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Critique and evaluation of published articles quality of Health Sciences qualitative Researches Journal based on CASP scale

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Abstract

Introduction: Recently, rate of journals and published article in the medical sciences has grown, but the quality of these journals and published articles should be criticized. Therefore, this study was conducted with the aim of criticizing quality of published studies in the qualitative research in health sciences journal based on the CASP scale.

Methods: This study has been done with a cross-sectional descriptive method. In this study, the quality assessment of qualitative articles published in the Journal of Qualitative Research in Health Sciences in two steps was performed. In the first stage, the quantity of published studies by descriptive statics has been investigated. In the second stage, based on CASP scale evaluation was perform.

Results: The highest percentage of published articles related to content analysis with 52.9% and the lowest percentage of published articles related to ethnography and mixed method with 0.42%. In the 83.1 percentage of published articles, CASP-related indicators are also observed. The highest compliance rate of CASP scale indicators is related to the index of the clarity of the research goals, which is observed in 100% of published articles. The least observance of the indexes in the published articles is related to ethical questions which 65.5 percentage of published articles has been followed. In general

Conclusion: Based on findings, recently the quality and quantity of published articles in Qualitative Research in Health Sciences journal is growing, but rate of some types of published studies and their quality is low, which these items should be improved.

Keywords: Criticism, Study Quality, CASP Scale, Health Sciences

Introduction

In recent decades, the number of journals and articles published in the field of medical science has increased dramatically and has increased several times in a short time (1). With

the expansion of medical sciences and the growing number of research journals, the structure of articles published in medical journals and their compliance with reporting standards and research methods has become



more and more important (2). However, the question has always been whether the quantitative growth of research has been coupled with their qualitative growth. It is clear that by improving the quality of research, the application of their results will also be effective in advancing science. On the other hand, poor quality of research can have negative consequences and lead to incorrect conclusions. Certainly, to improve the quality of articles published by local researchers, standards of research and reporting are essential, so we need to ensure the quality of articles (3).

Obviously, one of the factors affecting the quality of articles is the way of compiling articles based on scientific standards, so that increasing compliance with scientific writing standards in articles improves their structural quality and thus better understanding of the content. More effective with readers is to make better use of research results and thus to improve the quality of articles. In general, the structure of the article and the reporting of a scientific research are different according to the method used in the research (4). Today, various institutions and organizations have provided criteria for a variety of medical science articles. On how to compile and publish medical journal articles, for the first time in 1978, a small group of editors of accredited medical journals in Vancouver of Canada, came together to provide guidelines for writing medical journal articles and to develop guidelines. They intended to provide uniformity in the preparation and submission of research papers to medical journals. This group was known as the Vancouver band. With the development of this group, the International Committee of Medical Science Editors was formed. The committee prepared and published numerous editions of one-harmony rules for submissions to biomedical journals, which were completely revised in 1997 and published in 2010, its fourth edition (5). The publication of these guidelines, in addition to ending the vague points of how to write and submit medical science articles, has improved the knowledge of the authors and the unity of the research structure and increased their quality. Evaluating

and critiquing articles published in different journals based on published guidelines helps to improve the quality of journals. Guidelines-based critique is available in both quantitative and qualitative studies. Most of the elements that exist in criticism of quantitative research are also reviewed in criticism of Qualitative studies, but there are differences in criticism for design, method of data collection and analysis (6). Evaluating the quality of qualitative studies is an important process because qualitative research is now widely accepted in terms of interpretative and semantic results. Possibility of research on concepts such as living experiences, emotions and social mobility, interactions between individuals and communities, discovering the causes of emergence and disappearance of social phenomena, and the dual motivations and contexts for researchers to pursue such research. Accordingly, the tools needed to conduct such research are expanding day by day (7).

However, since performing qualitative studies requires specialized skills and analytical abilities, the results of these studies are highly dependent on the abilities of the researcher. The process of collecting and analyzing data and the meanings and concepts used in the emergence of theory in qualitative studies should be scrutinized with greater scrutiny (8). Zheng et al. suggest that in qualitative studies, after extracting the data, instead of using it for statistical analysis, it performs its non-quantitative analysis and composition, and in this way, provides a kind of flexibility in Research. The purpose of qualitative analysis is to understand the meaning and nature of the relationship between variables. At the same time, we deal with categories in qualitative research that sometimes cannot be quantified. As a result, researchers can contribute to the understanding of others through qualitative techniques and discover how people's lives are structured and how they mean to themselves and others (9). Aein et al. also mentioned in a study that the method of research on humans effects on how participants are assessed, so that if humans are studied statistically there is a risk that results will not match with the reality. Therefore, considering the importance of

qualitative studies in detailing and determining the quality of these studies, they should be reviewed and evaluated (10). There are various ways to evaluate and critique the quality of studies. One of the most important of these methods is the CASP scale survey. The CASP scale is one of the most validated tools for evaluating and analyzing a variety of studies, first set up by the Oxford Regional Health Center in the UK in 1993 and later it has been modified several times for both qualitative and quantitative studies, but for each type of quantitative study questions and their number is different, but in all qualitative studies the scale is constant and the same. The current and revised CASP Scale for Qualitative Studies includes ten general questions for evaluating and reviewing qualitative studies, each of them includes several more specific questions. The ten main questions of this scale include the three main aspects of quality assessment of qualitative studies including rigor, credibility and relevance (11). As the CASP scale has a long track record of evaluating the quality of studies, it is regularly updated, indicating that study criticism is an essential process in producing knowledge for practical use (12). This study aimed to critique and evaluate the quality of qualitative studies in the Journal of Qualitative Research in Health Sciences based on the CASP scale.

Methods

This study is a journal-based evaluation, which was done with cross-sectional descriptive method critically. In this study, we evaluated the quality of articles published in the Journal of Qualitative Research in Health Sciences from 1389 to 1396 based on the CASP scale. It is noteworthy that the published articles have been reviewed up to the sixth issue of volume three of the journal in 1396. To determine the validity of the CASP tool, the tool was first translated by the research team, and then validated and modified based on content validity by ten faculty members of Tehran Nursing and Midwifery School. To determine the reliability of this tool, the Richardson method was used, and the Richardson Index was 0.75.

The evaluation of the quality of the studies performed in this study was done in two stages.

In the first stage, the quantity of published studies that also somehow quality of the journal is analyzed year by year. The number and percentage of types of qualitative articles published have been evaluated in different years and the results reported. In the second stage, the quality of the published articles was evaluated on the basis of CASP scale, based on ten questions and indicators related to the scale in question in different years, as well as between 2010 and 2016 in general. The percentage of compliance with the total number of articles published per question is generally reported. In the second step, the findings, in addition to mentioning the percentage and number of observations of the articles, have been attempted to break down the questions into several sections with more examples and examples in each section. For the ethical considerations of this study, all papers published in this journal were carefully read, categorized and then evaluated. Also, none of the articles were excluded from the review and critique process. This study attempts to evaluate and review articles by all members of the research team who have background and experience of various qualitative studies. Other ethical considerations in this study were to evaluate articles based on the criteria of the scale mentioned in the study rather than on the personal judgment of the researchers, and in reporting the results, it was attempted to present the results of the evaluation of the articles clearly to allow for accuracy. In reporting and reviewing the articles, it has been attempted to refrain from mentioning the authors' names and the published specifications of the articles.

Results

The Journal of Qualitative Research in Health Sciences is published with the aim of disseminating the results of research in the field of health and with a qualitative approach. The journal has started publishing articles since 1389 which includes 10 volumes and 30 issues since its publication. Of course, after being scientifically researched, it has 6 volumes and 24 issues.

Table 1. Frequency distribution of different types of articles Published by Year in Qualitative Research in Health Sciences journal

Total	Quantitative and Review	Ethnography	Content Analysis	Grounded Theory	Historical	Action Research	Mixed	Phenomenology	Publication Year
18	17(94.5)	-	-	-	-	-	-	1(5.5)	1389
19	19(100)	-	-	-	-	-	-	-	1390
32	5 (15.6)	-	17(53.1)	1 (3.1)	-	1(3.12)	-	8(25)	1391
32	2(6.2)	1(3.1)	22(68.7)	2(6.2)	-	-	-	5(15.6)	1392
33	-	-	25(75.7)	4(12.1)	-	1(3.03)	-	3(9.09)	1393
41	2(4.8)	-	26(63.4)	4(9.7)	1(2.4)	-	-	8(19.5)	1394
36	5(13.8)	-	21(58.3)	3 (8.3)	-	-	-	7 (19.4)	1395
27	1(3.7)	-	14(51.8)	2(7.4)	-	-	1(3.7)	9(33.3)	1396
238	51(21.4)	1 (0.42)	125(52.5)	16(6.72)	1(0.42)	2(0.84)	1(0.42)	41(17.2)	89-96

Based on the analysis and the results of Table 1, 238 articles have been published until the sixth issue of the year 1396. After making scientific research of this journal, the quantity of articles has been increased, until 17 articles have been published in 1389, there have been 41 articles in 1394. Only one qualitative study was published in 1389 and no qualitative articles were published in 1390, and all published articles had quantitative method. Since 1391, the process of publishing qualitative articles in this journal has been growing, so that in articles published in 1396 there is only one quantitative review article (on qualitative research methods).

According to the table, In terms of quantity, the number of different quality articles was the highest quality article published with content analysis (52.9%), meaning more than half of the articles published in this journal were content analysis. The second in terms of quantity in the number of articles belongs to the type of phenomenology. These phenomenological studies have been both descriptive and interpretive. Grounded theory studies are only 6.7 percent of the total published. Ethnographic, mixed, historical, and action research articles contributed one, one, one, and two case, respectively.

Table 2. Frequency distribution of Observance of CASP Scale Criteria in Qualitative Articles in Journal of Qualitative Research in Health Sciences by Year

Average	Index 10	Index 9	Index 8	Index 7	Index 6	Index 5	Index 4	Index 3	Index 2	Index 1	Rate of Article	Publication Year
18	22	20	13	22	19	19	20	25	27	27	1391	
23	24	18	16	23	26	28	24	27	30	30	1392	
28	29	25	25	20	29	25	28	30	33	33	1393	
35	32	33	26	28	33	31	38	37	39	39	1394	
28	29	25	23	24	26	29	27	28	31	31	1395	
23	24	22	18	20	25	24	23	24	26	26	1396	
154 (83.1)	155 (83.3)	160 (86.02)	1 (76.8)	121 (65.05)	137 (73.6)	158 (84.9)	156 (83.8)	160 (86.02)	171 (91.9)	186 (100)	89-96	

According to Table 2, the highest index compliance in the articles published in the Journal of Qualitative Research in Health Sciences is related to the index and the question of clarity of the research objectives. In 100% of the published articles, this index is observed and the lowest Indicators in the published articles are related to the question of ethical issues, which is

observed in 65.05% of the published articles. Overall, 83.1% of the articles published in the Journal of Qualitative Research in Health Sciences met the indicators of the CASP scale. Other indicators in the Journal of Qualitative Research in Health Sciences are discussed in the Table 3.

Table 3. Indicator and description of each indicator

The description of each index	Index
According to the evaluation and review conducted in 100% (186 cases) of the qualitative studies published in this journal, the purpose was quite clear and stated objectively in the summary and the text of the article.	The purpose of the research is clear
In 91.9% (171) of the articles published in the Journal of Qualitative Research in Health Sciences the qualitative method was appropriate and in 9.1% (15 cases) the qualitative method was inappropriate.	Appropriateness of qualitative method
In 86/02 (160) percent of articles published in the Journal of Qualitative Research in Health Sciences, the research method used was appropriate to the research objectives, and in almost 14 percent (26 cases) of these articles the opposite was the case.	Relevance of the research method with the aim of the research
In 83.8% (156) of the articles published in the Journal of Qualitative Research in Health Sciences, the strategy of selecting participants was appropriate and in 16.2% (30%) of these articles The selection of contributors was not appropriate.	Appropriateness of Participant Selection Strategy with Research Goals
According to the results of Table 2 in 84.9% (158) of the articles published in the Journal of Qualitative Research in Health Sciences were collected in a way that covers the research subject and in 15.1% (28) Of these articles this was not the case.	Appropriate method of gathering information with research topic
In 73.6% (137) of the articles published in the Journal of Qualitative Research in Health Sciences the relation between researcher and participant was considered and in 26.4% (49) of these articles the relation between researcher and participant was not considered.	Consider the relationship between the researcher and the participants
According to the results in 65.05% (121) of the articles published in the journal Qualitative Research in Health Sciences, ethical issues were fully respected and in approximately 35% (67) of these articles ethical issues were not observed.	Considering ethical issues in research
In 76.8% (143) of the articles published in the Journal of Qualitative Research in Health Sciences the data analysis was accurate enough and in 23.2% (43) of the articles, this was not true.	Accuracy of data analysis
In 86.02 (160) percent of articles published in the Journal of Qualitative Research in Health Sciences there is a definite expression of findings and about 14 percent (26 cases) of these articles are presented in an unspecified manner.	Clearly of results
In 83.3% (155) of the articles published in the Journal of Qualitative Research in Health Sciences are valuable research, but in 14% (26 cases) of these articles it is not true.	The value of research

Discussion

One of the most important issues in the articles published in this journal is that 76.42% of the articles published in the Journal of Qualitative Research in Health Sciences belong to three types of studies contain Qualitative content analysis , grounded theory and phenomenology, but the share of grounded studies is less than content analysis and phenomenological.

In this journal, less attention has been paid to other types of qualitative studies, including action research, hybrid, historical, and ethnographic. The results of the study by Alaedini et al. also indicate the interest in publishing a specific type of study in different journals. The results showed that 52% of the articles were descriptive, 21.2% were intervention and 5.8% were analytical. Also in recent years the number of analytical and intervention articles has increased significantly compared to other articles and among the reviewed articles, no qualitative articles were

studied. The percentages of research articles, case reports and reviews were 44.9%, 36.9% and 14.1%, respectively. In recent years, the number of research articles compared to case reports and review articles has increased significantly (13) that this is matched with the results of the current study, which also focused on the publication of a particular type of paper.

Among other important issues in the journal's published articles and less emphasis placed on other indicators in the journal's published articles are ethical issues, in 67 (25%) of the articles published in this journal is not ethically mentioned that the results of the study are in line with the results of the research carried out by Heydari et al. (2015). The results of a study by Heydari et al., Aimed at critically examining the ethical considerations of articles published in Iranian Nursing Journals, showed that from 294 articles reviewed, 128 (43.5%) received ethics approval, 203 (69%) informed consent, 119 (58.6%) obtaining informed consent, 87 patients

(29.6%) confidentiality and 66 (22.4%) subjects awareness of the freedom to leave the study were reported. However, these should be reported in all articles reviewed. Also in the journals studied, these criteria were different in terms of reporting, and the percentage of reporting ethical consent and informed consent in articles published in two journals was appropriate from all journals reviewed (14). But another study conducted by Nowkarizi et al. aimed at evaluating the structural quality of articles published in Iranian Journal of Medical Sciences based on the International Guidelines of the Medical Journal Editors Committee (ICMJE) showed that the ethical principles in the review articles was 86.6. The result of this study could be due to incomplete sampling in this study, because this study examined only 150 articles of all articles published in medical journals published till 2012 which seems to be low and if they looked at more, might have had different results (15).

Another important issue to be noted in the peer-reviewed journal articles is the similarity and closeness of some of the papers published in this journal, although due to the different contexts and contributors it may be possible to publish studies on similar topics. However, given the numerous qualitative researches undertaken by qualitative researchers, the journal should place more emphasis on the publication of researches with new and different titles.

Research by Samadi et al. on ethical issues in the dissemination of scientific articles: An examination of the types and causes of scientific misconduct in medical science research indicates that some articles in the medical sciences are inappropriate. Samadi et al. Have divided overlapping publication issues in to four categories, including: Repeated Submission, Repeated Publishing, Excessive Publishing, Publications are similar and emphasize that the author is not ethically favorable to Send single articles or articles that are very similar in subject matter to more than one journal at the same time. (16).

One of the limitations of this study was that the different parts of some articles, especially their

methods, were not fully explained, so it was difficult and impossible to interpret and evaluate in some areas, and the criteria for evaluating only the contents of the articles were it was published, not what really existed. Among other limitations of this study is the absence of another journal in Iran on the subject of qualitative research in the field of health and health, which enables the comparison of qualitative research in health sciences with other journals and using the results of other journals. Finally, it should be noted that the main question of this study was to evaluate the quality of published articles in the Journal of Qualitative Research in Health Sciences based on the CASP scale by categorizing, interpreting and evaluating all articles published in this journal. At the outset, we reached the main objective of this article and reviewed and analyzed the quantity and quality of these articles in various respects, but quality improvement is a continuous process that needs to be reviewed in future issues. It is recommended to improve the quality of the articles by providing standard formats and checklists for qualitative studies in journal articles, providing guidance to reviewers, conducting workshops for researchers and editors of journals. Make the importance of these guidelines for research purposes. Also one of the issues in the published articles of this journal is not to emphasize ethical issues and lack of code of ethics in a significant number of these researches and since it requires conducting a research to have ethical authorization and compliance Ethical issues when conducting research should be better emphasized by the editor and the editorial staff.

Conclusion

Although the number of published qualitative articles in the Journal of Qualitative Research in Health Sciences was low at the beginning of publication, it gradually increased in quantity and quality of these studies and became an interdisciplinary journal. It is published in a variety of subjects in the fields of health sciences, social sciences, psychology and sociology that illustrate the growth and development of this journal. However, the contribution of some types

of published qualitative studies, including hybrid studies, ethnography, and history has been poor, which need to be modified and improved.

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Conflicts of Interest

The authors have no conflict of interest disclosures to declare.

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