Received: 20 December 2023 | Accepted: 8 January 2024

DOI: 10.1111/edt.12935

COMPREHENSIVE REVIEW

Dental Traumatology WILEY

Qualitative research in dental traumatology—A narrative review

Kate P. Kenny[1] | Amrit Chauhan[1] | Sue Pavitt[1] | Robbie Foy[2] | Peter F. Day[1,3]

[1]School of Dentistry, University of Leeds, Leeds, UK

[2]Leeds Institute of Health Sciences, University of Leeds, Leeds, UK

[3]Community Dental Service, Bradford District Care NHS Foundation Trust, Bradford, UK

Correspondence
Kate P. Kenny, Department of Child Dental Health, School of Dentistry, University of Leeds, Leeds LS2 9LU, UK.
Email: k.counihan@leeds.ac.uk

Funding information
National Institute for Health and Care Research

Abstract

This review highlights the recent contributions of qualitative research in advancing understanding of dental trauma injury and the barriers and enablers to guide policy for improved patient-centred care including transitional care. It summarises the common approaches and methods used and outlines the key factors that guide the appraisal of qualitative studies. It highlights the importance of the application of qualitative research methods in dental research to generate rich and detailed data to provide explanations and insights into people's experiences, beliefs and attitudes and the complexity of human decision-making and behaviour. In the past decade while there have been a growing number of publications of qualitative studies in dental journals, qualitative studies remain a small percentage of the published dental traumatology research. This may be because of limited understanding about the background, methods and rigour of qualitative research.

KEYWORDS
dento-alveolar trauma, dental trauma, qualitative research, tooth injury

1 | INTRODUCTION

Dental traumatology researchers have traditionally undertaken quantitative enquiry to develop the evidence base in the field. From the early laboratory-based studies of histology and tooth healing, through to questionnaires, surveys, cross-sectional and cohort studies, research in dental traumatology has generally addressed biomedical questions, striving to provide a robust evidence base for clinical management.[1]

Qualitative methods are used to generate hypotheses and focus on answering the questions 'why', 'what?', 'how much?' and 'when'.[2] Many quantitative researchers work from the assumption that there is an absolute truth, a 'reality', which they are trying to discover. Knowledge is objective and neutral. This belief about knowledge has been called 'objectivism', and the theoretical framework it implies is called 'positivism'.[2] Quantitative data can be statistically analysed and interpreted but inevitably can only offer incomplete insights into complex phenomena.[1]

Qualitative research is generally interpretive in nature and through this, seeks to understand and explain the behaviours, experiences and interactions of individuals and the social context in which these occur.[3] Most qualitative researchers today share a different belief about knowledge, called 'constructivism', which proposes that the reality we perceive is constructed by our social, historical and individual contexts—therefore, there can be no absolute truth.[2]

Qualitative research methods have a long track record in healthcare sciences and are making an increasingly important and distinctive contribution to evidence-based medicine.[4,5] However, there has been limited qualitative research in the field of dental traumatology.[1,6] This review aims to provide an overview of qualitative

research, its key approaches and how to appraise it, and to explore its potential value to dental traumatology research.

1.1 | Qualitative research in dental traumatology

Rodd and Noble highlighted that the first published narrative to describe the wider impacts of a traumatic dental injury was in fact published over 60 years ago.[1] They describe a case report[7] of a 9-year-old boy who attended a British dental hospital having sustained uncomplicated crown fractures of four permanent incisors. As well as detailing the clinical treatment, the authors described the patient's psychosocial upset from the injury. The boy was a chorister but after fracturing his incisors he lost his place in his choirs due to a lisp. The child's mother reported that her son had become quiet and moody, experienced disturbed sleep and sibling rivalry.

A 2016 comprehensive review of the dental trauma literature to determine the degree of children's involvement in clinical research did not identify any qualitative or mixed methods studies.[6] For the purposes of this current review, the first author (KK) hand searched Dental Traumatology issues from January 2015 until October 2023. Only five qualitative or mixed methods studies were identified. This accounts for less than 1% of all published articles. In part, this may be because health professionals and researchers have little training and experience in conducting and appraising qualitative research methods or are uncertain as to how it can inform or affect practice or policy. Table 1 summarises these five papers, and they are used to illustrate the different approaches throughout the article.

1.2 | Common approaches and methods used in qualitative research

Theory plays a crucial role in qualitative research, both as a guiding framework to inform the design and methodology of a study or as an outcome where studies can be designed to generate theory from the findings. Theory and methodology in qualitative research have distinct roles although they are interconnected. Many approaches exist—four of the most common approaches in applied health research are grounded theory, ethnography, narrative analysis and phenomenology. Table 2 summarises these approaches, including the general characteristics of participant selection, data collection and data analysis that can apply to different qualitative approaches. The overview has been simplified for the scope of this paper.

Qualitative research adopts a naturalistic approach that explores, interprets and captures a deeper understanding of social phenomena. A key feature of qualitative research is the collection and analysis of non-numeric data, such as text, audio or visual material. The detailed examination of these types of data allows researchers to gain a nuanced understanding of human beliefs, attitudes and behaviours. This approach is more concerned with explanation than with measurement. As such qualitative research provides an in-depth understanding of phenomena that quantitative research may overlook, prioritising the richness of human experience over numerical generalisation.[17,18]

Within the broad context of health, qualitative approaches can help determine the attitudes, beliefs and perspectives of patients, carers and clinicians to a condition, intervention or policy. They can help understand the interpersonal nature of caregiver and patient relationships and behaviours and enable insights into illness experience.[3] Bamashmous and colleagues[10] used semi-structured interviews with both patients and parents to explore how they look for relevant information following a TDI, and Morgan[12] explored how patients managed a transitional care pathway from the paediatrics team to the adult restorative team for the management of TDIs. Qualitative approaches have also been used to explore healthcare structures and policy. Zencricoglu and colleagues[9] used qualitative approaches to explore both how patients accessed emergency dental care following TDI, and the perspectives of clinicians in providing this care.

Qualitative methods have long played an important role in research into quality and safety in health care—to understand how medical errors occur, to consider how to minimise them and to identify ways to improve the quality of care.[19] Lingard and coworkers[14] study on identifying communication errors and challenges in teamwork operating theatres that may lead to medical errors is one of the most highly cited qualitative studies in healthcare research. This ethnographic study of general and vascular surgery revealed different types of communication errors. This informed the development of a pre-operative communication checklist which has subsequently led to significant reductions in communication errors among surgical teams.[19] A purely quantitative approach to this significant issue is unlikely to have obtained such rich data about communication errors. A solely quantitative study may have measured the frequency of communication errors, or their correlations with outcomes, but it would likely have failed to grasp the underlying reasons for these errors, or the specific ways in which communication broke down.

As health care and healthcare systems become increasingly complex, simply knowing 'what works' is not enough. Research problems that can be approached particularly well using qualitative methods include assessing complex multi-component interventions or systems of change, addressing questions beyond 'what works' towards 'what works, for whom, when how and why'.[20,21]

It is also necessary to know how significant research findings can be translated into front line healthcare delivery.[19] Rigorous effectiveness evaluations are generally necessary but insufficient by themselves to inform healthcare policy and practice. A qualitative approach alongside randomised trials can help in the development, feasibility, piloting and evaluation of both the trial methods and the intervention.

One of the most powerful reasons to undertake qualitative research is its ability to explore patient and professional perspectives. Taylor and colleagues[11] used a mixed methods approach to explore and contextualise the knowledge and attitudes of GDPs regarding their management of TDIs in 7–16-year-olds. A notable finding from the semi-structured interviews was that the TDI and its management had an impact on the GDP—for some the potential for a

TABLE 1 Summary of articles with qualitative or mixed methods approach in Dental Traumatology 2015–2023.

Author year	Qualitative approach	Aim	Data collection and analysis	Key findings
Ode[8]	Sequential mixed methods	(i) To examine the functional, psychological and social impacts of traumatic dental injury (TDI) and associated factors among a sample of adult patients (ii) explore the perceptions and attitudes of patients with experience of TDI and dentists managing such TDI (iii) to compare the attitudes and perceptions between patients and dentists	Oral Health Impact Profile (OPHI)-14 then focus groups. Thematic analysis	Patients wanted dentists to be reassuring, confident, willing to engage in shared decision-making and to walk the journey with them. Dentists were also mostly aware of the patients' needs; however, they were less attuned to the psychological impact experienced by patients
Zencricoglu[9]	Mixed methods	To evaluate the accessibility of on-time and proper treatment quantitatively after dental trauma in children by means of their parents, and qualitatively by interviewing parents and health professionals in Izmir, Turkey	Questionnaire then semi-structured interview with patients and dentists Thematic analysis	Treatment access was summarised into three main themes: physical accessibility of dental health services, a quality dental health service as an outcome and communication among parties
Bamashmous[10]	Mixed methods	To investigate (i) the different ways that patients undertaking treatment for TDI and their parents look for relevant information (ii) their information needs (iii) their preferred format of information (iv) the differences between the information seeking behaviour of children and their parents	Semi-structured interviews with patients Content and framework analysis Questionnaire developed from themes	The findings from the qualitative analysis allowed development of a patient and parent centred questionnaire that had good face validity
Taylor[11]	Mixed methods	To explore and contextualise the knowledge and attitudes of general dental practitioners regarding their management of TDI in the permanent dentition in 7 to 16-year-olds	Questionnaire survey. Findings from this used to develop topic guide for semi-structured interviews. Thematic analysis	Four major themes arose from the interviews—the impact of TDIs on patients' parents and general dental practitioners (GDPs) barriers to providing treatment, educational opportunities for GDPs and the interactions between primary and secondary care services
Morgan[12]	Interpretivist	To assess the opinions and experiences of transitional care pathways for young people with TDI	Semi-structured interviews Thematic analysis	Five themes related to the transitional care experience—patient–clinicians communication, impact of dental trauma, feelings of uncertainty, patient personal development and transitional care planning. Clear communication and involvement of young people in decision-making was identified as a vital factor to facilitate a successful transition of care form paediatric to adult services

TABLE 2 Summary of common qualitative approaches in applied healthcare research.

Qualitative research method	Grounded theory	Ethnography	Narrative analysis	Phenomenology
Aims	To produce a theory that is grounded in the data	To immerse the researcher in the natural environment of the study participants to gain insider experience	To understand and interpret the stories told by individuals and the meanings they ascribe to them	To describe the lived experiences of individuals about a particular phenomenon
Sampling and methods	Uses theoretical sampling. Data collection is mainly through interviews, observation and review of documentation	Purposive sampling Data are collected through extensive fieldwork: Observational studies supplemented with field notes, and/or follow-up interviews	Usually, purposive sampling with one or more individuals who have life experiences or stories to share. Data collection is mainly through in-depth interviews and other written narratives (e.g. diaries, letters and documents)	Purposive sampling of individuals with the lived experience of a phenomenon. Data collection is mainly in-depth interviews but may also include personal documents and descriptive observations
Analysis features	Constant comparison method. Generation of concepts and relationships. Concurrent data collection and analysis	Interpretative, data-driven (inductive) but no fixed commitment to developing new theory. Considers the whole context of the social setting. Detailed accounts (thick descriptions) of field experiences that convey the significance of social action, which is reflective	Analyses how the stories are structured with a focus on the content (what is said) and how it is said. Often uses chronological organising. Considers the cultural and historical context. Collaborative approach with participants. Involves looking for themes within the stories	Data-driven (inductive) that can either be interpretative or descriptive. Descriptive phenomenology: The researcher engages in bracketing (epoché). Identification of Significant Statements (narrow units), formation of meaning clusters (broader units), then detailed description of the experience and synthesis of meanings and essence. Interpretive phenomenological analysis (IPA): Interpretive and iterative process. Researchers engage in a double Hermeneutic. Researchers develop experiential statements and personal experiential themes
Example of application of methodology in dental /healthcare setting (See Table 3)	Hoglund[13]	Lingard[14]	Kettle[15]	Hazevah and Hovey[16]

poor outcome resonated with them and was identified as a significant stressor when providing treatment.[11] Health and social care policymakers increasingly expect engagement with the voices and perspectives of patients[22,23] and for policy to take account of patient values, beliefs and preferences.[24] Qualitative research not only allows exploration of patient perspectives, but also offers methods to investigate anything from health policy to doctor–patient interactions.[25] Policy is especially amenable to qualitative research given how policy endeavours to be responsive to real world contexts.[26]

Table 3 provides examples from the wider dental literature of how the differing approaches have been used to explore a broad range of topics. Subjects as diverse as medical errors, the meaning of living with chronic orofacial pain, dentists' recognition of dental anxiety and the relationship between oral health and connectedness have all been explored.

1.2.1 | Participant selection

Qualitative research is focused on achieving depth rather than breadth in its inquiry into a selected population. The primary objective of qualitative sampling is to capture a diverse range of perspectives and experiences within the research population that are relevant to the study's aims.[21] The most common type is purposive sampling, where researchers intentionally select a range of participants who have specific characteristics or experiences that are directly relevant to the research questions and objectives.[18] Researchers typically use various purposive sampling techniques such as snowball, maximum variation sampling, critical case sampling or deviant case sampling.[21] Snowball sampling is especially useful when accessing 'hard to reach' groups, as this involves identifying an initial participant who meets the research criteria and then asking them to refer other individuals who also meet the criteria.[2] Other approaches such as convenience sampling may be used to recruit participants who are easily accessible. This approach tends to capture a limited range of perspectives as participants are selected based on their accessibility rather than their relevance to the research questions or the diversity of their experiences.[27,28]

Sample size and determination of an appropriate sample size are very different in qualitative research when compared with quantitative research. Rather than having prespecified sample sizes, recruitment in a qualitative study will cease when 'saturation' is achieved.[2] This is defined as the point when the collection and analysis of new data no longer elicits new insights.[28] However, there is no set rule about what constitutes data saturation, and it is often determined by researcher judgement.

1.2.2 | Data collection

Focus groups and semi-structured interviews are the most common data collection methods in qualitative health research[8–12,29] Both methods are useful and effective in exploring individual experiences, preferences and values, thereby offering invaluable insights that can inform clinical practice.[28] Observations and document analysis, while less frequently employed in qualitative health research are particularly suited to understanding how organisations work or how different members of the healthcare team interact with each other.[29]

1.2.3 | Data analysis

The analysis of qualitative data generally seeks to describe and understand the phenomena under investigation.[28] There are various types of qualitative analysis methods, each suited to different kinds of data and research questions. Some of the key types of qualitative analysis include thematic analysis, content analysis, narrative analysis, discourse analysis, grounded theory, phenomenological analysis and ethnographic analysis. The choice of method depends on the research question, the nature of the data and the theoretical framework guiding the research. This steers how the analysis is undertaken such as the coding process or whether there is a development of themes or generation new theories. Table 2 outlines commonly used approaches.

Kuper and colleagues, in their review of qualitative research appraisal, highlight that data analysis should be iterative, involving cycles of data collection, analysis and then resumption of data collection to further explore and challenge emerging themes or theories.[2,28]

1.3 | Combining qualitative and quantitative research methods

Mixed methods research combines elements from both qualitative and quantitative paradigms to produce converging findings in the context of complex research questions.[30] It can be used to view a research question from multiple lenses, providing a more robust and comprehensive analysis. Mixed methods research requires an integrated analysis and the used of rigorous qualitative and quantitative research methods.[31] It can be classified into three core mixed methods designs (Table 4).

Mixed methods approaches were used in four of the five qualitative articles published in Dental Traumatology (Table 1). Interviews and/or focus groups were used after a questionnaire or survey instrument to contextualise and explore the findings[8,9,11] or used to develop a survey with increased validity.[10] This is especially useful where there is limited evidence on a topic and a lack of validated tools for exploring the research question.

Mixed methods designs can be incorporated into more complex research designs such as randomised controlled trials—this is a process evaluation[33] (Figure 1).

1.4 | Reporting and appraisal of qualitative research

As with any research, we need to be able to distinguish poor research from high quality research to judge its relevance and appropriateness for healthcare services.[19] Transparency is essential if qualitative methodologies are to be developed further and to maintain

TABLE 3 Qualitative approaches in the wider dental literature.

Author year	Qualitative approach	Aim	Sampling	Data collection	Analysis	Findings
Hoglund[13]	Grounded theory	To identify, describe and generate concepts regarding dentists' recognition of dental anxiety	Purposive and theoretical sampling	Semi-structured interviews	Inductive analysis by constant comparison	The core category was identified as 'the clinical eye'. This comprised five categories: sympathetic activation, patient-reported anxiety, controlling behaviours, avoidance and accomplishment
Lingard[14]	Ethnography	To describe systematically the content and effects of procedurally relevant communication events and to define and classify common communication failures	One hospital site Purposive sampling of procedures to observe—to represent a range of surgical cases	90 hours of observation during 48 procedures. Ethnographic filed notes methods	Field notes were analysed in a constant comparative manner. Rhetorical framework used	Communication failures in the operating room (OR) exhibited a common set of problems. One third of the errors resulted in effects which put patient safety at risk by increasing cognitive load, interrupting routine and increasing tension in the OR
Kettle[15]	Narrative analysis	To explore how stories relating to oral health practices emphasise connectedness	Convenience sample	In-depth interviews	Realist tale approach with thematic analysis	Demonstrated how oral health practices are constituted through family connectedness and at the same time how these practices contribute to the constitution of family
Hazevah and Hovey[16]	Phenomenology	To explore in depth 'what does it mean to live with chronic orofacial pain?'	Purposive sample from a pain clinic	In-depth interviews	Interpretive phenomenological approach	Three main findings emerged (1) suffering from loss; (2) encountering disbelief by others; (3) feeling dissatisfied with the healthcare system

TABLE 4 Categories of mixed methods research.

Type	Explanation	Example
Convergent	Qualitative and quantitative data are collected and analysed simultaneously within a single phase	Templeton et al. 2015[32]
Sequential exploratory	Quantitative data are collected first; then, qualitative data are collected to explain the quantitative findings	Ode et al. 2018[8] Taylor et al. 2021[11]
Sequential exploratory	Qualitative data are collected, a feature such as a new instrument or intervention is built, and then, the feature is tested quantitatively	Bamashmous et al. 2020[10]

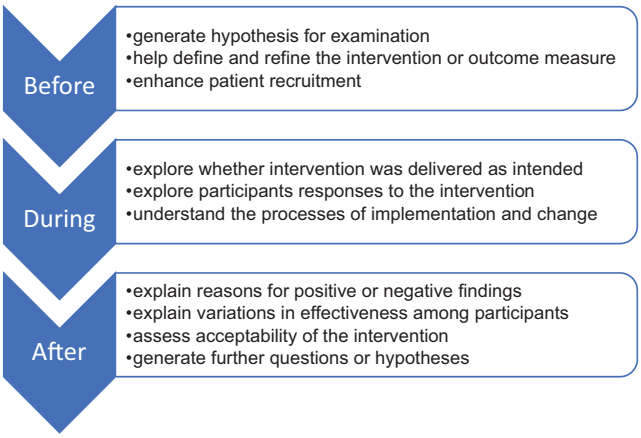

FIGURE 1 Mixed methods designs in process evaluations.

methodological rigour.[4] Four criteria are widely used to appraise the trustworthiness of qualitative research: credibility, dependability, confirmability and transferability.[34] Reflexivity is an additional marker of quality.[35] Table 5 summarises these key concepts.

There is, however, no consensus on the appropriate approach to appraising the quality of qualitative research.[36] More than 100 appraisal tools are now available. Consolidated Criteria for Reporting Qualitative Health Research (COREQ)[37] is one of the most used tools, but others such as Critical Appraisals Skills Programme (CASP),[38] Joanna Briggs Institute Checklist for Qualitative Research (JBI)[39] and American Psychological Association's Journal Article Reporting Standards for Qualitative Research (JARS-Qual)[40] are also widely used. Some concern has been expressed about the use of appraisal frameworks. It has been argued that checklists can lead to an uncritical adoption of a range of technical 'fixes' such as grounded theory or purposive sampling, which do not in themselves improve the quality of the research.[4] Checklists can only strengthen research rigour if they are used in the context of a broad understanding of qualitative research design and data analysis.[4] It has been suggested that the use of such checklists and appraisal tools may even be counterproductive if used uncritically and without careful consideration of the research context.[34]

1.5 | Opportunities and challenges in qualitative research

Qualitative research has the potential to generate a deep understanding of people's experiences, motivations, beliefs, goals, expectations and needs.[28] It also offers a rich range of method to explore anything from health policy to doctor–patient interactions. Good clinical practice, and indeed policy, depends on the sort of knowledge generated through small, in-depth qualitative studies, as well as information generated through large-scale clinical trials.[25]

In qualitative research, the researcher is the research instrument. Therefore, a qualitative researcher who is also a clinician must consider how their dual position informs participant consent, data collection and analysis.[41] The balance of maintaining a professional duty of care while ensuring methodological integrity can be challenging.[42] Additional challenges include a perceived (and often real) power imbalance between the research participant and the clinician interviewer, and the fact that the transfer of skills from clinical practice to qualitative interviewing does not necessarily equate to good qualitative research conduct.[41] It is also necessary to remember that the 'patient' becomes the participant in qualitative research who is the expert on their lived experience and knowledge and the researchers' role is to seek to understand this knowledge and experience rather than provide clinical care. Reflexivity ensures the challenges related to being a clinician-researcher are acknowledged and discussed openly.[41]

There is a common perception that the scientific rigour of qualitative studies may not match those with a quantitative methodology. This may account for the lower acceptance rates of such papers by many journals. Retrouvey and colleagues[43] undertook a bibliometric and altimetric analysis comparing the academic and social impact of quantitative and qualitative articles and did not find a dominant article type using those metrics. They found no indication that qualitative articles published in the BMJ had less impact than quantitative articles.

Another common perception is that qualitative research is not generalisable. It may be true to say it is not generalisable in the traditional sense, but by providing thick, rich descriptions of the context and the participants the reader is able to judge the transferability of the findings to other settings or groups.

2 | A FUTURE FOR QUALITATIVE RESEARCH IN DENTAL TRAUMATOLOGY?

Health research must strive to address issues that patients feel are important rather than just those that clinicians believe are a priority.[6] Some would argue that without appropriately conducted qualitative enquiries, opportunities are being missed to gain meaningful insights into the child's perspective of TDI.[6]

TABLE 5 Summary of appraisal in qualitative research (adapted from Stenfors 2020).

Criteria	What it means	How to recognise it
Credibility	The research findings are plausible and trustworthy	There is alignment between theory, research question, data collection, analysis and results. Sampling strategy, the depth and volume of data and the analytical steps taken are appropriate within that framework. Techniques that can enhance credibility include triangulation, member checking and reflexive journalling
Dependability	The extent to which the research could be replicated in similar conditions	There is sufficient information provided such that another researcher could follow the same procedural steps, albeit possibly reaching different conclusions
Confirmability	There is a clear link or relationship between the data and the findings	The researchers show how they made their finds through detailed descriptions and the use of quotes. The findings should be shaped by the participants and not the researcher's bias or motivation
Transferability	Findings may be transferred to another setting, context or group	Detailed description of the context in which the research was performed and how this shaped the finds
Reflexivity	A continual process of engaging with and articulating the researcher and the context of the research	Explanation of how reflexivity was embedded and supported in the research process and how the researchers have reflected on their own biases and experiences and how this may have influenced the research and its findings

It is important that researchers reappraise patients' views and opinions in relation to TDI. Such inquiry will help identify what is important to young patients and to prioritise where improvements can be made to better meet their needs.[6] The recently published narrative review of dental patient-reported outcomes following TDI and treatment emphasises the importance of the patient in the development of the appropriate outcome measures.[44] This can best be achieved using qualitative approaches. Further qualitative research is also required, particularly with adolescents, to inform clinicians about young patients' perspectives, experiences and values and how these may change over the course of treatment and indeed over the life course.[1] Incorporating insights from qualitative studies into clinical care, policies and trials can help promote patient-centred care to improve outcomes for patients.[28]

3 | CONCLUSION

There has been limited qualitative research in the field of dental traumatology. Qualitative research can broaden the evidence base in both policy and practice because it allows researchers to answer research questions that are difficult to address satisfactorily using quantitative methods alone. It can also address evidence gaps regarding patient priorities and clinician perspectives in the management of TDI.

AUTHOR CONTRIBUTIONS

All authors contributed to the manuscript development. All authors have read and approved the final version of the manuscript.

ACKNOWLEDGMENTS

This research was funded by the National Institute for Health & Care Research (NIHR). Kate Kenny, Doctoral Research Fellow, NIHR300206. The research was supported by the NIHR infrastructure at Leeds. The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

CONFLICT OF INTEREST STATEMENT

None of the authors declare any conflicts of interest.

DATA AVAILABILITY STATEMENT

Not applicable.

ORCID

Kate P. Kenny https://orcid.org/0000-0001-9076-5856

REFERENCES

1. Rodd H, Noble F. Psychosocial impacts relating to dental injuries in childhood: the bigger picture. Dent J. 2019 Mar 4;7(1):23.
2. Kuper A, Reeves S, Levinson W. An introduction to reading and appraising qualitative research. Br Med J. 2008 Aug 7;337:a288. https://doi.org/10.1136/bmj.a288
3. Flemming K, Booth A, Garside R, Tunçalp Ö, Noyes J. Qualitative evidence synthesis for complex interventions and guideline development: clarification of the purpose, designs and relevant methods. BMJ Glob Health. 2019 Jan 1;4(Suppl 1):e000882.
4. Masood M, Thaliath ET, Bower EJ, Newton JT. An appraisal of the quality of published qualitative dental research. Community Dent Oral Epidemiol. 2011 Jun;39(3):193–203.
5. Jayachandran S, Hill K, Walmsley AD. A critical review of qualitative research publications in dental implants from 2006 to 2020. Clin Oral Implants Res. 2021 Jun;32(6):659–71.
6. Wallace A, Rogers HJ, Zaitoun H, Rodd HD, Gilchrist F, Marshman Z. Traumatic dental injury research: on children or with children? Dent Traumatol. 2017 Jun;33(3):153–9.
7. Slack GL, Jones JM. Psychological effect of fractured incisors. Br Dent J. 1955;6:368–88.
8. Ode W, Lopez V, Wong ML, Schou L, Yu VS. Understanding patients' and dentists' perspectives in dental trauma management: a mixed-methods study. Dent Traumatol. 2018 Oct;34(5):320–8.
9. Kayıllıoğlu Zencircioğlu Ö, Eden E, Öcek ZA. Access to health care after dental trauma in children: a quantitative and qualitative evaluation. Dent Traumatol. 2019 Jun;35(3):163–70.

10. Bamashmous N, Cunningham SJ, Parekh S. Information seeking behaviour of dental trauma patients and their parents. Dent Traumatol. 2020 Dec;36(6):590–7.
11. Taylor GD, Sumner O, Holmes R, Waterhouse PJ. Primary care Dentists' management of permanent dentition traumatic dental injuries in 7-to 16-year-olds: a sequential mixed-methods study. Dent Traumatol. 2021 Aug;37(4):608–16.
12. Morgan E, Fox K, Jarad F, Albadri S. The transitional care pathway following traumatic dental injuries: patient perspectives. Dent Traumatol. 2022 Apr;38(2):117–22.
13. Höglund M, Wårdh I, Shahnavaz S, Berterö C. Dental clinicians recognizing signs of dental anxiety: a grounded theory study. Acta Odontol Scand. 2023 Jul 4;81(5):340–8.
14. Lingard L, Espin S, Whyte S, Regehr G, Baker GR, Reznick R, et al. Communication failures in the operating room: an observational classification of recurrent types and effects. BMJ Qual Saf. 2004 Oct 1;13(5):330–4.
15. Kettle J, Warren L, Robinson PG, Walls A, Gibson B. I didn't want to pass that onto my child, being afraid to go to the dentist': making sense of oral health through narratives of connectedness over the life course. Sociol Health Illn. 2019;41(4):658–72.
16. Hazaveh M, Hovey R. Patient experience of living with orofacial pain: an interpretive phenomenological study. JDR Clin Transl Res. 2018 Jul;3(3):264–71.
17. Neutens J, Rubinson L. Qualitative research, research techniques for the health sciences. San Francisco, CA: Benjamin Cummings; 2002.
18. Ritchie J, Lewis J. Qualitative research practice. London: Sega Publications Ltd; 2003.
19. Williams V, Boylan AM, Nunan D. Qualitative research as evidence: expanding the paradigm for evidence-based healthcare. BMJ Evid Based Med. 2019 Oct 1;24(5):168–9.
20. Lamont T, Barber N, de Pury J, Fulop N, Garfield-Birkbeck S, Lilford R, et al. New approaches to evaluating complex health and care systems. BMJ. 2016 Feb 1;352:i154. https://doi.org/10.1136/bmj.i54
21. Busetto L, Wick W, Gumbinger C. How to use and assess qualitative research methods. Neurol Res Pract. 2020 Dec;2:1-0.
22. Swindells M. Putting patients at the heart of all we do. 2017 Apr 7. Available from: https://www.england.nhs.uk/blog/putting-patients-at-the-heart-of-allwe-do/. Accessed 1 July 2019.
23. Carroll C. Qualitative evidence synthesis to improve implementation of clinical guidelines. BMJ. 2017 Jan 16;356:j80. https://doi.org/10.1136/bmj.j80
24. McInnes E, Wimpenny P. Using qualitative assessment and review instrument software to synthesise studies on older people's views and experiences of falls prevention. Int J Evid Based Healthcare. 2008;6:337–44. https://doi.org/10.1111/j.1744-1609.2008.00104.x
25. Braun V, Clarke V. Novel insights into patients' life-worlds: the value of qualitative research. Lancet Psychiatry. 2019 Sep 1;6(9):720–1.
26. Macdonald ME. The necessity of qualitative research for advancing oral health. Community Dent Oral Epidemiol. 2023 Feb;51(1):67–70.
27. Giacomini MK, Cook DJ. Users' guides to the medical literature: XXIII. Qualitative research in health care a. are the results of the study valid? Evidence-based medicine working group. JAMA. 2000;284:357–62.
28. Kelly A, Tymms K, Fallon K, Sumpton D, Tugwell P, Tunnicliffe D, et al. Qualitative research in rheumatology: an overview of methods and contributions to practice and policy. J Rheumatol. 2021 Jan 1;48(1):6–15.
29. Pope C, Mays N. Qualitative research in health care. 3rd ed. Boston, MA: Blackwell Publishing; 2006.
30. Lingard L, Albert M, Levinson W. Grounded theory, mixed methods, and action research. BMJ. 2008 Aug 7;337:a567. https://doi.org/10.1136/bmj.39602.690162.47
31. Creswell JW, Creswell JD. Mixed methods procedures. In: Salmon H, Neve C, Felts DC, Marks A, editors. Research design: qualitative, quantitative, and mixed methods approaches. Los Angeles, CA: Sage Publications; 2018. p. 213–46.
32. Templeton AR, Young L, Bish A, Gnich W, Cassie H, Treweek S, et al. Patient-, organization-, and system level barriers and facilitators to preventive oral health care: a convergent mixed methods study. Implement Sci. 2015;11:1–4.
33. Oakley A, Strange V, Bonell C, Allen E, Stephenson J, RIPPLE Study Team. Process evaluation in randomised controlled trials of complex interventions. BMJ. 2006;332:413–6.
34. Guba EG, Lincoln YS. Competing paradigms in qualitative research. In: Denzin NK, Lincoln YS, editors. Handbook of Qualitative Research. Volume 2; Thousand Oaks, CA: Sage; 1994. p. 163–94 105.
35. Stenfors T, Kajamaa A, Bennett D. How to… assess the quality of qualitative research. Clin Teach. 2020 Dec;17(6):596–9.
36. Majid U, Vanstone M. Appraising qualitative research for evidence syntheses: a compendium of quality appraisal tools. Qual Health Res. 2018 Nov;28(13):2115–31.
37. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International J Qual Health Care. 2007;19:349–57.
38. Critical Appraisal Skills Programme. CASP qualitative checklist. Available from: https://casp-uk.net/images/checklist/documents/CASP-Qualitative-Studies-Checklist/CASP-Qualitative-Checklist-2018_fillable_form.pdf. Accessed 22 Nov 2023.
39. JBI. Critical appraisal tools [Internet]. Adelaide: JBI; n.d. Available from: https://jbi.global/critical-appraisal-tools.
40. Levitt HM, Bamber M, Creswell JW, Frost DM, Josselson R, Suarez-Orozco C. Journal article reporting standards for qualitative primary, qualitative meta-analytic and mixed methods research in psychology: the APA publications and communications board task force report. Am Psychol. 2018 Jan;73(1):26–46.
41. Geddis-Regan AR, Exley C, Taylor GD. Navigating the dual role of clinician-researcher in qualitative dental research. JDR Clin Transl Res. 2022 Apr;7(2):215–7.
42. Hiller AJ, Vears DF. Reflexivity and the clinician-researcher: managing participant misconceptions. Qual Res J. 2016 Feb 1;16(1):13–25.
43. Retrouvey H, Webster F, Zhong T, Gagliardi AR, Baxter NN. Cross-sectional analysis of bibliometrics and altmetrics: comparing the impact of qualitative and quantitative articles in the British medical journal. BMJ Open. 2020 Oct 1;10(10):e040950.
44. Nagendrababu V, Vinothkumar TS, Rossi-Fedele G, Doğramacı EJ, Duncan HF, Abbott PV, et al. Dental patient-reported outcomes following traumatic dental injuries and treatment: a narrative review. Dent Traumatol. 2023 Feb 6;39:304–13.

How to cite this article: Kenny KP, Chauhan A, Pavitt S, Foy R, Day PF. Qualitative research in dental traumatology—A narrative review. Dental Traumatology. 2024;00:1–9. https://doi.org/10.1111/edt.12935