

### **COVID 19 AND TOBACCO PROJECT**

#### SCHOOL OF SOCIAL AND POLITICAL SCIENCE, UNIVERSITY OF EDINBURGH



#### IN COLLABORATION WITH

#### THE INITIATIVE, PAKISTAN



# Investigating the psychological, social and economic impact of COVID-19 epidemic and its response in a cohort of smokers in Pakistan

#### **PROTOCOL**

Sponsor	University of Edinburgh	
Funder	Global Challenges Research Fund, Scottish	
	Funding Council	
Version number and date	V 1.1 12 <sup>th</sup> April 2020	

























## Investigating the psychological, social and economic impact of COVID-19 epidemic and its response in a cohort of smokers in Pakistan

#### **BACKGROUND**

The current global COVID-19 pandemic has affected almost all aspects of life for a large proportion of the world's population. There is an urgent need to understand the impact of the outbreak on wellbeing, health and healthcare both directly because of the epidemic and indirectly because of the measures introduced to prevent its spread. The needs of the population living in low- and middle-income countries (LMIC) income countries such as Pakistan must be assessed and addressed to avoid widening existing global health inequalities. Pakistan is currently on an early but rising trajectory of the COVID-19 epidemic curve, and therefore assessing and monitoring the impact of COVID-19 is timely.

Since July 2019, we have been conducting a population-based observational study to investigate smoking behaviours in Pakistan- the STOP survey. The first wave of the survey recruited 6,027 participants. During consent gathering, survey participants were asked if they would be willing to take part in a future telephone follow-up in six-months time. This presents an opportunity to investigate the impact of the COVID-19 outbreak on this large nationally-representative population, in order to inform health, social care and policy responses. This proposal has the support of the Ministry of National Health Services, Regulations and Coordination Pakistan. Our links within the Ministry and other non-governmental actors will allow the survey findings to be communicated to the relevant stakeholders in a regular and timely manner.

#### **AIMS AND OBJECTIVES**

We aim to investigate the psychological, social and economic impact of the COVID-19 epidemic and its responses (e.g. social distancing measures) in a nationally-representative cohort of smokers in Pakistan.

#### **Research objectives**

- 1. To understand the levels of knowledge, attitudes and responses to public health advice about preventing the spread of COVID-19
- 2. To estimate the proportion of people with symptoms, testing positive for COVID-19
- 3. To assess the extent to which people are concerned about their health regarding the epidemic
- 4. To ascertain the extent to which people (both with and without COVID-19 symptoms) have access to healthcare and essential medications
- 5. To assess the impact of COVID-19 and its response on:
  - a. social connections and social isolation
  - b. housing and homelessness
  - c. livelihoods including job security and businesses
  - d. access and capacity to purchase food
  - e. household's financial situation
  - f. health risk behaviours with a focus on smoking
  - g. access to and opportunities for physical exercise

- h. wellbeing
- i. mental health (depression and anxiety)

#### **METHODS**

#### Design

Using a panel study design and the STOP survey cohort, we will take informed consent from those who took part in the STOP survey, between May and July 2020. This will provide post-COVID-19 cross-sectional data of the whole sample as well as panel data at regular intervals (daily/weekly) during this period. We will explore changes over time during this period using an interrupted time series analysis. To explore changes in their smoking behaviour since the pandemic outbreak, we will compare data collected following the outbreak with data collected at baseline (recruitment into the survey) in a before and after comparison. Table 1 links the study objectives with the relevant sections of the questionnaire, its outcomes and strategies to communicate these findings to the relevant stakeholders.

#### **Population**

Adults aged 15 years and above recruited from the STOP survey cohort and consenting to be surveyed on telephone.

#### **Recruitment and consent**

We will recruit participants from our STOP survey cohort who provided their phone numbers for a future follow-up. These will be contacted by telephone to explain the purpose of the study. STOP survey researchers will read out study information sheets and respond to questions. Where possible, information sheets will also be sent to the participants via Whatsapp. If people indicate they are interested, the researcher will go on to read out the statements in the consent form and assure confidentiality of responses (except where there are concerns raised about serious risk of harm to the participant or others). People will be asked if they are interested in continuing on the same day or wish to be given more time to decide. Information about the study will be available on our (The Initiative) website, which those with Internet access will be encouraged to visit. The website will also provide information about protecting yourself from COVID-19, including links to support materials provided by the WHO and the Ministry. Verbal informed consent will be sought and recorded before proceeding with any data collection. All participants will be given a mobile phone credit with Pak Rs. 200 as an incentive.

#### **Data Collection**

A draft questionnaire has been developed, which will be piloted with a few participants in the first instance to explore the appropriateness and burden of questions. We will put the final agreed questionnaire on Qualtrics. This approach to data collection has the advantage of reducing resource use and potential errors compared with paper data collection followed by electronic data entry and is feasible with remote working.

Measures to be collected are provided in the attached draft questionnaire. Wherever possible, measures that have been validated for use in the South Asian population will be used.

#### Statistical analysis

We will use descriptive statistics to generate frequencies and proportions for the responses obtained from our questionnaire. Due to the urgency of COVID-19 situation, we will publish these descriptive findings in tabular forms on our website on a weekly basis and also share it with the relevant stakeholders. In addition, we will also provide characteristics of our survey participants using means, ranges and standard deviation as appropriate. We will also conduct a regression analysis using SPSS software to identify which responses are associated with which sociodemographic characteristics. Moreover, we will also conduct interrupted time series analysis using each week's responses as a single data point to assess the impact of COVID-19 and its response.

#### **Ethics**

HSRGC (Health Sciences Research Governance Committee) of the University of York has indicated that due to the COVID19 situation and the need for an urgent response, ethics approval is only required from a competent authority in Pakistan and the committee in York will endorse the decision taken in Pakistan.

An approval from the National Bioethics Committee, Pakistan will be sought for this study

#### Data security and sharing

The data will be subject to the same data management, security and sharing procedures as described in the ethics submissions and data management plan for the STOP survey.

#### **Study Governance**

Day to day management of the study will be the responsibility of the STOP survey team.

Table 1: Links between the survey objectives and the relevant questionnaire sections, outcomes and communication strategies

Objectives	Questionnaire sections	Outcomes	Communication strategies
To understand the levels of knowledge, attitudes and responses to public health advice about preventing the spread of coronavirus (objective 1)		1.1 beliefs and knowledge about coronavirus and its spread 1.2 attitude towards the measures government has taken to tackle the epidemic 1.3 practice in response to government's advice and actions	ministries to modify their public health messages to raise awareness and

		1.4 key sources of information on coronavirus	
To understand the proportion of people with coronavirus, health concerns and lack of access to healthcare (objective 2, 3 and 4)	Section 2: Health (coronavirus exposure, health concerns, access to healthcare)	2.1 people with symptoms of coronavirus 2.2. health concerns 2.3 access to healthcare 2.4 access to essential medicines	Inform National Institute of Health and the Ministry for National Health Services, Regulations and Coordination to help plan responses and services
To assess the impact on social connections (objective 5a)	Section 3: Social connections (social isolation)	<ul><li>3.1 change in social connections</li><li>3.2 access to help</li><li>3.3 social isolation</li></ul>	Inform stakeholders (e.g. charities) to mitigate against social isolation
To assess the impact on housing and homelessness (objective 5b)	Section 4: Housing security	4.1 concerns over paying house rent/loans 4.2 concerns over loss of house (eviction)	established in response to Covid-19 to help plan for the impact of the epidemic on these wider determinants of
To assess the impact on livelihoods including job security and businesses (objective 5c)	Section 5: Livelihoods	5.1 change in work pattern 5.2 concerns about job/business loss 5.3 expectations about job/business loss	
To assess the impact on access and capacity to purchase food (objective 5d)	Section 6: Food security	<ul><li>6.1 access to food</li><li>6.2 sufficiency of food</li><li>6.3 affordability of food</li><li>6.4 eating less</li><li>6.5 staying hungry</li></ul>	
To assess the impact on household's financial situation (objective 5e)	Section 7: Financial loss	<ul><li>7.1 change in financial situation</li><li>7.2 ability to pay for utilities</li></ul>	
To assess the impact on change in health risk behaviours with a focus on smoking (objective 5f)	Section 8: Health risk behaviours (smoking)	8.1 quit attempts 8.2 quit permanently 8.3 increase/decrease smoking 8.4 change in attitude towards smoking	Inform stakeholders (e.g. tobacco control cell) to reinforce health messages on smoking and its links with coronavirus

To assess the impact on access to and opportunities for physical exercise (objective 5g)	Section 9: Physical activity	9.1 level of exercise 9.2 changes in exercise patterns 9.3 access to outdoor activities	Communicating these findings with relevant public health bodies and inform public health advice on physical activity
Impact on general wellbeing (objective 5h)	Section 10: Wellbeing	10.1 well being scores	Communicating these findings to the WHO collaborating centres on mental health, Pakistan and developing approaches to address mental health issues in the wider public
Impact on mental health (objective 5i)	Section 11: Depression	11.1 depression scores	
Impact on mental health (objective 5i)	Section 12: Anxiety	12.1 anxiety scores	