



RESPIRE Data Management Plan (DMP): Template (adapted from the University of Edinburgh)

Name:	Dr. Tabish Hazir
Project Title:	Perceived effects of second-hand smoke on a pregnant woman: a phenomenological study
Institute:	Maternal, Neonatal and Child Health Research Network (MNCHRN)
Start Date:	01 September 2019
End Date:	31 December 2020
DMP version number and date:	DMP_V01_20201130
<u>Responsibilities & Resources (applicable across the sections below)</u>	
<i>Who will be involved in the data management of this research?</i>	
Name	Role in the Data Management
Dr Hana Mahmood	Data deposit and oversight of implementation of the plan
Hira Kiani	Data collection and management
Mustafa Ali	Data collection
Sumaira Nasim	Data collection
Sajid Khan	Data collection
Saman Mujeeb	Data collection and maintenance of data
Syed Yahya Sheraz	Data storage
Rakhshanda Hameed	Data collection and analysis
Nyla Muzaffar	Data collection and analysis
Saadia Khan	Data collection and management

1. Data Capture

What data will be generated or reused in this research?

Systematic review:

PubMed, Embase, Global Health and CINAHL were searched systematically to identify and retrieve relevant data against the identified key terms. Inclusion criteria are given below:

- Qualitative studies or mixed method studies
- Studies covering perception of effects of second-hand smoke (SHS) on pregnancy

Two independent reviewers implemented the search strategy and compiled extracted data in Microsoft Excel sheet.

In depth interviews:

In depth interviews are being conducted with males who are smokers and with non-smoking pregnant or post-partum women (whoever is available) exposed to second-hand smoke residing in peri urban slums and rural setting of Rawalpindi district. These are being conducted face to face or telephonically based upon respondent convenience. Telephonic interviews are being conducted through a computer assisted telephonic interviewing system by research staff equipped with a laptop and sound (headphone and microphone) system with automatic dialling software installed into it. All interviews are audio recorded upon taking consent from the respondent. Interviews are being transcribed and translated by members of the research team. Thereafter they will be coded by two members of the research team.

At least 25 to 30 interviews will be conducted with fathers who are smokers and 10 to 15 with non-smoking pregnant or post-partum women exposed to second-hand smoke.

How much data will be generated?

25 to 30 GB of data will be generated.

2. Data Management

How will the data be documented to ensure it can be understood?

For each article included in systematic review following were documented in Microsoft Excel workbook

- a. Title of the study
- b. Year of publication
- c. Authors
- d. Study design
- e. Findings

For audio recording, transcript and translated document of each interview, following will be recorded in a text file.

- name of the file

- file location
- file size
- file format
- software used or required to create or run the file (e.g., Microsoft Word for transcripts and translated documents)
- date of creation
- file creator
- file version
- access rights set for the file

Where will the data be stored and backed-up?

Storage:

Data including audio recordings, transcripts, translated documents have been stored in password protected and encrypted computers with access to authorized members of the research team only. These computers have been encrypted using Bitlocker and the folders are stored in encrypted containers using the 7-zip.

Backup:

3 backup copies of the original data have been created and stored on different locations; Original copy has been stored on the password protected and encrypted computer of the data manager placed at the corporate office of MNCHRN in headquarters. These computers have been encrypted using Bitlocker and the folders are stored in encrypted containers using the 7-zip. One copy has been backed up on the main server located at the central field office of the MNCHRN and two copies on cloud storage (My Cloud EX4100 secured by volume encryption with enterprise-class WD Gold Hard Drives- 2 drives of 10TB each) on a fortnightly basis. These hard drives provide up to 2.5M hours MTBF, vibration protection technology, RoHS compliant, have SATA 6 Gb/s interface, 262 MB/s data transfer rate, 256 MB cache, 7200 RPM performance class.

File naming:

Files have been named as per the standard naming convention of the organization, i.e., MNCHRN name_projectID_subjectID_type of data files e.g., MCNHRN_RES007_K.1.1_transcript.docx

Organization of folders:

A separate password protected folder has been created for each interview with the following sub folders

- Audio recording
- Field notes of the note taker
- Photos
- Transcript
- Translated document

Files have been placed in their respective folders in computers. These computers have been encrypted using Bitlocker and the folders are stored in encrypted containers using the 7-zip.

Data transfer:

Audio recording of the interviews have been automatically stored in central server folders which are only accessible to authorized individuals. The moderator does not have any access to the data of the respondents. The audio files have been trimmed by the Data Manager to delete any identifying information before transcription. A record file has been maintained to track the transfer of the data among research team members.

3. Integrity

How will you quality assure your data?

Following measures have been taken to assure the quality of the data:

- All versions of data collection tools have been saved for traceability
- The recordings of the interviews will be listened to by the supervisor upon completion of interviews for quality assurance.
- Back checking and proof reading of transcripts and translations by a trained member of research team (supervisor) to ensure nothing is missed out.
- Data stored on 3 different locations to prevent the loss of the data. Original copy has been stored on the password protected and encrypted computer of the data manager placed at the corporate office of MNCHRN in headquarters. These computers have been encrypted using Bitlocker and the folders are stored in encrypted containers using the 7-zip. This is backed up on the main server located at the central field office of the MNCHRN and also on cloud storage on a fortnightly basis.

4. Confidentiality

How will you manage any ethical and Intellectual Property Rights issues?

The audio recordings have been trimmed to remove those parts that contain identifiable information and all transcripts have been anonymized and identifying details have been removed or given pseudonyms in the transcript and translated documents.

Additionally, consents have been taken from the participants before the start of the interview indicating their voluntary participation and permission to share the data as per the participant information sheet.

5. Retention and Preservation

Which data do you plan to keep and for how long?

All data generated from this study will be kept for a minimum of 5 years after the study is finished. The tools used for data collection i.e., interview guide will also be preserved.

How will the data be preserved?

The data generated from the study will be anonymised and cleaned before preservation. The data including the spread sheet of systematic review, translations, interview guide, code books and meta data will be preserved in stable file formats i.e., note pad for text files and comma-separated value (.csv) file for spreadsheets. These will be uploaded in University of Edinburgh's online digital repository –DataShare.

The University of Edinburgh undertakes to maintain the digital outputs of this project for the long-term and will utilise University infrastructure (namely the Edinburgh DataShare repository) to ensure preservation and continued access. Edinburgh DataShare is an online digital repository of multi-disciplinary research datasets produced at the University of Edinburgh, hosted by the Data Library in Information Services. It acts as a trusted repository, ensuring that research data will be preserved.

6. Sharing and Publication

Which data will be shared and how?



The anonymised data generated from this project will be shared and archived through DataShare which is an open access data repository. All the text documents including data collection tools, translation and field notes will be shared as notepad document and the data extracted from systematic review will be saved as CSV file so that no particular platform is required to open these files.

Are any restrictions on data sharing required?

No, there are no restrictions on sharing of the anonymised data shared and archived in DataShare.

