a complex step as it involves various stakeholders and the responsibilities and the key to effective implementation lies between the actors. The primary purpose of smoke-free laws and policies is to protect non-smokers from becoming second-hand smokers,[31] as well as to motivate and help smokers to quit smoking and prevent initiation of tobacco use.

Table I. Summary of individual articles and findings

No.	Author/ Year	Setting	Study design	Study population	Findings	Health policy framework			
						Content	Context	Actor	Process
1.	Aherrera et al., 2016	Turkey	Cross-sectional study	Hospitality venue owners/ managers and employees	Working 70 hours or more per week was more likely to have a positive attitude towards the law (OR 1.33, 95% CI 1.05 to 1.70). Older individuals (OR 0.96, 95% CI 0.93 to 0.99 per year), women (OR 0.29, 95% CI 0.09 to 0.91), participants working in bars/ nightclubs (OR 0.25, 95% CI 0.11 to 0.56), venue owners receiving fines for non-compliance (OR 0.26, 95% CI 0.13 to 0.52) and current smokers (OR 0.11, 95% CI 0.03 to 0.42) were less likely to have a positive attitude towards the law. Participants working in traditional coffee houses (OR 3.87, 95% CI 1.29 to 11.6), former smokers (OR 3.60, 95% CI 0.89 to 14.5), and participants with a high school education or greater (OR 2.00, 95% CI 1.05 to 3.80) were more likely to enforce the law. Smokers who quit or reduced smoking because of the law (OR 3.53, 95% CI 1.29 to 9.70) were more likely to enforce the law compared with those who were not influenced by the law.		√	√	
2.	Berg et al., 2015	Atlanta, USA	Qualitative study	adult 18-65, spoke the local language if smokers = daily smoke	Most participants believe SHS is dangerous but some couples think protecting children is impractical Misconceptions about how to protect others from SHS Lack of home policies on smoking ban	√			
3.	Edwards et al., 2008	New Zealand	Evaluation research (data sources from literature searches and consultations with the experts)	The implementation process and outcomes of the act (SEAA) relating to smoke-free indoor workplaces and public places	The public and bar managers showed support for the SEAA and its underlying principles. There was evidence of high compliance in bars and pubs, where most enforcement problems were expected. The SHS exposure in the home among participants reduced from 20% in all households (42% of households with one or more smokers) in 2003 to 9% (30% of households with one or more smokers) in 2006.		√	√	
4.	Escoffery et al., 2017	Atlanta, USA	Interventional study	Household of whom 18 years of age or older, and a smoker or non-smoker living in a smoking discordant household.	The majority of participants were highly satisfied with the intervention (M=3.76, SD=0.57) and found it useful in creating a smoke-free home (M=3.63). Common goals set were changing the environment to support a home smoking ban (e.g. putting up signs, removing ashtrays) (82%) or picking a date (60%).	√			
5.	Jiang et al., 2018	New York, USA	Qualitative: Focus Group Discussion	Smoker & Non-smokers living in New York City public housing	Participants expressed scepticism about the public housing authority's capacity to enforce the policy due to widespread violations of the current smoke-free policy in common areas and pervasive use of marijuana in buildings. Most believed that resident engagement in the roll-out and providing smoking cessation services were important for compliance. The resident expressed concerns about evictions and worried that other building priorities (i.e., repairs, drug use) would be ignored with the focus now on smoke-free housing.				√

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No.	Author/ Year	Setting	Study design	Study population	Findings	Health policy framework			
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6.	Kairouz et al., 2015	Canada	Retrospective cohort study	Smokers 18 years of age and older in the province of Québec	187 were classified as remaining smoke-free homes, 711 as stable smoking homes, 96 as adopted smoke-free homes, and 64 regressing to smoking homes. No significant changes in smoking restrictions in homes between pre-and post-ban periods. For baseline smokers, including continuing smokers and quitters, the proportion of homes with a total smoking ban changed by approximately 3%. For continuing smokers, the proportion of households with partial smoking restrictions increased by 0.7%, and the proportion of smoke-free homes remained stable at 21.9%. Several individual and household characteristics were significantly associated with types of smoking restrictions in homes at baseline and follow-up with p<.05 (45-64 years old, male gender, household composition, presence of children at home). Continuing smokers who made their homes smoke-free between the pre-and post-ban periods significantly decreased the number of cigarettes they smoked inside their home between baseline and follow-up.			√	
7.	Kegler et al., 2019	USA	Qualitative: Semi-structured interview	21 Privately-owned affordable housing management companies	The decision to adopt was typically made by corporate leadership, board members, owners, or property managers, with relatively little resident input. Policy details were influenced by property layout, perceptions of how best to facilitate compliance and enforcement, and the cost of creating a designated smoking area. Policies were implemented through inclusion in leases, lease addenda, or house rules with 6 months' notice most common. Participants felt that having a written policy, the norms and culture of the housing community, public norms for smoke-free environments, and resident awareness of the rules and their consequences, helped with compliance. Violations were identified through routine inspections of units and resident reporting. Challenges to enforcement include resident denial, efforts to hide smoking, the perception that concrete evidence would be needed in eviction court, and that simply the smell of Second-hand Smoke was insufficient evidence of the violation. Over half had terminated leases or evicted residents due to violations of the smoke-free policy. The most common benefits cited were reduced turnover cost and time, and lower vacancy rates.			√	√
8.	Kingsbury & Reckinger, 2016	Minnesota, USA	Longitudinal study: pre-test & post-test evaluation	Residents from 8 affordable housing properties in Minnesota	There was a significant decrease in non-smokers' reported exposure to second-hand smoke indoors from Time 1 (44.0%) to Time 2 (23.6%), F (1,144) = 22.69, P<.001. There was no significant difference from Time 1 to Time 2 in outdoor second-hand smoke exposure, F (1,140) = 2.17, P = .14. Among 119 non-smokers living in properties that did not prohibit smoking outdoors, there was a marginally significant increase in outdoor second-hand smoke exposure from Time 1 to Time 2, F(1,118) = 3.76, P = .055.			√	

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No.	Author/ Year	Setting	Study design	Study population	Findings	Health policy framework			
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9.	Klein et al., 2013	Ohio, USA	Cross-Sectional study	Low-income pregnant & postpartum women enrolled in Ohio Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).	Non-white race, higher educational attainment, and greater than 50 % of the federal poverty level were all significantly associated with lower odds of preconception smoking. Being younger than 20 (OR: 0.71 95% CI 0.70 to 0.73) or 30 or older (OR: 0.80 95% CI 0.79 to 0.82) was associated with lower odds of preconception smoking. Having one or more children (OR: 0.92 95% CI: 0.90–0.93) and living in the metropolitan (OR: 0.85 95% CI 0.83–0.87) or Appalachian regions (OR: 0.95 95% CI 0.93–0.97) were associated with lower odds of preconception smoking; while living in rural non-Appalachian areas was associated with higher odds of preconception smoking compared to women living in suburban regions (OR = 1.05; 95% CI 1.02 to 1.08). There was a statistically significant reduction in the odds of preconception smoking during the time period after policy enforcement (OR = 0.98, 95% CI 0.98 to 0.99). For every 6 months after policy enforcement, the odds of preconception smoking among a sample of low-income women decreases by 11 % after accounting for ethnicity, socioeconomic factors, age, parity, region of the state, and cigarette taxes.		√	√	
10.	Kuang Hock et al., 2019	Malaysia	Cross-sectional study	Malaysian population - non-institutionalised residents	A majority of the Malaysian adult population supported the smoke-free policy - shopping centres (94.4%), workplaces (90.4%), public transport terminals (85.2%), and restaurants (83.5%). Relatively lower support for smoke-free bars (43.9%), casinos (40.0%), and discos (37.8%). **Support for the smoke-free workplace:** Non-smokers were twice as high as smokers in supporting smoke-free workplaces (AOR: 2.09, 95% CI: 1.04 to 4.21). Those working in workplaces with total smoking restriction were 14 times more likely to support it (AOR: 14.94, 95% CI: 6.44 to 34.64), while those working in partial smoking restriction workplaces were 3 times more likely to support the policy (AOR: 2.96, 95% CI: 1.38 to 6.35). **Support for smoke-free shopping centres, public transport terminals, restaurants, and hotels:** Non-smokers were more supportive of smoke-free shopping centres (AOR 1.81, 95% CI: 1.07 to 3.08), public transport terminals (AOR 2.13, 95% CI: 1.50 to 3.01), restaurants (AOR 1.71, 95% CI: 1.28 to 2.44) and hotels (AOR 1.61, 95% CI: 1.19 to 2.16). Male respondents were less likely to support a smoke-free policy in restaurants than females (AOR 0.72, 95% CI: 0.54 to 0.99). **Support for smoke-free bars, casinos, discos, and karaoke centres:** Non-smokers were twice more likely to support smoke-free places (SFP) at entertainment premises compared to smokers at bars (AOR 1.55, 95% CI: 1.21 to 1.99), casinos (AOR 1.95, 95% CI: 1.50 to 1.53), discos (AOR 1.91, 95% CI: 1.51 to 2.43), and karaoke centres (AOR 1.86, 95% CI: 1.48 to 2.34).		√	√	
11.	Malone et al; 2012	USA	Review	Any population that measured smoking or tobacco-industry-related outcomes	A total of 60 studies were reviewed examining Tobacco Industry Denormalizing (TID) with 9 smoking-related outcomes. The majority of studies suggest that TID is effective in reducing smoking prevalence and initiation and increasing intentions to quit. There was mixed evidence on TID's impact on intentions to smoke, youth empowerment, and views of the industry and its regulation.			√	

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						Content	Context	Actor	Process
12.	Mapa et al; 2018	Africa	Qualitative case study design	Document review on Tobacco policy in Cameroon Africa. In-depth interviews among Actors of national policies Direct observations on Effectiveness of policy imple-mentation in regions of Yaoundé, Douala, Ebolowa, Bamenda and Garoua.	Twelve out of 19 policies for tobacco use and prevention address the WHO "best buy" interventions. Cameroon's policy formulation was driven locally by the social context of non-communicable diseases, and globally by the adoption of the WHO Framework Convention on Tobacco Control. The policies incorporated all four domains of tobacco use "best buy" interventions. Formulating policy on smoke-free areas was single-sector oriented while determining tobacco taxes and health warnings utilized multisectoral approaches. The main actors involved were ministerial depart-ments of Health, Education, Finances, Communi-cation, and Social Affairs. The level of implementation varied widely from one policy to another and from one region to another. Political will, personal motivation, and the exist-ence of formal exchange platforms facilitated policy formulation and implementation, while barriers were poor resource allocation and lack of synergy.		√	√	√
13.	Martin et al., 2017	South Australia	Interven-tional study	Health staff and patients in South Australia	Health staff support for the policy was high across all time points (79.6%, 81.6%, and 84.0%), respectively. Among the most common reasons for disagreement at 15 months post-implementation of policy: preference for designated smoking areas (38.9%) perceived infringements on 'smoker rights/ freedoms' (28.7%) concerns regarding implementing the policy with mental health clients (20.5%) Non-compliance to policy: Exposure to passive smoke at work - pre-implementation (32.9%), 3 months post-implementation (26.7%), 15-month post-implementation (32.3%) ($p<0.001$). Witness non-compliance with the smoke-free policy - increase from 3 months post-implementation (59.0%) to 15 months post-implementation (66.9%) ($p<0.001$) Smoking behaviour: Although a majority of smokers indicated that the smoke-free policy had no impact on their smok-ing, 20.3% reported that the policy motivated them to cut down their smoking, and 6.4% were motivated to try to quit smoking. The proportion of smokers who reported that they smoke during working hours decreased significantly at 15 months post-implementation compared to pre-implementation (71.0% vs. 57.7%, $X^2= 14.1$, $p < 0.001$). Post-implementation of the policy, about 34.7% of patients were offered some form of cessation support while hospitalisation. Nearly half of patients indicated that they had changed their smoking habits since leaving the hospitals, either by quitting (9.1%) or cutting down (38.8%)	√			

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No.	Author/ Year	Setting	Study design	Study population	Findings	Health policy framework			
						Content	Context	Actor	Process
14.	Merom & Rissel, 2001	New South Wales, Australia	Cross-sectional study (Computer-assisted telephone interview survey)	New South Wales population aged ≥16 years, N= 17,494	72% of adults reported having a smoke-free home (SFH): -87% of never-smokers -81% of ex-smokers -35% of current smokers Current smokers living with younger children (<6 years old) in the household were almost 4 times more likely to have a SFH compared to those living alone (OR= 3.8, 95% CI 3.1 to 4.7). For both current smokers and ex-smokers, being employed in a smoke-free workplace was more likely to have a SFH compared to those, not in paid work (AOR=1.6, 95% CI 1.33 to 1.85; AOR=1.2, 95% CI 1.05 to 1.47), respectively. Smoking women were less likely to live in SFHs compared to smoking men (AOR= 0.8, 95% CI 0.7 to 0.9), and older smokers were less likely to live in SFHs compared to a younger smokers (AOR= 0.75, 95% CI 0.64 to 0.87 for 35 - 54 years old, and AOR=0.76, 95% CI 0.61 to 0.95).		√	√	
15.	Milcarz et al., 2017	Poland	Cross-sectional study	Socially disadvantaged populations in Poland, N= 1617	19.4% of the respondents declared exposure to Environmental Tobacco Smoke (ETS) at home. In non-smoker group, 15.5% (n = 157), including 6.6% of males and 18.3% of females, were exposed to ETS in their home ($p < 0.0001$). In smoker group, 25.8% (n = 156), including 25.1% of males and 25.5% of females, were exposed to ETS ($p > 0.05$). Smokers were almost twice significantly more likely to live in houses where complete smoking bans had not been implemented compared to non-smokers (OR = 1.71; 95% CI 1.32 to 2.21; $p < 0.001$). Those who were unaware of ETS-associated health consequences had higher odds of lacking SFH compared to those who are aware of the threats (OR = 1.28; 95% CI 1.00 to1.65; $p < 0.05$).	√		√	
16.	Miller et al., 2002	South Australia	2 Cross-sectional studies; Study 1: household surveys, Study 2: Restaurateur surveys and venue inspections	Study 1: 3000+ South Australians, aged 15 and older; Study 2: 500+ owners and managers of public dining venues	Study 1: Public support for smoke-free dining increased from 73.4% in 1997 to 84.2% in 1999. In 1999, 60.2% reported the ban had made dining out more enjoyable and 35.1% indicated no difference. Study 2: 88.2-92.3% of restaurants were complying with the legislation at five months and 95.7- 99.6% at 18 months. In 2000, 82% of restaurateurs reported that they had spent no money in order to implement the law.		√	√	
17.	Obeidat et al., 2015	Jordan	Cross-sectional survey	Urban population (Aman, Jordan)	79% of the population knew that smoking was banned. Relatively high level of knowledge on health effects of passive and active smoking. 64% of respondents correctly identified all mentioned harms of active smoking, 65% second-hand smoking. High support for banning smoking in specific locations (96% hospitals, clinics, schools / 92% public transportation / 85% in public building including airports / 80% shopping malls / 76% universities). Lower support rates in restaurants (66%) and coffee shops (39%). Older age groups, lower educational levels, non-smokers, those knowledgeable with regards to the harms of smoking, those knowledgeable with regards to the harms of SHS, and those who knew that smoking was banned in public places were significantly more likely to be supportive of restaurant bans independent and significant effect of educational level, non-smoker, good knowledge have greater support on banning smoking in restaurants. Independent and significant effect of older age, non-smokers, and good knowledge on banning smoking in coffee shops.		√	√	

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No.	Author/ Year	Setting	Study design	Study population	Findings	Health policy framework			
						Content	Context	Actor	Process
18.	Campos & Reich, 2019	LMIC	Commentary article	-	Smoke-free laws encourage cessation among smokers, make smoking less socially acceptable and prevent young ones from initiating smoking. Not all smoke-free laws conform to FCTC recommended best practices eg policies that allow designated smoker. Smoke-free policies in Israel 2012 bring new smoke-free policies to the entrance of medical facilities, train stations, outdoor swimming pools, and government offices.		√		√
19.	Van Minh et al., 2016	Vietnam	A critical narrative literature review	articles concerning tobacco control policies in Vietnam	National Health survey 2002 estimated the smoking rate was 56% among adult males. Smoking ban in halls, cinemas, and theatres started since 1989, banned in the army in 1996, and tobacco sponsorship in sports and culture events banned in 1997 Expanded areas for the Smoking ban include health and educational settings, childcare, and entertainment areas designated for children, areas at high risk of fire, indoor workplaces, restaurants, and public transport - in 2012 Tobacco Control Law took effect in 2013. GATS 2010: proportion of smoking in bars/cafes/ shops 92.6%, restaurant 84.9%, indoor workplaces 55.9%, universities 54.3%, government office 38.7%		√		

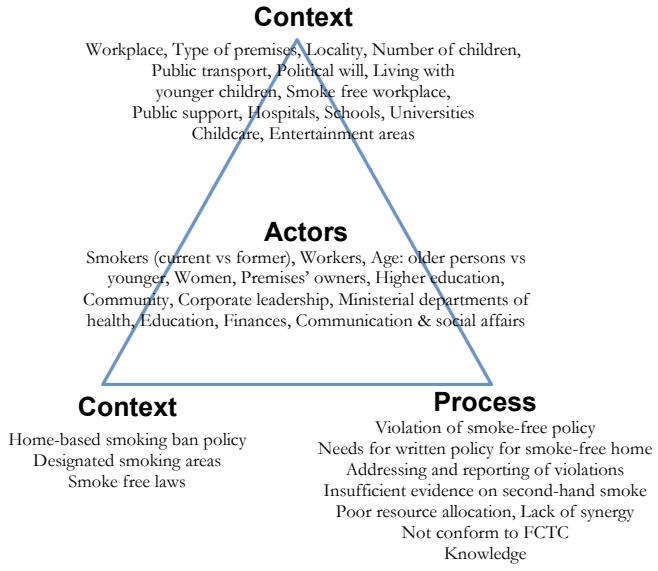

Figure 3. Issues and challenges of smoke-free policy implementation according to the policy triangle framework

This review found the important role of actors (smokers, community/ workers, premises' owner, ministries, and women) as well as the context particularly workplace and premises to enhance and support the implementation of a smoke-free policy. Smokers were found to be less likely to have a favourable attitude towards the smoke-free policy. Smoking status has been reported in previous research as a significant predictor towards smoke-free policy support.[32] Smokers were generally less supportive of the policy since they feel the law hinders them from being able to practice their habits in the public area and jeopardising their freedom. The smokers' perception of the adverse health effects towards second-hand smokers plays an important role to the succeed of the policy. Many smokers tend to downplay the negative effects of SHS by adopting positive perceptions on the smoke such as perceiving SHS as less harmful than vehicle emission, just to rationalise their smoking behaviour in the public. Cooper and Hogg described Festinger's cognitive dissonance theory that postulates the tendency of rationalization by a human when there are inconsistencies in one's belief, behaviour, or perception, and this could be another challenge to the policy implementation.[33] Their beliefs and perception of smoking adverse effects on other people is an important factor to be tackled as this will influence their behaviours on the policy since actions were influenced by the individual's attitudes and beliefs as being described by the Theory of Reasoned Action.[34]

Apart from that, the public or community as well as the workers' acceptance and understanding of the policy also play an important role. Various studies that explore the public perceptions and acceptance of the policies discovered that younger people with lower knowledge on

the issue, low-income groups, and smokers had significantly lower support for the policies.[13,20,35] The scepticism on the benefit of the policies was due to inadequate knowledge of the second-hand smoke hazards and concern that the public must report and confront the smokers directly. Despite the many issues related to compliance with the smoke-free policy, scientific evidence supports its role to increase cessation and reduce smoking prevalence among workers and the general population [31,36,37] and may also reduce smoking initiation among youth.[38] Furthermore, based on the findings of related studies conducted in France, Ireland, Netherlands, Germany, and Canada, workplaces with smoke-free policies in place had nearly twice as likely for the employees to quit smoking, and reduces smoking prevalence by 3.8% among employees who smoke. [39]

Smoke-free premises refer to enclosed or substantially enclosed premises that are open to the public or used as a place of work by more than one person. However, to effectively implement the policy and educate the workers on the policy, it requires full management support, including support for the workers to quit smoking such as counselling and medical referral. Furthermore, to resolve the fundamental and irreconcilable conflict between the tobacco industry's interests and public health policy interests, the inclusion of tobacco control as part of the Sustainable Development Goals (SDG) has been instrumental.[5] It gives a clear outline of addressing the tobacco epidemic and reducing the burden of tobacco in order to accelerate the achievement of the SDG.

Among the effective and affordable public health measures include a substantial increase in tobacco tax, adapting code of conduct in dealing with industries, and bans on advertising and promotions of tobacco products. Nonetheless, it requires cooperation and collaboration from the various advocates and governments who have signed the Framework Convention on Tobacco Control (FCTC) to raise awareness as well as to develop policies and acts to combat tobacco control in line with goal 3a to strengthen the implementation of the World Health Organization FCTC in all countries. To achieve a continuous positive gain from the policy implementation, the promotional and enforcement activities were recommended on top of compliance rate monitoring from all population subgroups.[29]

This review is, however, limited to the studies conducted in the Western countries, which may have better smoke-free policy enforcement. It also included non-research articles such as commentary which was based on opinion.

CONCLUSION

The articles involved in this review highlight glaring issues in the implementation of smoke-free policy which were discussed according to the health policy triangle framework. The actor and context constructs of the framework were found to be the main contributors to the issues and challenges related to the implementation of the smoke-free policy, revolving around issues related to awareness and commitment of smokers, the community, premises' owner, and tobacco industry. Intensified strategies targetting on the actors are necessary for future planning and implementation of smoke-free policies and related health promotion activities.

CONFLICT OF INTEREST

We, the authors of the article declare that there is no conflict of interest regarding the publication of this article.

ACKNOWLEDGEMENTS

The authors would like to extend their gratitude to the lecturers of the Department of Community Health, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia for their continuous support and guidance for manuscript publication.

FUNDING

The authors received no financial support for the research, authorship, or publication of this article.

ETHICAL APPROVAL

Ethical approval is not required for this review.

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