**ADDITIONAL FILE 1**

**STANDARDS FOR REPORTING QUALITATIVE RESEARCH (SRQR)**

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | TOPIC | ITEM | REPORTED ON PAGE # |
| **TITLE AND ABSTRACT** | | |  |
| S1 | Title | Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended | 1 |
| S2 | Abstract | Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions | 3 |
| **INTRODUCTION** | | | |
| S3 | Problem formulation | Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement | 5-6 |
| S4 | Purpose or research question | Purpose of the study and specific objectives or questions | 6 |
| **METHODS** | | | |
| S5 | Qualitative approach and research paradigm | Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale | 6 |
| S6 | Researcher characteristics and reflexivity | Researchers’ characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers’ characteristics and the research questions, approach, methods, results, and/or transferability | 9 |
| S7 | Context | Setting/site and salient contextual factors; rationale | 7 |
| S8 | Sampling strategy | How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale | 8 |
| S9 | Ethical issues pertaining to human subjects | Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues | 45 |
| S10 | Data collection methods | Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale | 8-9 |
| S11 | Data collection instruments and technologies | Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study | 8-9 |
| S12 | Units of study | Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results) | 11 |
| S13 | Data processing | Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts | 10-11 |
| S14 | Data analysis | Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale | 10-11 |
| S15 | Techniques to enhance trustworthiness | Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale | 9,10 |
| **RESULTS/FINDINGS** | | | |
| S16 | Synthesis and interpretation | Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory | 11-33, Additional file 2 |
| S17 | Links to empirical data | Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings | 11-33 |
| **DISCUSSION** | | | |
| S18 | Integration with prior work, implications, transferability, and contribution(s) to the field | Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field | 34-42 |
| S19 | Limitations | Trustworthiness and limitations of findings | 42 |
| OTHER | | | |
| S20 | Conflicts of interest | Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed | 45 |
| S21 | Funding | Sources of funding and other support; role of funders in data collection, interpretation, and reporting | 44 |

*Reference*: O’Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Academic Medicine. 2014. 89 (9). DOI:10.1097/ACM. 0000000000000388.

**ADDITIONAL FILE 2**

**THEMES, SUB-THEMES AND DESCRIPTORS**

|  |  |  |
| --- | --- | --- |
| Theme | Sub-theme | Descriptor |
| Participants’ knowledge of RTCs in their city, state and country | The nature and extent of the problem | * RTCs are a major problem where the occurrence is high amongst adolescents and young adults and tends to involve two-wheelers and pedestrians * RTCs are the leading cause of neurotrauma |
| Factors and risk factors leading to RTCs and RTC-related neurotrauma | * Human factors: drink driving, speeding, not using personal safety equipment, wrong-way driving, using mobile devices while driving, under-age driving * Environmental factors: Poor road infrastructure and design, bad weather conditions, being hit by the opposite road user, moving obstacles on the road * Vehicle and equipment factors: Overloaded vehicles, using substandard safety equipment |
| Impact of RTCs | Impact to health and healthcare system | * RTCs can lead to injuries, especially neurotrauma and death * Neurotrauma cannot be cured completely * The increase in RTCs cause an increase in neurotrauma cases which are overwhelming the current healthcare system |
| Financial and economic impact | * Loss of family income as RTCs tend to involve the sole breadwinner * National economic impact due to effect on Gross Domestic Product (GDP) and loss of professionals to RTCs |
| Social impact | * The city gets a bad name |
| Current preventative strategies | The role of government and related organisations | * Traffic rules and regulations including the Good Samaritan Law * Enforcement of traffic rules by the police * Penalties and fines for and imprisonment of offenders * Educational and awareness programmes about laws and road safety * Training police and lay people to respond to RTCs * Ambulance services with a dedicated signalling system * Trauma centres * Compulsory installation of in-vehicle speed management devices * Speed breakers * Road safety committees |
| The role of individuals and communities | * Carrying out educational programmes and awareness campaigns in the community * Collaborating with the government in educational and awareness programmes * Informal educational efforts among friends, family and at the workplace * Building and running a rehabilitation centre |
| The role of research | * Research into the severity of RTCs, types of injuries, disabilities and long term impact of RTCs * Some participants are involved in research, for example factors affecting recovery from neurotrauma |
| Effectiveness of current strategies | * The government is spending money and doing a lot of work in this area but there are still some deficiencies |
| Challenges to prevention | Physical factors | * Overpopulation or overcrowding resulting in heavy traffic on the roads |
| Lack of resources | * Lack of funds * Lack of manpower, especially in law enforcement |
| Inconsistent implementation | * Educational and awareness efforts are only carried out in urban areas at educational institutions * Too few trauma centres and concentrated in urban locations * Traffic rules are not being enforced uniformly or equally |
| Lack of appropriate action | * Not investigating the root cause of RTCs * RTC victims not transported to the appropriate healthcare facility * Untimely and unsafe road engineering efforts |
|  | Deficiencies in research efforts | * Lack of scientific research * Data not collected in a timely manner * Lack of data sharing * Provision of incorrect information |
| Poor governance | * Corruption in the law enforcement system * Lack of political will * Lack of coordination between government agencies * Obstacles from the opposing political parties |
| Poor mindset and behaviour | * Disregarding traffic rules * Thinking nothing will happen to them even if rules are violated * Abiding by the rules only to avoid penalties and fines * Forgetting to use personal safety equipment or feeling it is unnecessary for short distances * Irresponsibility amongst parents which affects safety of their children * Misleading advertisements which promote speeding, especially among youth * Law enforcement officials also disobeying traffic rules which influences the behaviour of the community |
| Lack of education and awareness | * Unaware of traffic rules and the changes to rules or new rules |

|  |  |  |
| --- | --- | --- |
| Perceived recommendations for improving prevention | Enhancing current strategies | * Education and awareness: More targeted education and awareness efforts, commencing road safety education early, using creative and engaging ways to educate and increase awareness, Maximising the use of the media. * Research: More awareness about research among the government entities and the public, widespread dissemination of research findings, investigating the number of victims, causes and on pre-hospital care, utilising former victims and other qualified people in research, auditing research procedures and results * Pre-hospital and trauma system: improving the first responder system with more layperson involvement, first aid centres in rural areas, proper training of ambulance staff and swifter ambulance response time, more decentralised trauma centres with expertise in neurotrauma, appropriate transfer of victims * Enforcement and legislation: Stricter enforcement with an audit system set up and a programme to identify accident-prone areas, small changes in legislation to address current issues, changing the police system * Road engineering: improving road quality and width and ensuring construction is safe, having a system in place for immediate reporting of road defects |
| Establishing collaborations and partnerships | * There needs to be inter-and intra-agency partnerships and collaborations * There should also be partnership between the government and members of the public |
| Changing mindset and behaviour | * Following traffic rules and understanding that it is for safety and not just avoidance of punishment * Citizens should take ownership and responsibility when it comes to preventing RTCs and neurotrauma * The government should have a strong political will and set a good example for citizens |