

This is a repository copy of *Global impact of tobacco control policies on smokeless tobacco use:A systematic review protocol*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/168701/>

Version: Accepted Version

---

**Article:**

Arora, Monika, Chugh, Aastha, Jain, Neha et al. (15 more authors) (2020) Global impact of tobacco control policies on smokeless tobacco use:A systematic review protocol. BMJ Open. e042860. ISSN 2044-6055

<https://doi.org/10.1136/bmjopen-2020-042860>

---

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

## Addressing Smokeless Tobacco and Building Capacity in South Asia (ASTRA) – Policy Workstream

### Data Extraction Form

#### SECTION I: General Information and Identification

1.	Title of the Article/ Document	
2.	Study ID ( <i>surname of first author and year study was published e.g. Smith 2001</i> )	
3.	Report ID ( <i>for projects or studies with multiple report - if different to Study ID e.g. Smith 2001_01</i> )	
4.	Report IDs of other reports of this study ( <i>e.g. duplicate publications, follow-up studies</i> )	
5.	Date form completed (dd/mm/yyyy)	
6.	Initials of person extracting data	
7.	Full reference with URL	
8.	Type of Document	<input type="checkbox"/> Scientific article <input type="checkbox"/> Government Report <input type="checkbox"/> Policy Document <input type="checkbox"/> Non-government report <input type="checkbox"/> Commentary <input type="checkbox"/> Editorial <input type="checkbox"/> Government Circular <input type="checkbox"/> Others
9.	Study author contact details	
10.	Source of document ( <i>If ministry website, mention which ministry – Health, Environment, Commerce etc.</i> )	<input type="checkbox"/> Academic journal <input type="checkbox"/> Ministry website, name: _____

		<input type="checkbox"/> Google <input type="checkbox"/> Other, name: _____ _____
11.	Country (in which study was conducted/policy document is based)	
12.	Duration of study ( <i>start and end date</i> )	
13.	State funding source	
14.	Ethics approval obtained for the study (Y/N)	

**SECTION II: DETAILS OF SMOKELESS TOBACCO POLICY (specific to RQ1)**

1.	Population (study participants)	<input type="checkbox"/> Smokers <input type="checkbox"/> Smokeless Tobacco Users <input type="checkbox"/> Dual Users <input type="checkbox"/> Any other, please specify:
2.	Age group of study participants (adolescents/young adults/adults)	<input type="checkbox"/> All age groups <input type="checkbox"/> adults, age range: _____ <input type="checkbox"/> children/youth, age range: _____ <input type="checkbox"/> other, age range: _____ <input type="checkbox"/> comment/warning message (if any): _____
3.	Gender distribution of participants	Total number of males (%): Total number of females (%):
4.	Setting of the population ?( national or sub-national)	
5.	Number of participants/sample size	

INTERVENTION (POLICY) DESCRIPTION		
INTERVENTION (POLICY) 1 (replicate the entire section in case of more than 1 policy)		
1.	Intervention (policy) focus	<p><b>FCTC Policies</b></p> <p><input type="checkbox"/> Pricing and taxation (Article 6)</p> <p><input type="checkbox"/> Product regulation (Article 9 and 10)</p> <p><input type="checkbox"/> Packaging and health warnings (Article 11)</p> <p><input type="checkbox"/> Education, communication, training, and public awareness (Article 12)</p> <p><input type="checkbox"/> Advertisement, promotion and sponsorship bans (Article 13)</p> <p><input type="checkbox"/> Cessation (Article 14)</p> <p><input type="checkbox"/> Illicit trade (Article 15)</p> <p><input type="checkbox"/> Sales to and by minors (Article 16)</p> <p><b>Non-FCTC Policies</b></p> <p><input type="checkbox"/> Complete ban</p> <p><input type="checkbox"/> Partial ban</p> <p><input type="checkbox"/> Import ban</p> <p><input type="checkbox"/> Other policies mentioned to control ST (agriculture, environment etc.), please specify _____</p> <p>_____</p>
2.	Comparator ( <i>usual care/control etc.</i> )	<p><input type="checkbox"/> Reported/Describe: _____</p> <p><input type="checkbox"/> Not reported (but should be reported)</p> <p><input type="checkbox"/> Not applicable</p>
Description of intervention (using TIDieR checklist: <a href="https://www.equator-network.org/reporting-guidelines/tidier/">https://www.equator-network.org/reporting-guidelines/tidier/</a> )		
3.	Brief name (name or phrase that describes the policy in the document)	<p><input type="checkbox"/> Present/Describe: _____</p> <p><input type="checkbox"/> Absent (but should be reported)</p>

		<input type="checkbox"/> Not applicable (when it is legitimately not relevant)
4.	Why? (Describe any rationale, theory, or goal of the elements essential to the policy)	<input type="checkbox"/> Present/Describe: <hr/> <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
5.	What materials  (any physical or informational materials used for the policy)	<input type="checkbox"/> Present/Describe: <hr/> <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
6.	What procedures  (procedures, activities, and/or processes used in the policy)	<input type="checkbox"/> Present/Describe: <hr/> <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
7.	Who provided  (For each category of intervention provider (e.g. psychologist, nursing assistant), describe their expertise, background and any specific training given; N/A for non-human provider modes)	<input type="checkbox"/> Present/Describe: <hr/> <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
8.	How  (modes of delivery (e.g. face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group)	<input type="checkbox"/> Present/Describe: <hr/> <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
9.	Where  (Describe the type(s) of location(s) where the policy occurred, including any necessary infrastructure or relevant features)	<input type="checkbox"/> Present/Describe: <hr/> <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
10.	When and how much  (period of time covered by the policy and any specification on frequency and intensity)	<input type="checkbox"/> Present/Describe: <hr/> <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)

11.	<p>Tailoring</p> <p>(If it was planned to be personalised, titrated or adapted for a specific population, then describe what, why, when, and how)</p>	<input type="checkbox"/> Present/Describe: _____ <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
12.	<p>Modifications</p> <p>(any modified made to the policy during the course of the study, describe the changes (what, why, when, and how))</p>	<input type="checkbox"/> Present/Describe: _____ <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
13.	<p>How well implemented (plan)</p> <p>(whether policy adherence was assessed, and if any strategies were used to maintain and improve adherence)</p>	<input type="checkbox"/> Present/Describe: _____ <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
14.	<p>How well implemented (actual)</p> <p>(if policy adherence was assessed, describe the extent to which it was implemented as planned)</p>	<input type="checkbox"/> Present/Describe: _____ <input type="checkbox"/> Absent (but should be reported) <input type="checkbox"/> Not applicable (when it is legitimately not relevant)
Contextual specification of intervention		
15.	Is the extent of policy enforcement described in the document?	<input type="checkbox"/> Yes, National/federal level <input type="checkbox"/> Yes, Regional/state-level/provincial <input type="checkbox"/> No  If Yes, Describe the extent: _____
16.	Enforcers/regulators of the policy (Government body enforcing or regulating the policy)	<input type="checkbox"/> Ministry/Department/Division of Health <input type="checkbox"/> Ministry/Department/Division of Commerce <input type="checkbox"/> Ministry/Department/Division of Finance <input type="checkbox"/> Ministry/Department/Division of Environment <input type="checkbox"/> Food and Drug Administration <input type="checkbox"/> Others, please specify _____ _____

17.	Does this document identify if stakeholders were involved in developing/modifying the policy?	<input type="checkbox"/> Yes <input type="checkbox"/> No
18.	If Yes in Point 5, select all the stakeholders that were involved in developing/modifying the policy	<input type="checkbox"/> Federal Government/National Government <input type="checkbox"/> Provincial/State/Regional Government <input type="checkbox"/> Health Care Organisations <input type="checkbox"/> Experts <input type="checkbox"/> Regulators <input type="checkbox"/> Professional Organisations (non-regulatory) <input type="checkbox"/> Clinicians <input type="checkbox"/> Patients <input type="checkbox"/> Researchers <input type="checkbox"/> Others (specify) _____ <input type="checkbox"/> Not available
19.	Does the document describe any policy drivers, e.g., preamble or rationale for introducing policies (like media coverage, political will, public health concern etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No  if yes, specify details:
20.	Does the document evaluate or mention evaluation of the policy's effectiveness?	<input type="checkbox"/> Evaluates impact ( <i>complete Section III</i> ) <input type="checkbox"/> Mentions evaluation of impact ( <i>in methods</i> ) <i>State/provide reference of the article/document with details of the impact evaluation:</i> <input type="checkbox"/> None of the above
21.	Any other details (limitations or other observations)	

### SECTION III: DETAILS OF IMPACT OF SMOKELESS TOBACCO POLICIES (specific to RQ2)

#### A. Methods

			Location in text (Page #/ Figure/Table)
1.	Study objectives <i>(as stated in the study)</i>		
2.	Design	<input type="checkbox"/> Randomized controlled trial <input type="checkbox"/> Controlled clinical trial <input type="checkbox"/> Cohort analytic (two groups pre+post) <input type="checkbox"/> Case-control Cross sectional (surveys) <input type="checkbox"/> Cohort (one group pre+post (before and after)) <input type="checkbox"/> Interrupted time series <input type="checkbox"/> Other specify _____ <input type="checkbox"/> Not specified	
3.	Sampling technique with details	<input type="checkbox"/> Random sampling <input type="checkbox"/> Purposive sampling <input type="checkbox"/> Snowball sampling <input type="checkbox"/> Cluster sampling <input type="checkbox"/> Any other, please specify: _____ <input type="checkbox"/> Not specified	



4.	Is the analysis of the study conducted at individual level?	<input type="checkbox"/> No <input type="checkbox"/> Yes, please give details: _____	
5.	Is the analysis of the study conducted at group level?	<input type="checkbox"/> No <input type="checkbox"/> Yes, please give details: _____	

## B. Outcomes

			Location in text (Page #/ Figure/Table)
<b>PRIMARY OUTCOME 1 (replicate the section in case of more than one PRIMARY outcome)</b>			
1.	Outcome name (e.g. quit rate)		
2.	Outcome definition		
3.	Time points measured		
4.	Time since policy implementation		
5.	Time points reported		

6.	Total N (% - <i>at this stage of follow-up as % of N at time of enrolment in study</i> )		
7.	N (%) with outcome		
8.	Effect estimate ( <i>e.g. Odds Ratio/Prevalence percentage/risk ratio/mean/median</i> )		
9.	Unit of effect estimate ( <i>e.g. Odds Ratio, percentage, mean etc.</i> )		
10	Confidence/precision intervals of effect estimate ( <i>e.g. 95% CI, IQR, SD, SR etc.</i> )		
11	Is tool validated for population of interest		
	<b>INTERMEDIATE OUTCOME</b>		
	<b>Details</b>		
	<b>UNINTENDED OUTCOME</b>		
	<b>Details</b>		

	Notes:
--	--------

### C. COMPARATORS

			Location in text (Page #/ Figure/Table)
<b>COMPARATOR 1 (Replicate the section in case of more than one comparator)</b>			
1.	Comparator Name (e.g. quit rate)		
2.	Comparator definition		
3.	Time points measured		
4.	Time since policy implementation		
5.	Time points reported		
6.	Total N (% - <i>at this stage of follow-up as % of N at time of enrolment in study</i> )		
7.	N (%) with outcome		
8.	Effect estimate ( <i>e.g. Odds Ratio/Prevalence percentage/risk ratio/mean/median</i> )		

9.	Unit of effect estimate ( <i>e.g. Odds Ratio, percentage, mean etc.</i> )		
10.	Confidence/precision intervals of effect estimate ( <i>e.g. 95% CI, IQR, SD, SR etc.</i> )		

#### **D. Limitation and Mitigation Strategy (author identified)**

			Location in text (Page #/ Figure/Table)
1.	Strength		
2.	Limitation		

#### **E. Conclusions**

			Location in text (Page #/ Figure/Table)
1.	Key Conclusion of Study Author/s		

**F. Risk of bias (quality assessment)**

<b>1. SELECTION BIAS</b>	
a. Are the individuals selected to participate in the study likely to be representative of the target population?	<input type="checkbox"/> Very likely <input type="checkbox"/> Somewhat likely <input type="checkbox"/> Not likely <input type="checkbox"/> Can't tell
b. What percentage of selected individuals agreed to participate?	<input type="checkbox"/> 80-100% agreement <input type="checkbox"/> 60-79% agreement <input type="checkbox"/> Less than 60% agreement <input type="checkbox"/> Not applicable <input type="checkbox"/> Can't tell
Rate this section (selection bias)	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
<b>2. STUDY DESIGN</b>	
a. Indicate the study design	<input type="checkbox"/> Randomized controlled trial <input type="checkbox"/> Controlled clinical trial <input type="checkbox"/> Cohort analytic (two groups pre+post) <input type="checkbox"/> Case-control Cross sectional (surveys) <input type="checkbox"/> Cohort (one group pre+post (before and after)) <input type="checkbox"/> Interrupted time series <input type="checkbox"/> Other specify _____ <input type="checkbox"/> Can't tell
b. Was the study described as randomized? (If No, go to component 3)	<input type="checkbox"/> No <input type="checkbox"/> Yes

c. If yes, was the method of randomization described?	<input type="checkbox"/> No <input type="checkbox"/> Yes
d. If yes, was the method appropriate?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Rate this section (study design)	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
<b>3. CONFOUNDERS</b>	
a. Were there important differences between groups prior to intervention?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
The following are examples of confounders	<input type="checkbox"/> Race <input type="checkbox"/> Sex <input type="checkbox"/> Marital status/family <input type="checkbox"/> Age <input type="checkbox"/> SES (income or class) <input type="checkbox"/> Education <input type="checkbox"/> Health status <input type="checkbox"/> Pre-intervention score on outcome measure
b. If yes, indicate the percentage of relevant confounders that were controlled (either in the design (e.g., stratification, matching) or analysis)?	<input type="checkbox"/> 80-100% (most) <input type="checkbox"/> 60-79% (some) <input type="checkbox"/> Less than 60% (few or none) <input type="checkbox"/> Can't tell
Rate this section	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
<b>4. BLINDING</b>	
a. Was (were) the outcome assessor(s) aware of the intervention or exposure status of participants?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell

b. Were the study participants aware of the research question?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
Rate this section	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
<b>5. DATA COLLECTION METHODS</b>	
a. Were data collection tools shown to be valid?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
b. Were data collection tools shown to be reliable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
Rate this section	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
<b>6. WITHDRAWALS AND DROP-OUTS</b>	
a. Were withdrawals and drop-outs reported in terms of numbers and/or reasons per group	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/> Not applicable (i.e. one time surveys or interviews)
b. Indicate the percentage of participants completing the study (if the percentage differs by groups, record the lowest)	<input type="checkbox"/> 80-100% <input type="checkbox"/> 60-79% <input type="checkbox"/> Less than 60% <input type="checkbox"/> Can't tell
Rate this section	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
<b>7. INTERVENTION INTEGRITY</b>	

a. What percentage of participants received the allocated intervention or exposure of interest?	<input type="checkbox"/> 80-100% <input type="checkbox"/> 60-79% <input type="checkbox"/> Less than 60% <input type="checkbox"/> Can't tell
b. Was the consistency of the intervention measured?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
c. Is it likely that subjects received an unintended intervention (contamination or co-intervention) that may influence the results	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
<b>8. ANALYSES</b>	
a. Indicate the unit of allocation (select one)	<input type="checkbox"/> Community <input type="checkbox"/> Organisation/institution <input type="checkbox"/> Practice/office <input type="checkbox"/> Individual
b. Indicate the unit of analysis (select one)	<input type="checkbox"/> Community <input type="checkbox"/> Organisation/institution <input type="checkbox"/> Practice/office <input type="checkbox"/> Individual
c. Are the statistical methods appropriate for the study design?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
d. Is the analysis performed by intervention allocation status (i.e. intention to treat) rather than the actual intervention received?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell
<b>COMPONENT RATINGS</b>	
a. Selection Bias	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
b. Study Design	<input type="checkbox"/> 1 Strong



	<input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
1 Confounders	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
2 Blinding	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
3 Data collection method	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
4 Withdrawals and drop-outs	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
<b>GLOBAL RATING FOR THIS PAPER (SELECT ONE)</b>	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak
(With both reviewers discussing the ratings) Is there a discrepancy between the reviewers with respect to the component (a. – f.)	<input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, indicate the reason for discrepancy	<input type="checkbox"/> Oversight <input type="checkbox"/> Differences in interpretation of criteria <input type="checkbox"/> Differences in interpretation of study
<b>Final Decision of both reviewers (select one)</b>	<input type="checkbox"/> 1 Strong <input type="checkbox"/> 2 Moderate <input type="checkbox"/> 3 Weak