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How well are dental qualitative studies involving interviews and focus groups reported?

Dalya Al-Moghrabi[a,b,*], Aliki Tsichlaki[a], Saleh Alkadi[c,d], Padhraig S. Fleming[a]

[a] Centre for Oral Bioengineering, Barts and London School of Medicine and Dentistry, Queen Mary University of London, London, United Kingdom
[b] College of Dentistry, Princess Nourah Bint Abdulrahman University, Riyadh, Saudi Arabia
[c] Department of Oral and Maxillofacial Surgery, Cork University Hospital, Cork, Ireland
[d] Faculty of Dentistry, Jordan University of Science and Technology, Irbid, Jordan

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ABSTRACT

Objective: Qualitative research is being increasingly ingrained within dentistry. The aim of the study was to assess whether recent qualitative studies involving interviews and focus groups in the dental literature comply with the consolidated criteria for reporting qualitative research (COREQ) checklist.

Methods: Qualitative studies in dentistry, involving interviews and focus groups with patients, parents or caregivers published between January 2017 and June 2018 were identified through electronic and hand searching with no language restrictions. The characteristics of the included studies and adherence to the COREQ checklist were assessed.

Results: A total of 7137 studies were identified. Following initial screening, 244 full-text articles were obtained; of these, 100 met the inclusion criteria. The majority of the identified studies were in the field of dental public health (30%) with just half published in dental journals. The median sample size was 20 participants (IQR 38.5). Data analysis was most commonly undertaken using thematic analysis or the framework approach 59% (53/90), with purposive sampling used in 54% (36/67) of those describing sampling methods. On average, 17 (± 5.3) of 32 of the COREQ checklist items were presented within the individual studies. Overall, the quality of reporting of individual studies was typically categorised as either moderate (51%) or poor (34%).

Conclusion: As qualitative research in dentistry becomes more established, improved adherence to the COREQ checklist should be encouraged to ensure transparent reporting, in order to maximally influence the delivery of care, policy and clinical practice.

1. Introduction

Qualitative research endeavours to explore concepts that are difficult to measure numerically, illuminating meanings and understanding of complex phenomena and processes underlying behavioural patterns in their natural setting [1]. Valuable information related to the effectiveness of interventions is commonly elucidated using quantitative methods [2,3]. However, detailed understanding of patient values, experiences and preferences, in addition to clinical decision making, both of which are vital cogs in evidence-based practice, are better suited to qualitative methods [2,3]. Therefore, qualitative research is becoming more established in dentistry, especially with the increased recognition of the importance of patient-reported outcomes [4,5].

Qualitative studies can be conducted as standalone research or complimentary to quantitative studies to help explain unexpected findings providing more holistic assessment of experiences and impact of treatment [6,7]. Furthermore, qualitative studies can be employed in development of tools such as questionnaires, and in preliminary assessment of the impact of interventions prior to testing effectiveness in clinical trials [6,7]. In mixed-methods research, qualitative data can also assist in providing detailed information concerning reasons for drop-outs and refusal to participate [7].

Qualitative research has been viewed with scepticism and criticised on the basis of being subjective, anecdotal, unscientific, and not reproducible or generalisable [8–10]. This has culminated in lower priority for publication, a lack of appreciation and a dearth of qualitative research within the biomedical literature in view of a perception of limited applicability to clinical practice and limited citation counts

* Corresponding author at: Centre for Oral Bioengineering, Barts and London School of Medicine and Dentistry, Queen Mary University of London, London, United Kingdom.
E-mail addresses: d.almoghrabi@qmul.ac.uk (D. Al-Moghrabi), a.tsichlaki@qmul.ac.uk (A. Tsichlaki), alkadis@tcd.ie (S. Alkadi), padhraig.fleming@qmul.ac.uk (P.S. Fleming).

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[9]. However, while interaction with participants during research might provide some information about perspectives and experiences, it invariably does not provide the depth and detail associated with rigorous qualitative research [7]. Moreover, the former does not follow a systematic method and is prone to bias; it therefore often contributes little to our scientific knowledge [7,11].

There is a common misconception that sample sizes in qualitative research are often too low [12]. Unlike quantitative studies, sample sizes are not based on power calculations but rather on the adequacy of the sample in attaining sufficient depth and saturation of the data, defined as lack of new and discernible emergent themes [12]. Achieving saturation is rather facilitated by selecting participants who can provide diverse and relevant data, the experience of the researcher in asking probing questions, allowing sufficient duration of data collection, and conducting repeat interviews where necessary [13–15]. Notwithstanding these obstacles, qualitative research is beginning to assume greater traction within the dental literature both in isolation and in mixed-methods designs complementing quantitative data [4,16].

This increased prominence of qualitative research places an onus on completeness of reporting to ensure that research is explicit and transparent in terms of the study context, methods and analysis. Lack of adherence to reporting guidelines contributes to research waste, possibly limiting the applicability and transferability of research findings to other settings [17,18]. A bespoke guideline, the 32-item consolidated criteria for reporting qualitative research (COREQ) checklist, was published in 2007 to provide a framework for reporting qualitative studies involving interviews and focus groups [19]. The itemised checklist includes three key domains: research team and reflexivity, study design, data analysis and reporting of findings.

Since the introduction of the COREQ checklist over a decade ago [19], there has been no previous assessment of compliance with reporting of qualitative studies within the dental literature. The aim of the study was to assess whether recent qualitative studies involving interviews and focus groups in the dental literature comply with the COREQ guidelines. The objective was to describe the characteristics of qualitative research involving interviews and focus groups in dentistry.

2. Methods

The following electronic databases were searched over an 18-month period between 1st of January 2017 and 30th of June 2018: PubMed, Embase®, psycINFO via EBSCO and Web of Science Core Collection with no language restrictions using specific search terms (Table 1). Furthermore, a supplementary hand searching of relevant journals was undertaken.

All qualitative studies eliciting data related to dentistry involving patients, parents or caregivers were included. No restriction on age group, intervention, comparison or study outcomes was applied. Only studies which involved interviews and focus groups as data collection method were selected. Questionnaire-based studies and studies involving analysis of social media or online posts were excluded. Where multiple publications were derived from the same sample, the most recent publication was selected.

Table 1
Search strategy.

((((qualitative OR interview* OR “focus group*” OR “thematic analysis” OR “grounded theory” OR “discourse analysis” OR “conversation analysis” OR narrative OR ethnograph* OR phenomenolog* OR case study OR observation* OR “framework analysis” OR “verbatim quotation*” OR “topic guide”)))
AND
(*dent*[Title/Abstract] OR *dont*[Title/Abstract] OR oral[Title/Abstract] OR cleft[Title/Abstract] OR orthognathic[Title/Abstract]))
NOT
("qualitative assessment"[Title] OR “case report*”[Title] OR "literature review"[Title] OR "systematic review"[Title] OR "In vitro"[Title] OR meta-analysis[Title] OR critical review[Title])
Filters activated: Publication date from Publication date from 01/01/2017 to 30/06/2018, Humans.

The abstracts of identified studies were assessed by three authors (DA, SA, AT) and the full-texts of those meeting the selection criteria were subsequently retrieved. Data were extracted using pre-piloted data collection forms by three authors (DA, SA, AT). The following details were extracted from each study: journal of publication, field and scope of the study, sampling method, data collection method, participant characteristics, sample size, study setting, data recording type, duration of interviews or focus groups, and method of data analysis.

The quality of reporting of the included studies was assessed by two authors (DA, AT), based on a binary (Yes/No) evaluation using the consolidated criteria for reporting qualitative research (COREQ) checklist [19]. Scoring was pre-piloted on 10 studies (DA, AT). The percentage of studies reporting each of the 32 criteria within the checklist was identified. Any disagreement in study selection, data extraction or assessment of reporting criteria was discussed with a fourth author (PSF). Studies were categorised as having good (≥25 items); moderate (17–24 items); poor (9–16 items); or very poor (≤8 items) reporting based on the number of items described.

3. Results

Electronic database searches yielded a total of 7137 studies. Of these, 244 were deemed to be relevant and the full-texts were retrieved. Following analysis of the full-text, 100 studies met the inclusion criteria (Fig. 1; Appendix).

3.1. Characteristics of the included studies

The majority of identified qualitative studies were conducted in Europe (40%), followed by North America (23%) and Asia (20%) (Table 2). Only half of the studies were published in dental journals with BMC Oral Health (n = 6) and Community Dentistry and Oral Epidemiology (n = 6) being most popular. The majority of published qualitative studies identified were in the field of dental public health (30%), followed by medical problems associated with dentistry (20%) and cleft lip and/or palate (12%) (Table 2). The scope of qualitative methods was mainly to evaluate patients', parents' or carers' views and experiences, and the impact of condition or treatment (43%), followed by service evaluation and utilisation including access to dental care (32%), tool- or programme- development (20%) and risk factor exploration (5%).

The median sample size calculated from 99 studies was 20 participants (IQR 38.5). Sixty per cent of the studies involved patients only, 25% involved parents and/or carers, and 15% included both with the majority (65 ± 24.2%) of participants being female. The age of the sample was reported in only 66 studies with the majority of the studies including adults (> 18 years; n = 50), followed by elderly (≥60 years; n = 10), adolescents (≤18 years; n = 4) and children (< 10 years; n = 4).

Of the 67 studies reporting sampling method, the most commonly used was purposive (n = 36) followed by convenience sampling (n = 19) (Table 2). Data collection method mainly involved using interviews alone (66%), followed by focus groups only (21%) and both methods (13%). Interviews were mainly conducted face-to-face, while a number of these were conducted over the phone (n = 17). Interviews and focus groups were commonly audio-recorded (71%); however, video-recording was used in 7 studies. Interviews and focus groups were mainly conducted in professional settings e.g. hospitals and community centres (40%), participants' homes (4%) or both (10%), with this information missing in 41%.

Data was mostly analysed using thematic analysis or the framework approach (n = 53) followed by content analysis (n = 18), grounded theory (n = 10) and descriptive or interpretative phenomenological analysis (n = 5). Only 66 studies reported the duration of the

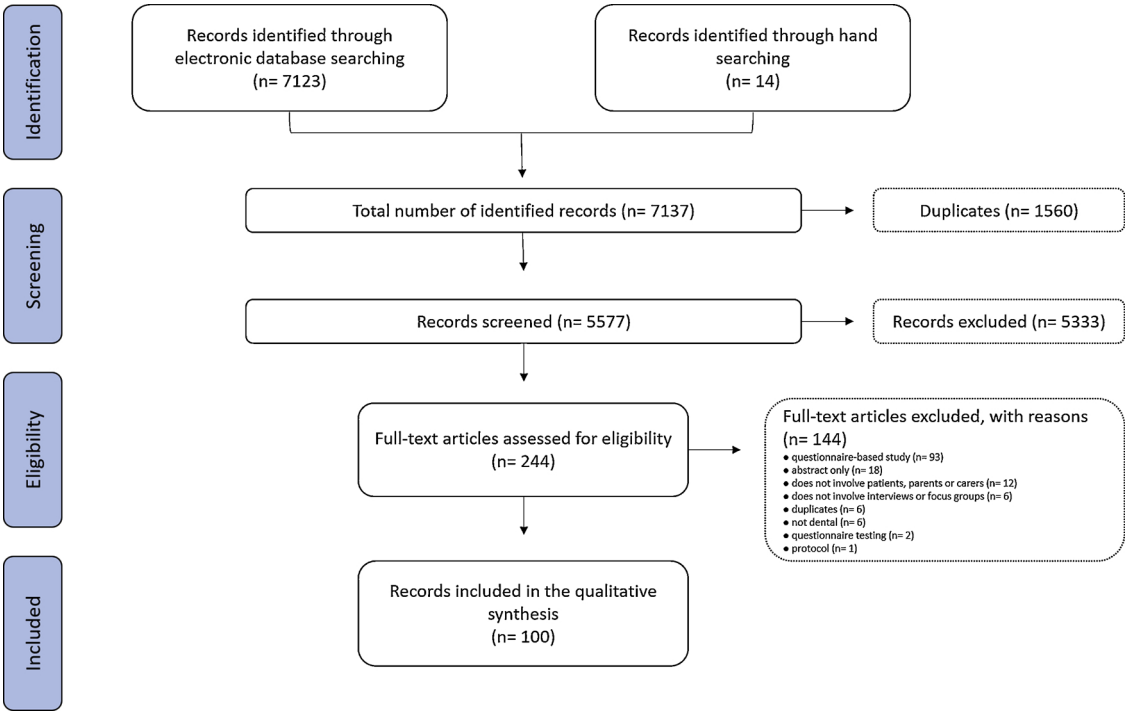

Fig. 1. Flowchart of the included studies.

Table 2
Characteristics of the included studies.

Number of studies per region	
Europe	n = 40
North America	n = 23
Asia	n = 20
Australia	n = 9
South America	n = 4
Africa	n = 3
More than one region	n = 1
Number of studies per discipline	
Dental public health	n = 30
Medical problems including sleep apnea	n = 20
Cleft lip and/or palate	n = 12
Geriatric dentistry	n = 8
Oral medicine	n = 7
Paediatric Dentistry	n = 5
Multidisciplinary	n = 4
Orthodontics	n = 4
Prosthodontics	n = 3
Implantology	n = 2
Maxillo-facial surgery	n = 2
Oral surgery	n = 1
Periodontics	n = 1
Temporomandibular disorders	n = 1
Number of studies per sampling method	
Purposive sampling	n = 36
Convenience sampling	n = 19
Consecutive sampling	n = 3
Snowball sampling	n = 3
Combination of two methods	Purposive and snowball sampling (n = 2); Purposive and convenience (n = 2); convenience and snowball (n = 2)
No information provided	n = 33
Duration of the interviews/focus groups	
Very short (≤15 min)	n = 6 interviews
Short (> 15 min, < 30 min)	n = 10 interviews and n = 1 focus groups
Medium (≥30 min, < 1 h)	n = 29 interviews and n = 3 focus groups
Long (≥60 min)	n = 11 interviews and n = 16 focus groups
No information provided	n = 34 studies

interviews or the focus groups with the latter exceeding 60 min in most studies (n = 16) (Table 2). Interviews typically lasted 30 min to less than 1 h, although very short interviews (≤15 min) were used in some studies (n = 6).

3.2. Completeness of reporting of the included studies

On average, 17 (± 5.3) of 32 of the COREQ checklist items were presented within the individual studies (Table 3). However, the range varied between 2 and 27. The quality of reporting in the majority of the included studies was categorised as moderate (51%) or poor (34%), based on the number of COREQ checklist items reported within individual studies (Table 4). When comparing reporting scores across domains, sufficient information about the research team and reflexivity was presented in only one-third of included studies (Table 3). However, study design domain was reported on in approximately half of the included studies with adequate information on analysis and findings outlined in two-thirds (Table 3).

4. Discussion

The reporting quality of recent qualitative studies involving interviews and focus groups in dentistry is suboptimal, highlighting the need to improve transparency of study conduct and analysis. In line with previous research, the findings of this study underline the limited number of published qualitative studies involving interviews and focus groups with patients, parents or carers within dental disciplines other than dental public health [20,21]. The lack of publication of qualitative research was exposed in a previous study in the field of orthodontics which only identified 27 studies published over a 10-year period [22]. The limited number of qualitative studies might be due to the low priority of publication given by editors [9]. This may be reflected in the finding that a significant proportion of studies (50%) in the present article, as well as in previous research (42%) [21] were published in non-dental and open access journals. Moreover, the relatively low numbers might also highlight disinclination of researchers to undertake qualitative studies due to the associated challenges and the required

Table 3
Percentage of studies reporting each item in the COREQ checklist.

Reporting criteria	Number of studies fulfilling the criteria
Domain 1: Research team and reflexivity	
Personal Characteristics of the interviewer	
1. Interviewer/facilitator identified	48%
2. Credentials (E.g. PhD)	18%
3. Occupation at the time of the study	38%
4. Gender of the interviewer	50%
5. Experience and training in qualitative research	30%
Relationship with participants	
6. Relationship established	17%
7. Participant knowledge of the interviewer	49%
8. Interviewer characteristics	28%
Mean overall score for domain 1	**34.8%**
Domain 2: Study design	
Theoretical framework	
9. Methodological orientation and Theory	90%
Participant selection	
10. Sampling	67%
11. Method of approach	55%
12. Sample size	99%
13. Non-participation	35% (reasons for drop-out: 16%)
Setting	
14. Setting of data collection	54%[a]
15. Presence of non-participants	25%[a]
16. Description of sample	77%
Data collection	
17. Interview guide	68% (pilot-tested: 18%)
18. Repeat interviews	2%
19. Audio/visual recording	80%
20. Field notes	27%
21. Duration	66%
22. Data saturation	60%
23. Transcripts returned	3%
Mean overall score for domain 2	**53.9%**
Domain 3: Analysis andfindings	
Data analysis	
24. Number of data coders	61%
25. Description of the coding tree	59%
26. Derivation of themes	76%
27. Software	48%
28. Participant checking	14%
Reporting	
29. Quotations presented	90% (quotation identified: 60%)
30. Data and findings consistent	90%[b]
31. Clarity of major themes	94%
32. Clarity of minor themes	86%
Mean overall score for domain 3	**68.7%**

[a] Scored as "not applicable" in studies involving telephone interviews only (5%).

[b] Scored as "not applicable" if participants' quotations were not presented (10%).

Table 4
Percentage of studies categorised as having good, moderate, poor or very poor levels of reporting.

Scoring system based on the number of the COREQ checklist items reported	Percentage of studies
Good reporting (25–32 items)	8%
Moderate reporting (17–24 items)	51%
Poor reporting (9–16 items)	34%
Very poor reporting (≤8 items)	7%

investments in time, bespoke training and experience [23].

In the present analysis, only studies involving interviews and focus groups were included, as these are two of the most common methods for data collection in healthcare and dental research [20,21,24]. As such, there is a dearth of other qualitative designs such as observational studies and studies related to action rather than perceptions [10,21]. Although interviews were mainly conducted face-to-face, 17% of the included studies involved telephone interviews. The sufficiency and depth of participants' responses have been shown to be similar in telephone and face-to-face interviews [25]. Telephone interviews can be convenient, cost-effective, and allow easier access to less accessible patients as well as aiding in preserving participants' anonymity [25,26]. However non-verbal cues may be missed in this manner, and these can also contribute to the interpretation of the findings [27]. A possible option to overcome this problem is the use of technology in the form of online video calls through Skype™ or other social virtual worlds [16]. However, use of technology is reliant on access to computers along with internet connectivity; the use of such digital methods was not observed in the present study. An alternative to overcome the issue of difficult-to-reach participants such as elderly people, is to conduct interviews in participants' homes; this was undertaken in 14% of the studies evaluated. Home interviews may encourage broader participation by overcoming pragmatic issues and might stimulate more open discussions resulting in more forthright opinion and unvarnished responses [28]. Furthermore, home interviews positively alter the perceived closeness of the researcher and the power relationship between the interviewer and interviewee [28]. Notwithstanding this, home interviews may be more time-consuming and difficult to arrange, and may necessitate specific ethical clearance (e.g. lone working policies) potentially reducing the attractiveness of this approach to research teams.

A comprehensive search strategy was used in the current study to ensure inclusion of all relevant studies. The search was confined to a period of 18 months, notwithstanding this, it resulted in a high number of irrelevant studies (95.6%). Although this is common of systematic review searches and reflects the sensitivity of the search strategies used, the issue of suboptimal indexing of qualitative studies resulting in difficulty in identifying relevant studies was highlighted previously, with a similar percentage of irrelevant studies (96%) identified in an analysis of breast-feeding support literature [29]. The use of guidelines for abstract reporting and title requirements were implemented in randomised controlled trials to improve indexing in addition to ensuring clarity of reporting [30]. Similar requirements do not exist within the COREQ checklist. However, these issues were addressed in a more recent checklist for qualitative studies which incorporates title and abstract requirements [31]. The latter may allow for simpler identification of qualitative studies in future.

Complete reporting of qualitative studies assists in ensuring clarity and in making judgements concerning the transferability of research findings [17]. Furthermore, it allows readers to assess the trustworthiness of the study [21,32]. Although a more recent reporting checklist is available [31], the COREQ checklist remains the most widely used and cited by a factor of 10. A number of relevant criteria that could help readers in better understanding the study conduct and analysis are not included in the COREQ checklist but are still worth reporting. These include, clarity of the research question, ethical issues and the use of vouchers or other incentives to encourage participation, which were included in the more recent checklist [31]. The COREQ checklist is only intended to guide reporting of studies employing interviews or focus groups, and is therefore, not applicable universally to qualitative research approaches [33]. An additional reporting criterion has been advocated for qualitative studies undertaken within randomised controlled trials [7,34]. This relates to reporting the treatment group allocation included in the qualitative study as well as the timing of qualitative data collection and analysis of findings in relation to the quantitative element [7,34]. Furthermore, reporting quality is not necessarily tantamount to research quality and as such, while use of the COREQ checklist aids in assessing methodological rigour, fulfilling the checklist does not automatically translate into higher quality research [35]. Other checklists and tools can be used for the assessment of quality and trustworthiness of qualitative research studies [36–38].

This is the first study to assess adherence to the COREQ checklist in the dental literature, to our knowledge. Meaningful assessment of adherence to the COREQ checklist was ensured by the inclusion of studies published a decade following its introduction [19]. A 10-year period was considered reasonable in order to allow implementation of the checklist. Furthermore, as qualitative studies have only relatively recently gained increased recognition in dentistry [16], we anticipated that a sufficient number of studies would be published in recent years. Following the COREQ checklist, the criteria were assessed as a binary outcome (reported or not) for ease of quality assessment, tabulation of the results and comparison of reporting across different domains. In the present analysis, assessments were verified by a third author and high levels of agreement between examiners were found. As is characteristic of previous analysis [39,40], all items of the COREQ checklist were given equal weight. Titration of weight based on the relative importance for specific items is possible but is complicated by variations in study design and focus, rendering consistency particularly problematic. The quality of reporting in the majority of the included studies was categorised based on an arbitrary measure, to display and understand the data and provide a meaningful overview of the results. The sufficiency and depth of information provided in individual studies was not assessed in the present study. While depth and yield is likely to reflect the quality of the qualitative studies, this is difficult to define in a robust, objective manner. Word count limits imposed by different peer-reviewed journals might explain the suboptimal reporting both in qualitative and quantitative studies. However, it is particularly problematic in the former, especially if lengthy quotations typical of qualitative research contribute to word count. With the increasing use of open access and electronic-only publications these constraints might well reduce with time. Moreover, a significant proportion of papers were published in open access, electronic journals in the present sample with analogous levels of reporting identified.

5. Conclusion

The quality of reporting of dental qualitative studies involving interviews and focus groups was typically either moderate or poor. In view of the increased recognition of qualitative studies in dentistry, compliance with the COREQ checklist should be encouraged.

Declarations of interest

None.

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None.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.jdent.2019.03.001.

References

[1] R.K. Yin, Qualitative Research From Start to Finish, Guilford Publications, New York, 2015.
[2] H. Zafran, By not publishing good qualitative research, the BMJ is not fulfilling its values, BMJ 352 (2016) i1478.
[3] D.L. Sackett, W.M.C. Rosenber, J.A.M. Gray, R.B. Haynes, W.S. Richardson, Evidence based medicine: what it is and what it isn't, BMJ 312 (1996) 71–72.
[4] K. Stewart, P. Gill, B. Chadwick, E. Treasure, Qualitative research in dentistry, Br. Dent. J. 204 (2008) 235–239.
[5] D. Dunt, R. McKenzie, Improving the quality of qualitative studies: do reporting guidelines have a place? Fam. Pract. 29 (2012) 367–639.
[6] H.R. Boeije, S.J. Drabble, A. O'Cathain, Methodological challenges of mixed methods intervention evaluations, Methodology 11 (2015) 119–125.
[7] A. O'Cathain, A Practical Guide to Using Qualitative Research with Randomized Controlled Trials, Oxford University Press, Oxford, 2018.
[8] N. Mays, C. Pope, Qualitative research: rigour and qualitative research, BMJ 311 (1995) 109–112.
[9] T. Greenhalgh, E. Annandale, R. Ashcroft, J. Barlow, N. Black, A. Bleakley, R. Boaden, J. Braithwaite, N. Britten, F. Carnevale, et al., An open letter to the BMJ editors on qualitative research, BMJ 352 (2016) i563.
[10] N. Britten, Making sense of qualitative research: a new series, Med. Educ. 39 (2005) 5–6.
[11] F. Webster, The BMJ should not narrowly confine publication to positivist quantitative studies, BMJ 352 (2016) i1490.
[12] P.I. Fusch, L.R. Ness, Are we there yet? Data saturation in qualitative research, Qual. Rep. 20 (2015) 1408–1416.
[13] J. Ritchie, J. Lewis, C.M. Nicholls, R. Ormston, Qualitative Research Practice: A Guide for Social Science Students and Researchers, Sage Publications, 2013.
[14] A.J. Onwuegbuzie, L.L. Nancy, Taking the "Q" out of research: teaching research methodology courses without the divide between quantitative and qualitative paradigms, Qual. Quant. 39 (2005) 267–295.
[15] G. Guest, A. Bunce, L. Johnson, How many interviews are enough? An experiment with data saturation and variability, Field Methods 18 (2006) 59–82.
[16] P. Gill, J. Baillie, Interviews and focus groups in qualitative research: an update for the digital age, Br. Dent. J. 225 (2018) 668–672.
[17] Y.S. Licoln, E.G. Guba, Naturalistic Inquiry, Sage Publications, Newbury Park, CA, 1985.
[18] P. Glasziou, D.G. Altman, P. Bossuyt, I. Boutron, M. Clarke, S. Julious, S. Michie, D. Moher, E. Wager, Reducing waste from incomplete or unusable reports of biomedical research, Lancet 383 (2014) 267–276.
[19] A. Tong, P. Sainsbury, J. Craig, Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups, Int. J. Qual. Health Care 19 (2007) 349–357.
[20] M. Gussy, V. Dickson-Swift, J. Adams, A scoping review of qualitative research in peer-reviewed dental publications, Int. J. Dental Hyg. 11 (3) (2013) 174–179.
[21] M. Masood, E.T. Thaliath, E.J. Bower, J.T. Newton, An appraisal of the quality of published qualitative dental research, Commun. Dent. Oral Epidemiol. 39 (3) (2011) 193–203.
[22] A.B. Almeida, I.C.G. Leite, G.A.D. Silva, Evidence in Orthodontics related to qualitative research, Dent. Press J. Orthod. 23 (2018) 64–71.
[23] A. O'Cathain, J. Goode, S.J. Drabble, K.J. Thomas, A. Rudolph, J. Hewison, Getting added value from using qualitative research with randomized controlled trials: a qualitative interview study, Trials 15 (2014) 215.
[24] P. Gill, K. Stewart, E. Treasure, B. Chadwick, Methods of data collection in qualitative research: interviews and focus groups, Br. Dent. J. 204 (2008) 291–295.
[25] J.E. Sturges, K.J. Hanrahan, Comparing telephone and face-to-face qualitative interviewing: a research note, Qual. Res. 4 (2004) 107–118.
[26] S. Fenig, I. Levav, R. Kohn, N. Yelin, Telephone vs face-to-face interviewing in a community psychiatric survey, Am. J. Public Health 83 (1993) 896–898.
[27] C. Miller, In-depth interviewing by telephone: some practical considerations, Int. J. Eval. Res. Educ. 9 (1995) 29–38.
[28] S.A. Elwood, D.G. Martin, "Placing" interviews: location and scales of power in qualitative research, Prof. Geogr. 52 (2000) 649–657.
[29] R.L. Shaw, A. Booth, A.J. Sutton, T. Miller, J.A. Smith, B. Young, D.R. Jones, M. Dixon-Woods, Finding qualitative research: an evaluation of search strategies, BMC Med. Res. Methodol. 4 (2004) 5.
[30] K.F. Schulz, D.G. Altman, D. Moher, CONSORT 2010 statement: updated guidelines for reporting parallel group randomised trials, BMC Med. 8 (2010) 18.
[31] B.C. O'Brien, I.B. Harris, T.J. Beckman, D.A. Reed, D.A. Cook, Standards for reporting qualitative research: a synthesis of recommendations, Acad. Med. 89 (2014) 1245–1251.
[32] E.G. Guba, Y.S. Lincoln, Fourth Generation Evaluation, Sage Publications, Newbury Park, CA and London, 1989.
[33] G.D. Smith, L. Gelling, C. Haigh, S. Barnason, H. Allan, D. Jackson, The position of reporting guidelines in qualitative nursing research, J. Clin. Nurs. Res. 27 (5–6) (2018) 889–891.
[34] A. O'Cathain, K.J. Thomas, S.J. Drabble, A. Rudolph, J. Goode, J. Hewison, Maximising the value of combining qualitative research and randomised controlled trials in health research: the QUAlitative Research in Trials (QUART) study—a mixed methods study, Health Technol. Assess. 18 (2014).
[35] K. Peditto, Reporting qualitative research: standards, challenges, and implications for health design, HERD 11 (2018) 16–19.
[36] L. Spencer, J. Ritchie, J. Lewis, L. Dillon, Quality in Qualitative Evaluation: a Framework for Assessing Research Evidence, Government Chief Social Researcher's, London, 2003.
[37] Methods for the Development of NICE Public Health Guidance. Appendix H Quality Appraisal Checklist – Qualitative Studies, (2012) (Accessed 22 February 2019), https://www.nice.org.uk/process/pmg4/resources/methods-for-the-development-of-nice-public-health-guidance-third-edition-pdf-2007967445701.
[38] Critical Appraisal Skills Programme, CASP Qualitative Checklist, (2018) (Accessed 22 February 2019), https://casp-uk.net/wp-content/uploads/2018/01/CASP-Qualitative-Checklist-2018.pdf.
[39] S. Ghimire, E. Kyung, W. Kang, E. Kim, Assessment of adherence to the CONSORT statement for quality of reports on randomized controlled trial abstracts from four high-impact general medical journals, Trials 13 (2012) 77.
[40] F. Nawijn, W.H. Ham, R.M. Houwert, R.H. Groenwold, F. Hietbrink, D.P. Smeeing, Quality of reporting of systematic reviews and meta-analyses in emergency medicine based on the PRISMA statement, BMC Emerg. Med. 19 (2019) 19.