A practical approach to evidence-based dentistry: VIII

How to appraise an article based on a qualitative study

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ABSTRACT

Background and Overview. Because of qualitative researchers' abilities to explore social problems and to understand the perspective of patients, qualitative research studies are useful to provide insight about patients' fears, worries, goals, and expectations related to dental care. To benefit fully from such studies, clinicians should be aware of some relevant principles of critical appraisal. In this article, the authors present one approach to critically appraise the evidence from a qualitative research study.

Practical Implications. Critical appraisal involves assessing whether the results are credible (the selection of participants, research ethics, data collection, data analysis), what are these results, and how they can be applied in clinical practice. The authors also examined how the results could be applied to patient care in terms of offering theory, understanding the context of clinical practice, and helping clinicians understand social interactions in clinical care. By applying these principles, clinicians can consider qualitative studies when trying to achieve the best possible results for their own practices.

Key Words. Evidence-based dentistry; qualitative research; critical appraisal.

JADA 2015:146(8):623-630

http://dx.doi.org/10.1016/j.adaj.2015.06.010

EIGHTH IN A SERIES

In previous articles published in this series, we introduced the general steps to pursue evidence-based clinical practice[1] and how to search for[2] and critically appraise studies about therapy,[3] harm,[4] diagnosis,[5] systematic reviews,[6] and clinical practice guidelines.[7] In this article, we turn to appraising the evidence from a study whose investigators relied on qualitative research.

Qualitative research is an inquiry process that focuses on meaning and interpretation.[8,9] Investigators conducting this type of research aim to explore social or human problems.[8,9] Qualitative researchers often address real-world situations in which complex systems are greater than the sum of their parts.[10] Qualitative researchers not only aim to understand how people think about the world and how they act and behave in it, their study results also can extend beyond patients' personal experiences to explore interactions and processes within organizations or other environments.[11] In the context of

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evidence-based medicine, the results of qualitative research can be particularly important in helping clinicians to understand patients' values and preferences.[12,13]

BOX 1

Clinical scenario.

A 48-year-old man who smokes heavily came to your office concerning periodic toothaches. Despite having dental insurance benefits, he had not visited a dentist for the past 5 years as he had no pain until recently. You noticed widespread caries and moderate periodontal disease. You performed scaling and root planing, restored several teeth, and extracted 4 nonrestorable teeth. Next, he asks you to replace the extracted teeth with dental implants because his wife recently had a positive experience with a dental implant. You explain that the cost for implants is not covered by his insurance; however, he says that he is willing to make such an investment because "the implants will last a lifetime." You are concerned about making a clinical judgment in this case and are not sure if your patient is a good candidate for dental implants given his smoking and oral hygiene status, as well as his unrealistic expectation for the longevity of the implants. Evidence from the literature may provide insights that would bring further understanding of this patient's expectation and preferences. You therefore seek a relevant study to consult.

WHEN IS QUALITATIVE RESEARCH RELEVANT?

There are numerous reasons for conducting a qualitative study. Qualitative research is relevant when little is known about a topic or to address questions that cannot be answered by quantitative methods. Qualitative research results also can be relevant when a clinician wants to study how potential barriers to care are perceived, to describe a decision-making process, or to examine why interventions work or do not work. Qualitative research results can be influential when examining the kinds of impact (both anticipated and unanticipated) that might be perceived from using different intervention strategies.[14] Qualitative researchers seek in-depth understandings of "what is going on in the world" and also can challenge assumptions about that world and the people who live and interact in it.[15] Investigators of qualitative research studies that are relevant for clinicians address a social phenomenon and seek a theoretical or conceptual understanding of a particular problem.[16] Qualitative researchers in oral health have conducted studies that have addressed issues such as the effect of having natural teeth as a person gets older, dentists' perceptions and experiences of treating people who receive social assistance, experiences of tooth loss and replacement, and oral health preferences in patients with diabetes.[17-20]

WHERE TO FIND QUALITATIVE STUDIES

It can be difficult to identify qualitative studies because their key words often do not map easily to medical subject headings (MeSH) terms, which are used for indexing articles in MEDLINE, and these types of studies are not always published in journals that are indexed in commonly used databases. However, in 2003, the National Library of Medicine introduced "qualitative research" as a MeSH term. To make a search more sensitive, a clinician using PubMed can apply filters such as "qualitative" or "interview" in the title or abstract fields or the term "experience" in the text word field.

BOX 2

The search for a qualitative study.

You are interested in finding a qualitative study that explores patients' values and preferences regarding dental implants. You start with PubMed and enter the search terms "dental implants" and "qualitative research." The search identifies over 100 articles. As you look through the titles and abstracts, you identify and retrieve an article that appears to be particularly relevant.

BOX 3

The study you find.

The study you find was written by Grey and colleagues,[21] and the title is "A Qualitative Study of Patients' Motivations and Expectations for Dental Implants." You read the abstract of this research study, which indicates that patients believe that dental implants are just like natural teeth; such a belief, you note, could be problematic. You decide that reading the article may provide further insight into your patient's perspective and his initial decision to request implants.

CRITICALLY APPRAISING QUALITATIVE RESEARCH TO INFORM CLINICAL DECISIONS

There are many approaches (also referred to as methodologies or traditions) to conducting qualitative research, including grounded theory, phenomenology, and ethnography. These approaches, in addition to numerous theoretical perspectives, often shape the research question, data collection, data analysis, and choices for promoting rigor in the study. Unlike quantitative research, there is no hierarchy among the approaches in qualitative research; no approach is more likely to get to the "truth" than another.

Over 100 checklists are available to critically appraise a qualitative study.[22] Many of these checklists are procedural in nature, focusing on the methods alone and diverting attention away from the analytic content of the work and the substantive findings.[23] In addition, many checklists consider all qualitative research to be the same, as they fail to acknowledge differences between approaches or variants within each of the approaches.[24] For the purposes of this article, we relied on Giacomini and Cook's[16] criteria because these authors specifically developed criteria for use in evidence-based practice. According to these criteria, the process of using the results of a qualitative research study to inform clinical decisions involves assessing the credibility, the results, and the applicability of those results. Below, we describe each of these 3 steps.

ABBREVIATION KEY. MeSH: Medical subject headings.

ARE THE RESULTS CREDIBLE?

Investigators have defined credibility as the degree of confidence that a clinician could have that a study's findings represent the "truth."[25,26] Discussions about and techniques for establishing credibility have evolved over the past 30 years since the term was conceptualized. According to our criteria,[16] answering the following questions can provide key insights into the credibility of the findings of a qualitative study.

1. Was the choice of participants or observations explicit and comprehensive? One of the hallmarks of qualitative research is purposeful (or purposive) sampling.[10,27-29] Purposeful sampling refers to the process of recruiting information-rich cases (for example, people or documents) that promise to provide a full and sophisticated understanding of the phenomenon.[10,30,31] By selecting information-rich cases, qualitative researchers gain efficiency in learning about the issues of central importance to the research.[10]

There are many types of purposeful sampling strategies. These include, but are not limited to, selecting cases that are diverse or heterogeneous as related to dimensions such as age that are deemed important to the researchers (maximum variation sampling), selecting a homogeneous sample to describe a particular subgroup in depth (homogenous sampling), using key sources and initial participants to inform the selection of subsequent participants (snowball sampling), and using the categories and theories that are developed during data analysis to inform future sampling (that is, theoretical sampling).[10,29] The researcher's decision to use any one, or a combination, of these sampling strategies often depends on a variety of elements, including what occurs as data are being collected and analyzed, the type of approach within which the researcher is operating (for example, using the data collected to develop theoretical ideas, concepts, models, and formal theories, which is an approach traditionally referred to as grounded theory[32]), and the data collection techniques used (for example, individual interviews, focus groups, or documents). For example, in a qualitative study that explores the perceptions of people who have undergone a particular experience (phenomenological research), the researcher would be sure to choose participants who have undergone the experience of interest (criterion sampling). When qualitative researchers are planning to conduct focus groups, they may prefer homogenous sampling because they want to minimize variation in the sample, such as a power differential among group members.[33] For example, in a study in which the objective was to understand how dentists perceived and experienced treating people who received social assistance,[19] the authors used maximum variation sampling to recruit dentists who had potentially diverse experiences with people living with poverty.

In summary, when assessing whether the researchers' choice of participants or observations was explicit and comprehensive, clinicians should look for some description of purposeful sampling, even if the researchers did not specifically use the term "purposeful."

2. Was research ethics approval obtained? Similar to other types of research studies, qualitative research studies typically require research ethics approval. Several ethical issues are considered to be unique to qualitative research. For example, it is important to realize that participants can shape the data and create ethical dilemmas; the communities being researched are not passive components of the research study.[34] One ethical issue that occurs during analysis is whether participants should have a say in how the researchers interpret their statements.[35] This issue can be especially important to acknowledge if researchers solicit feedback from participants about the study findings (known as "member checking," "member validation," or "respondent validation").[32] Strategies for member checking include sending participants their interview transcripts or summaries of the findings. Some researchers view member checking as a criterion of critical appraisal; however, it might instead be viewed as another way of gathering data that has ethical consequences.[32,36]

Another ethical consideration of qualitative researchers arises when the openness and intimacy of the research leads participants to disclose information that they may later regret having shared.[35,37] To minimize this risk, qualitative researchers are careful to maintain a professional distance from their participants so that they do not lead participants to believe they have entered into a therapeutic relationship.[35] Because of the small sample sizes used in qualitative research, it is important that researchers do not reveal too much information about their study sample (for example, the hospital from which patients were recruited), as there is always the possibility that readers may be able to identify participants.[38] Ethical issues such as those described previously are not always captured by standard applications for research ethics board approval, yet qualitative researchers may need to discuss these issues as they carry out their research.

3. Was data collection sufficiently comprehensive and detailed? Among the numerous techniques for collecting data for a qualitative study, the most common are one-on-one interviews, focus groups, observations, and documents. An interview is an active process in which interviewer and interviewee, through their relationship, produce knowledge or data.[31,35] Focus groups are distinguished from one-on-one interviews because of the researcher's ability in focus group sessions to explore the interactions among research participants.[39] Researchers can use observations to study behavior in a natural environment, such as publicly accessible spaces,[11] and they can also analyze documents and records. Documents might include public records (for example, government documents, television scripts, minutes of

TABLE

Example of critically appraising an article about qualitative research.*

GUIDE	COMMENTS
I. Is qualitative research relevant?	
1. Is my question about social, rather than biomedical, phenomena?	Yes. The authors sought to understand patients' motivations for seeking implants and their expectations of treatment. The authors did not seek to measure outcomes (for example, patient satisfaction with implants) or determine the efficacy of the implant procedure.
2. Do I seek theoretical or conceptual understanding of the problem?	Yes. The authors were interested in understanding a phenomenon rather than making causal or correlational inferences to populations.
II. Are the results credible?	
1. Was the choice of participants or observations explicit and comprehensive?	Grey and colleagues'[21] study involved interviews with participants. The authors did not report that they conducted purposeful sampling for selecting their participants. They acknowledged that their "small opportunity sample" was a limitation; however, they could have provided more details about how they collected observations from this sample. Eligible patients were adults who were fluent in English and had consulted a restorative dental specialist with an interest in implantology at a private dental practice in Wiltshire, United Kingdom. Although the authors mentioned "a private dental practice," it was not clear whether patients were drawn from more than 1 restorative dental specialist's practice in Wiltshire. Fifty patients were eligible to participate in the study, and the authors mailed information about the study to these patients. Of the 50 patients, the investigators interviewed only 9 patients. The authors gave no explanation of how these 9 patients were selected to participate in the study. For example, the authors did not state whether other patients had agreed to participate but then dropped out, whether only 9 patients mailed back a response form, or whether more than 9 patients mailed back response forms but the authors further selected the sample from these patients.
2. Was research ethics approval obtained?	Yes, the authors stated that they obtained approval to conduct the study. As stated on page 2, "Approval was gained from the research ethics committees at the University of Bath and the University of the West of England." The authors did not describe any other ethical issues.
3. Was data collection sufficiently comprehensive and detailed?	The authors collected demographic data but did not include some important factors about the participants that might be relevant to describe a clinical scenario, such as participants' highest level of education, socioeconomic status, and race. Also, the investigators collected data through telephone interviews. Although the authors justified this strategy by citing a reference, which indicated that telephone interviews were comparable to face-to-face interviews, face-to-face interviews can create a better rapport between the participant and researcher. Face-to-face interviews also allow the researcher to gauge a participant's nonverbal behavior, such as facial expressions, during the interview. The first author conducted all the interviews. The interviews were semistructured, and the first 2 authors developed the interview schedule (or guide) on the basis of previous literature and with input from the other authors. The authors mentioned that they piloted the interview questions but did not describe with whom they piloted the interview questions. Although it is appropriate to modify the interview questions on the basis of the analysis, the authors did not describe the topic areas of the interview guide. Also, it is not clear whether the authors modified the interview questions on the basis of the piloted questions or whether they modified the questions on the basis of data collection (that is, the interviews conducted with the 9 participants). The interviewer also summarized participant's comments at the end of the interview. Interviews lasted from 26 to 53 minutes. With a small sample of 9 participants (note that this sample size could be considered small, even for a qualitative study), it is important to collect sufficient data to achieve saturation. The authors did not mention how they made the decision to stop collecting data and whether the decision was made because they believed they had reached saturation. If most of the interviews lasted only approximately 30 minutes, a reader might conclude that the authors' data collection strategy was not sufficiently comprehensive.
4. Were the data analyzed appropriately, and were the findings corroborated adequately?	Grey and colleagues[21] did not report that a particular approach, such as grounded theory, had guided their data analysis; however, they did report that they used thematic analysis as described by Braun and Clarke.[45] They reported that they used 6 steps to analyze the data, but they did not actually describe the analytic process. In a review of Braun and Clarke's analytic process, it is clear that the 6 steps were as follows: familiarizing yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. This process seems reasonable, with the exception that "searching for themes" assumes that the themes were in the data waiting to be discovered. The authors did not discuss the iterative nature of data collection and analysis, so it was not clear whether they analyzed the data simultaneously as they conducted the interviews or whether the investigators conducted the analysis after they had conducted all the interviews. To the benefit of the study, the authors reported that all of the authors had discussed the interpretation of the data, which suggests that several team members with individual expertise contributed to data analysis. On the basis of the affiliations of the authors, the authors' content expertise included psychology, appearance research, oral and dental sciences, and workplace health. It would have been helpful for the authors to have indicated whether anyone on the research team had expertise in qualitative research. Direct quotations from participants supported the study's findings. However, the authors did not provide accounts from 3 of the 9 participants in the results section. This omission could be related to space limitations in this particular journal; however, it also could have been because the data from these 3 participants did not "fit" with the overall findings being presented. That stated, with only 9 participants, it would be important for the authors to make sure that responses from all of the participants were represented in the results, or it would have been helpful for the authors to have described how data collected from the 3 participants did not "fit" with the overall findings presented.

* Source: Grey and colleagues.[21]

TABLE (CONTINUED)

GUIDE	COMMENTS
III. What are the results?	Grey and colleagues[21] reported that their participants described an overarching theme of "normality" in their motivations for requesting, and expectations of having, dental implants. The concept of "normality" encompassed both appearance and function. Regarding appearance, participants described normality in terms of how they felt about themselves and how they behaved in social situations. Participants expected the implants to restore their "normal" appearance so that they could not only regain their internal self-image but also behave naturally in social situations (for example, not having to restrain their smiles or shield their mouths while talking). Regarding function, participants described their expectations of "normality" in terms of being able to eat and speak as they had before they lost their natural teeth. The authors also discussed how participants' desire to return to "normality" did not mean that participants desired to have perfect teeth or a "Hollywood smile."
IV. How can I apply the results to my patient care?	
1. Does the study offer helpful theory?	On the basis of Giacomini and Cook's[16] definition of theory, readers could conclude that the results of Grey and colleagues'[21] study do offer helpful theory. Grey and colleagues[21] developed theoretical concepts from their analysis and proposed a visual depiction of these concepts and how they were related (Figure 1 in the article). They identified a central concept of "normality" that was linked to 2 subthemes of appearance and function. The authors highlighted that this theme of normality was distinct from the expectation of "perfect teeth" and was related to participants restoring their appearance and function rather than improving their function or enhancing their appearance.
2. Does the study help me understand the context of my practice?	Although the characteristics of the study sample may not be similar to a clinician's own practice population, the findings described by Grey and colleagues[21] may be transferable in that they account for patients' motivations for requesting and expectations regarding having dental implants. If you regularly see patients who are making a decision about implants, reading the study results may help you understand the context of your own practice.
3. Does the study help me understand social interactions in clinical care?	Assuming that a clinician's patients share similarities with the patients included in this study's sample, we believe that the study can help a clinician understand social interactions in clinical care. The authors proposed that good clinician-patient communication should account for patients' expectations of dental implants. If a patient desires to regain "normality" by receiving a dental implant, the clinician will need to assess whether this is a realistic expectation. The research results also suggest that patients who have this expectation of normality may treat their implants as they treated their previously natural teeth, which, for many, may not entail the thorough cleaning procedures that are necessary for implant longevity. If a patient lost his or her natural teeth owing to poor oral hygiene and periodontal disease, the clinician needs to communicate that the patient may need to improve his or her oral hygiene behaviors, and possibly, address any pre-existing disease, before deciding to get implants.

meetings), private documents (for example, letters, medical histories, school records), and photographs.[32]

It is appropriate to use a single technique or a combination of techniques for collecting data in qualitative research. For example, in grounded theory studies, researchers may combine focus groups with interviews.[40,41] In an ethnographic study, researchers may combine observations with interviews.[42] Although using a combination of techniques is not necessary, doing so can allow the researcher to provide an enhanced description of the phenomenon's structure.[40]

It is helpful when qualitative researchers outline the topic areas they covered in the interview.[35] Some journal reviewers like to see the actual interview questions presented in a table. However, individual interview questions or prompts can be revised to adapt to the ongoing data analysis or circumstances in the field.[11] In some instances, a researcher conducts a single interview with each participant; in other studies, researchers conduct multiple interviews.

There are no hard-and-fast rules to determine sample size in qualitative research. The aim of data collection is to obtain a rich description of the phenomenon of study rather than to generalize to a population of interest.[43] Creswell[8] proposed sample sizes for different qualitative approaches; however, many researchers use a standard strategy in which they stop collecting data when they believe that further data collection will add little or no important new information relevant to the analysis (a state of affairs referred to as *saturation*).

In a similar manner to quantitative researchers, qualitative researchers collect some demographic data (for example, age, sex, race, education status) to describe the sample as well as the context or setting from which the sample was drawn. For example, the setting can be a dental practice, a screening program, a school, or the community.

In summary, in assessing whether data collection was comprehensive and detailed, clinicians should look for descriptions of how the qualitative researchers collected the data (for example, interviews or focus groups), what types of data were collected (for example, the topic areas covered, interview guide questions, contextual information such as the setting from which participants were selected), and how the decision to stop collecting data was made by the study team (for example, they concluded that they had reached saturation).

4. Were the data analyzed appropriately, and were the findings corroborated adequately? In quantitative research, researchers generally conduct analysis separate from, and after, data collection to minimize the risk of bias. This is antithetical to what happens in qualitative research. One key feature of qualitative data analysis is that it is iterative, occurring simultaneously with data collection. The design and process of data collection and analysis is

circular in nature; analysis unfolds as a researcher generates data and considers theoretical assumptions, a process referred to as emergent analysis.[32] As a result, researchers can elaborate on and revise the perspective of the phenomenon being studied as data are collected.[32]

Generally, all qualitative analysis involves breaking down data into smaller pieces (that is, coding) and reassembling the pieces to develop an interpretation, a process sometimes referred to as thematic analysis. Themes do not emerge as if they are waiting to be discovered; rather, researchers develop themes on the basis of their interaction with participants and the data collected from participants.[44,45] In other words, after accounting for the data, qualitative researchers determine the different paths they can pursue, each of which might be a separate analysis.[44] Research team members' input can be especially important at this stage of the research, as are the details related to the qualitative approach or tradition, which may provide further guidance as to how analysis should proceed. For example, a description of classic grounded theory outlines prescriptive steps for analysis.[46,47]

The investigators of many qualitative studies stop short of offering an in-depth analysis by providing a list of themes or categories without integrating those themes into a more advanced interpretation.[44] It is important for qualitative researchers to demonstrate that their analysis extends beyond the initial coding of data. When qualitative researchers report their results, they often provide direct quotations from their interviews to support their claims.[22] They also may account for data that do not fit with the themes or concepts or theory developed.[48] Throughout data collection and analysis, qualitative researchers can enhance credibility for their research by critically self-reflecting on their preferences and theoretical predispositions toward the work (for example, by commenting in field notes and memos), a process referred to as reflexivity.[32]

In summary, when assessing whether researchers appropriately analyzed data and corroborated findings, clinicians should determine if the researchers used an iterative process of analysis. In addition, clinicians should look for researchers' explanations of how they developed and then interpreted concepts, themes, or both.

BOX 4

Your assessment of the qualitative research you identified.

While reading Grey and colleagues'[21] qualitative research study, your judgment leads you to be concerned about how the authors of the study selected study participants and whether the authors collected sufficient data from their participants. You notice that the authors did not discuss purposeful sampling nor did they discuss why they stopped recruitment and data collection. You note that although the study appears to have had no concerning ethical issues, the process of data analysis is not entirely clear. You decide to keep reading this study with caution (see the table for a more detailed critical appraisal of the article).

WHAT ARE THE RESULTS?

Investigators usually present the main results of qualitative studies in clinical research as single or multiple concepts (often referred to as themes) that are integrated or linked in some way. The message from the results should be clear in the text. Research reports might include thematic statements as headers in the results section to enhance the accessibility of findings.[49] The results section of a research report may include tables and figures, but this section usually includes quotations or examples of observations to illustrate the concepts or themes presented. The investigators should integrate these quotations or examples of observations into the text along with the claims the quotes or examples support.

BOX 5

What are the results?

Grey and colleagues[21] reported that their participants described an overarching theme of "normality" in their motivations for obtaining and their expectations of having dental implants. The concept of normality encompassed both appearance and function. Regarding appearance, participants described normality in terms of how they felt about themselves and how they behaved in social situations. Participants expected the implants to restore their normal appearance so that they could not only regain their internal self-image but also behave naturally in social situations (for example, they would not have to restrain their smiles or shield their mouths while talking). Regarding function, participants described their expectations of normality in terms of being able to eat and speak as they had before they lost their natural teeth. The authors also discussed how participants' desire to return to normality did not mean that participants desired to have perfect teeth or a "Hollywood smile."

HOW CAN I APPLY THE RESULTS TO PATIENT CARE?

Does the study offer helpful theory? Theories provide "lenses" through which clinicians can look at complicated problems.[50] A theory can be central or peripheral to a particular investigation.[51] Theories influence research design, underpin methodology, have implications for how researchers and clinicians analyze and interpret data, and can be developed from the results of a qualitative study.[51,52] Nevertheless, having a resulting formal theory is not required of qualitative studies. Sometimes researchers use diagrams to depict the theories that are developed from a qualitative study, but a visual representation of theories is not a requirement. Clinicians might consider the results of qualitative research to be concepts and relationships.[16] The concepts are the building blocks of theory and they relate to each other in many ways. If a clinician finds that the study results offer concepts or theories that helps him or her to understand a clinical scenario, then this newly acquired viewpoint will aid the clinician in providing patient care.

Does the study help me understand the context of my practice? Rather than describe the generalizability of their research results, qualitative researchers often

discuss how their findings may transfer to or fit into contexts outside their particular study.[25] If researchers provide sufficient detail about the circumstances of the situation or case that they studied, clinicians can speculate whether the findings from such a study are applicable to other cases with similar circumstances.[25] Clinicians also can determine whether they can transfer theoretical explanations about the phenomenon to their own clinical scenarios (that is, theoretical generalization).[32]

Does the study help me understand social interactions in clinical care? Qualitative research results offer clinicians insights about understanding social roles, interactions, relationships, and experiences; although the results may not provide a definitive answer to a question, they do provide an understanding into what might be going on.[16] In general, insights from qualitative research results may highlight contextual variables that contribute to patient care, enhance communication between patients and clinicians, offer examples of the contrasting experiences of patients and caregivers, or address assumptions related to medical language that people often take for granted. The results of the study you find can become even more applicable to patient care if they help you understand how to communicate with patients and how patients' and clinicians' social contexts might affect decision making or the receipt of care.

BOX 6

Your assessment of the applicability of the qualitative research you identified.

After assessing the applicability of the results, you conclude that this study offers useful theory and helps you better understand the context of your practice in terms of possible motivations and expectations that your patients may have when seeking implants. The study results also help you understand the interactions that routinely occur between patients and providers when it comes to making clinical decisions (see the table for a more detailed critical appraisal of the article[16,21,45]). Thus, you decide that this evidence is applicable to inform the decision that you and your patient have to make.

CONCLUSION

Because of qualitative researchers' abilities to explore social problems and to understand the perspective of patients, the results of qualitative research studies can provide unique information about patients' fears, worries, goals, and expectations related to dental care. Clinicians should, however, know how to appraise or evaluate the results of these studies to adequately inform their decisions. The critical appraisal criteria we outlined focus on aspects of credibility, the results, and the applicability of those results. By applying these guidelines, clinicians can consider qualitative studies when trying to achieve the best possible results for their own practice. ■

BOX 7

What you say to your patient.

By reviewing this qualitative study, you learned that patient's pretreatment expectations can strongly influence the treatment outcome and the level of patient satisfaction after treatment. Therefore, it is important to identify your patient's motivation for his treatment choice and to determine his commitment to quit smoking, improve his oral hygiene, and regularly attend appointments for recall and maintenance as needed, because these were the factors that may have contributed to his dental issues. You also need to discuss with the patient the inherent limitations of implants to restore "normality" and the risks associated with implants. By doing so, you will take the necessary steps to correct any misunderstandings or unrealistic expectations that your patient may have developed.

Disclosure. None of the authors reported any disclosures.

Joanna Sale was funded by a Canadian Institutes of Health Research New Investigator Salary Award.

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