Original Article

Access this article online

Quick Response Code:

Website:
www.jehp.net

DOI:
10.4103/jehp.jehp_227_22

Development and psychometric evaluation of the need assessment tool for women survivors of rape: Protocol for a mixed methods study

Leila Asadi[1,2], Mahnaz Noroozi[3], Hajar Salimi[4], Fardin Mardani[5], Sara Jambarsang[6]

[1]Student Research Committee, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran, [2]Research Center for Nursing and Midwifery Care, Shahid Sadoughi University of Medical Sciences, Yazd, Iran, [3]Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran, [4]Behavioral Sciences Research Center, Department of Psychiatry, Isfahan University of Medical Sciences, Isfahan, Iran, [5]Forensic Medicine Research Center, Isfahan, Iran, [6]Research Center of Prevention and Epidemiology of Non-Communicable Disease, Department of Biostatistics and Epidemiology, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Address for correspondence:
Dr. Mahnaz Noroozi, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail: noroozi@nm.mui.ac.ir

Received: 10-02-2022
Accepted: 09-11-2022
Published: 29-07-2023

Abstract:

BACKGROUND: Rape can lead to various physical and psychological consequences. Thus, survivors should receive immediate interventions and need-based care. The present study aims to design and psychometric *e*valuation of needs in women survivors of rape.

MATERIALS AND METHODS: This mixed methods study is conducted using a sequential exploratory approach. In the first phase, the participants (women survivors of rape and healthcare providers) are selected through purposive sampling in Isfahan. Data are collected through in-depth semi-structured interviews and field notes and are analyzed using conventional qualitative content analysis. The draft of the questionnaire is prepared based on the findings of the qualitative phase and literature review. Then, the face validity, content validity, and reliability of the questionnaire are assessed. Construct validity is assessed using the exploratory factor analysis through a descriptive cross-sectional study on women survivors of rape in the quantitative phase. Using a convenience sampling method, the data are collected in the research environment and analyzed via descriptive and inferential statistical methods. Cronbach's alpha coefficient is used to assess the internal correlation of the questionnaire.

CONCLUSION: The valid and reliable questionnaire that is developed in this study can be used by planners to provide services and care according to the needs of women survivors of rape.

Keywords:

Iran, needs assessment, psychometrics, rape, survivors, women

Introduction

Sexual and reproductive health was included as an important part of public health of society and became one of the main objectives of nations' sustainable development that was recognized after holding the International Conference on Population and Development (ICPD) in 1994.[1] Reproductive and sexual rights include the recognition of the fundamental right of all individuals to decide freely and responsibly on the number of children, child birth interval and the timing of it, as well as to have access to the highest level of sexual and reproductive standards. This important issue includes the individuals' right to decide on sexual relationships that are free from discrimination, coercion, and any violence, and the right to have a satisfying and safe sexual life.[2,3] According to the findings of studies, violations of reproductive and sexual rights of women (in the form of violence against women) are observed in all countries worldwide.[4] Sexual violence encompasses any sexual act, attempt, or threat that is sexual in nature and is done without the consent of survivors. Sexual violence includes rape, sexual abuse and harassment, sexual exploitation, and forced prostitution.[5-7]

How to cite this article: Asadi L, Noroozi M, Salimi H, Mardani F, Jambarsang S. Development and psychometric evaluation of the need assessment tool for women survivors of rape: Protocol for a mixed methods study. J Edu Health Promot 2023;12:246.

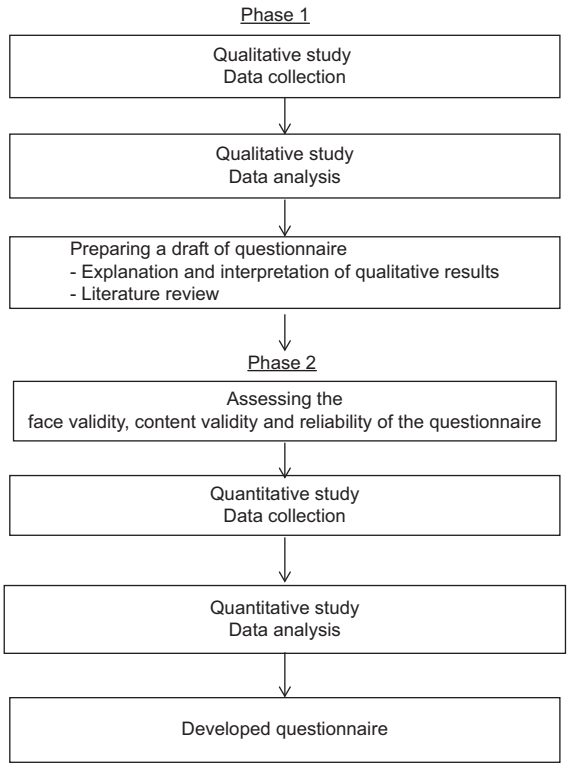

Figure 1: Study visual diagram

While there is no universal definition of rape, the World Health Organization (WHO) defines rape as unavoidable penetration, no matter how slight, of the vagina, anus, or mouth with male penis or any body part (e.g., finger), and also the penetration of the vagina, mouth, or anus with objects, without the consent of the survivor.[3,8,9] In this regard, South Africa has the highest rape rate in the world with 132.4 incidents per 100,000 people worldwide.[10,11] According to studies, every 73 seconds a woman is sexually assaulted in the United States, and on average there are 433,648 survivors (aged 12 and older) of rape each year in the country.[12,13] Like many other countries worldwide, due to it being a taboo and due to fear of social stigma, there are no accurate and reliable sources of statistics for rape cases in Iran, and in some studies incest rates are reported to be about 22% to 25%.[14] Rape can cause several problems, including unplanned pregnancies, substance and alcohol abuse, acquired immunodeficiency syndrome (AIDS) and sexually transmitted infections (STIs), depression, sleep disorders, post-traumatic stress disorder (PTSD), suicide, and death.[15,16] Due to many irreparable complications of rape, rape survivors need immediate actions and interventions.[17] Recognizing rape as a violation of human rights requires attention to and perception of the survivors' needs so that professional services that are proportional to their needs can be provided to them.[18] In this regard, a review of records referring to different centers providing services to rape survivors in Turkey revealed a positive association between the number of attendants and the provision of support services proportional to the survivors' needs. Therefore, an integrated referral system should be established to cover all rape survivors, and the services should be provided to the rape survivors based on their needs.[19] It seems that it is necessary to carry out more research on examining the needs of women survivors of rape and on designing tools to evaluate the needs of these women in line with fundamental and comprehensive health interventions.

A review of studies in Iran reveals the scattered structure of types of services provided to rape survivors and indicates that the available common assessment methods are not enough to accurately assess the survivors' needs when receiving various services[18,20] and there is no specific, valid, and reliable tool to assess and prioritize the needs of these women.[21] Moreover, the content of a tool should be appropriate and harmonious with the culture and way of life of the society in which the tool is to be used. Thus, this mixed methods study (qualitative-quantitative) was conducted to explain the needs of women survivors of rape and to design and psychometrically assess the needs of these women.

Materials and Methods

This is a mixed-methods study with sequential exploratory design. In this research, first the qualitative study is conducted. Then, based on the data gathered in the qualitative phase and by reviewing the literature, a questionnaire is prepared to assess the needs of women survivors of rape. After the questionnaire items are designed, face validity, content validity, construct validity, as well as the reliability of the questionnaire is determined [Figure 1].

1. First phase: Qualitative study

The participants of this phase include women survivors of rape, as well as those with direct or indirect work experience in providing women survivors of rape with healthcare services, all of whom are willing to participate in this study.

Participant selection: The selection of women survivors of rape begins by using a purposeful sampling method and continues with a maximum variation strategy in terms of age, occupation, education level, marital status, number of pregnancies and deliveries, time that may have already elapsed since the rape took place, age at the time of rape, and survivors' familiarity with perpetrator. The selection of healthcare providers with direct or indirect work

experience in the area of providing survivors of rape with healthcare services beings by using a purposeful sampling method and continues with a maximum variation strategy in terms of work experience. In this study, behavioral diseases counseling centers, private offices of general practitioners (GPs) and specialists (obstetricians, infectious disease specialists, psychiatrists), psychology and counseling centers, midwives and reproductive health specialists' offices, counseling and midwifery services centers, counseling centers for vulnerable women (affiliated with the deputy minister of health), social deputy of the police force, addiction treatment centers, social emergency centers, drop-in centers (DICs) and women's rehabilitation centers affiliated with the Welfare Organization, crime prevention unit affiliated with the judiciary, guidance and counseling centers of the University Student-Cultural Office (dormitories and colleges), obstetrics and gynecology emergency clinics of hospitals, and forensic medicine centers in Isfahan are suitable environments for this phase of the research due to the ease of access to participants.

Data collection: The required data are gathered using in-depth and semi-structured interviews. In addition to using interviews, field note is also utilized. The participants are interviewed wherever they prefer and are recorded with an MP4 recorder. Data collection continues until data saturation is achieved.

Data analysis: In order to analyze the data, the conventional qualitative content analysis is used.[22] While conducting the interviews and recording them, the researcher simultaneously transcribes the data on a regular basis and encodes the recorded sentences and phrases. Final categories and themes are then to be extracted from these codes.

Rigor and trustworthiness: Guba and Lincoln proposed four criteria, namely, credibility, dependability, transferability, and confirmability to be used to evaluate the soundness of data.[23] To validate the findings, various methods are used, including allocation of sufficient time and ongoing engagement to gather data (prolonged engagement), combination of various methods of data collection, such as in-depth interviews, field notes, and selection of participants with maximum variation. To confirm the accuracy of the extracted data, the review by the participants is used (member checking). Additionally, using the opinions of experts, the consistency of the data with the statements of the participants is matched and ensured. To increase transferability, findings of the study are presented to four individuals who did not participate in this study but had similar characteristics to its participants so that they can judge whether the results are similar to their own experiences or not.

Review of the literature

In this stage, in order to obtain the existing knowledge in the field of needs of women survivors of rape, studies conducted in Iran and the world are reviewed. To search the existing databases, keywords are determined based on MeSH and the title of the research; then, by combining the existing keywords, the databases are reviewed. To this end, keywords such as "sexual assault", "rape", "sex offenses", "victim", "survivor", "post rape care", "need", and "need assessment" are searched in databases such as PubMed, Web of Science, Science Direct, Cochrane, Scopus, ProQuest, Iran Medex, Magiran, SID, and Iran Doc. The full text of all sources that were published in English and Persian between 2000 and 2021 are reviewed. In the first stage, by quickly reviewing the titles and abstracts of the articles, a number of unrelated and duplicate studies are removed under the supervision of the responsible author. In the next step, the remaining articles are carefully evaluated and critiqued. All steps are performed by two independent researchers and a third researcher supervises the review results of the two reviewers and, in case of disagreement in deleting or accepting articles, their decision is the base.

2. Second phase: Quantitative study

At this phase, based on the findings of the qualitative phase of the study and the data obtained from reviewing the literature, phrases and items of the questionnaire are designed and its psychometric properties are determined.

Determining the validity of the tool: In this study, the validity of the tool is examined using the face validity, content validity, and construct validity. To determine the face validity, both qualitative and quantitative methods are used. To assess the face validity qualitatively, 10 women survivors of rape are interviewed individually. They are asked about the simplicity, fluency, and comprehensibility of the items, and their opinions are applied to modify the questionnaire. To evaluate the face validity quantitatively, the "item impact" method is used and the impact score of an item is calculated.[24] First, the opinions of 10–15 people of the target group (specialists and individuals with work experience in the area of providing services to survivors of rape) regarding the importance of each item is rated on a five-point Likert scale as very important (5), important (4), relatively important (3), slightly important (2), and not important (1). The "item impact" score is calculated from the product of the percentage of participants who rated the phrase as important, that is, scored the item 4 or 5 (frequency) and the average score of the importance of each item. If the impact score is equal to or higher than 1.5, the item is kept within the questionnaire.[25-27]

The content validity of the tool is examined in two quantitative and qualitative stages.[28] In qualitative content validity to investigate the comprehensiveness of the tool and items within the questionnaire in terms of complying with rules of grammar, proper use of words, and the use of appropriate words and phrases,[29,30] the questionnaire is presented to 20 specialists (reproductive health specialists, obstetricians and gynecologists, forensic specialists, psychiatrists, psychologists and other specialists with experience in developing measurement tools) and they are asked to express their corrective views comprehensively in written form. The quantitative content validity is examined in two parts: content validity ratio (CVR) and content validity index (CVI).

a. Content Validity Ratio (CVR).

In CVR, 20 experts are asked to determine whether the given item in a set of items is essential to make the concept under study operational (essential = 3; useful, but not essential = 2, and not essential = 1). In this study, CVR is calculated based on Lawshe's formula. Items with a CVR score less than the numerical value are excluded from the questionnaire. In this research, as the number of the expert panel is 20, the minimum CVR value is considered to be 0.42.[31]

b. Content Validity Index (CVI).

To calculate CVI value, a total of 20 experts are asked to evaluate the clarity, simplicity, and content relevance of each item.[32]

For every item, a mean CVI value of equal to or more than 0.78 is acceptable. Items with a mean CVR score less than this value are excluded.[31]

Determining the reliability of the tool: The reliability of the tool is determined using two methods: internal consistency and stability.[33] Cronbach's alpha coefficient is used to determine the internal consistency or item homogeneity of different parts of the questionnaire.[34] The questionnaire is distributed among 20 women survivors of rape who meet the inclusion criteria. Cronbach's alpha coefficients of the different domains is computed using the Statistical Package for the Social Sciences (SPSS) version 24 software. The acceptable coefficient for high levels of homogeneity is 0.70 and greater.[34,35] In order to determine the stability, the test-retest method is used.[35] Therefore, the designed questionnaire is distributed among 20 women survivors of rape who are eligible for inclusion in the study, twice at two-week intervals. The reliability and stability are then determined by calculating and comparing the Pearson correlation coefficient.

Determining the construct validity: In order to determine the construct validity, exploratory factor analysis, and to extract the factors, principal component analysis (PCA) is used.[36]

Type of study: In this part of the study, a descriptive-cross sectional study is conducted for psychometric evaluation of the tool.

Research population and sample: The research population includes women survivors of rape who refer to research environments, such as behavioral disease counseling centers, private offices of general practitioners (GPs) and specialists (obstetricians, infectious disease specialists, psychiatrists), psychology and counseling centers, midwives and reproductive health specialists' offices, counseling and midwifery service centers, counseling centers for vulnerable women (affiliated with the deputy minister of health), social deputy of the police force, addiction treatment centers, social emergency centers, DICs, social emergency centers, and women's rehabilitation centers affiliated with the Welfare Organization, crime prevention unit affiliated with the judiciary, the guidance and counseling centers of the University Student-Cultural Office (offices of dormitories and colleges), obstetrics and gynecology emergency clinics of hospitals, and forensic medicine centers in Isfahan, to receive healthcare services. Of the women who attend these centers, those who meet the following criteria are included in the study and complete the questionnaire. Inclusion criteria are as follows: Those 1) willing to participate in the study; 2) able to read and write; 3) giving informed consent; 4) who are Iranian; 5) who are 21 years old or older at the time of study; 6) for whom at least six months and at most two years have already elapsed since the rape took place; 7) not having any known psychological disorders and a history of psychiatric treatment prior to the rape or at the present time (based on the participant's report); 8) not having any prior experience of rape; 9) not having any experience of tragic events in life (death of one of the family members, etc.) over the past three months. Exclusion criteria are distorted or incomplete questionnaire.

Sampling method: Sampling is performed in the research environments using a convenience method. In research studies, the minimum and maximum sample-to-item ratio is considered to be 3 and 10 subjects, respectively.[37] Based on the items of the designed tool and after the initial qualitative study, the sample size in this study is determined with a sample-to-item ratio of at least 3:1.

Data collection: After obtaining permission from the ethics committee of Isfahan University of Medical Sciences, the process of data collection is performed

by attending the aforementioned centers. The research sample is formed from women with the given characteristics who entered the study with convenience sampling and gave their informed written consent for participation. At the beginning of the sampling, the participants are asked to exactly answer the questions. Also, they are provided with an explanation about the confidentiality of the questionnaire. The data collection tool in this stage is a researcher-made questionnaire that was designed following the qualitative phase of the study and the literature review. The questionnaire contains two parts that are completed through a self-reporting method.

Data analysis: For factor analysis in this study, after the required data are gathered, first the sampling adequacy index test is investigated using the Kaiser–Meyer–Olkin (KMO) sampling index.[38] Considering the acceptable value of this index, factor analysis is conducted based on the correlation matrix.[39] In order to determine the number of factors, the eigenvalue method and screen plot are used.[38] Also, in order to obtain independent factors direct varimax rotation is used which causes a clearer separation of factors. Data is analyzed using descriptive and inferential statistics. All statistical calculations are performed using SPSS version 24 software. The maximum error accepted in all tests is 5%.

Ethical considerations

Written and informed consent is taken from each participant. The ethics committee of the Isfahan University of Medical Sciences, Isfahan, Iran, approved the protocol of this study (code number: IR.MUI.NUREMA.REC.1400.133).

Discussion

Survivors of rape require an understanding of their needs and legal and social support, as the lack of legal and social support based on the survivors' needs leads to re-injury and further psychological damage.[40] The most important issue to improve services provided to rape survivors is understanding their experiences and interpretations and finding ways to ensure that the services they receive through the health sector are sufficient to support them.[41,42] Investigation of the health needs of women survivors of rape can help understand the importance of establishing and strengthening the mechanisms required for social support and informed therapeutic services to rebuild the lives of these women after experiencing rape.[41] Needs assessment is considered as a method to identify needs in healthcare and to suggest measures to be taken to satisfy said needs. Additionally, all toolmakers arrived at a consensus that the content of the tool should be extracted and recorded directly from the people who are the reference of that tool.[43] Developing health promotion programs, especially on culturally sensitive issues such as sexuality, as well as paying attention to community culture and accepted customs, can strengthen the impact of said programs.[20] Using a mixed methods study with sequential exploratory design, this research seeks to assess the needs of women survivors of rape and then design a local tool that is consistent with cultural characteristics of those women and assess their needs in large-sized samples in an effective and valid way. Therefore, the use of a mixed method and application of both qualitative and quantitative methods seem to be a proper way to attain the goals of the present study. Findings of this study seem to be able to provide the information needed for policymakers of different areas (e.g., health, medical, social, and legal) to design and implement effective and appropriate intervention programs to promote health, especially the sexual and reproductive health of women survivors of rape. Additionally, planners can make arrangements to provide services and care according to the needs of women survivors of rape.

Acknowledgements

We should thank the Vice-Chancellor for Research of Isfahan University of Medical Sciences for the financial support. Moreover, we appreciate all participants in this study.

Financial support and sponsorship

This study was supported by Isfahan University of Medical Sciences. This article is related to the dissertation of PhD in reproductive health that was approved by Isfahan University of Medical Sciences with research proposal No: 3400527.

Conflicts of interest

There are no conflicts of interest.

References

1. Chandra-Mouli V, Svanemyr J, Amin A, Fogstad H, Say L, Girard F, *et al*. Twenty years after international conference on population and development: Where are we with adolescent sexual and reproductive health and rights? J Adolesc Health 2015;56:S1-S6.
2. World Health Organization (WHO). Violence against women. 2017. Available from: https://www.who.int/en/news-room/fact-sheets/detail/violence-against-women. [Last accessed on 2021 Dec 08].
3. The Centre for the Study of Violence and Reconciliation (CSVR). Sexual violence. 2002. Available from: https://www.who.int/violence_injury_prevention/violence/global_campaign/en/chap6.pdf. [Last accessed on 2021 Dec 02].
4. World Health Organization (WHO). Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence 2013. Available from: https://apps.who.int/iris/bitstream/

handle/10665/85239/9789241564625_eng.pdf. [Last accessed on 2022 Feb 02].
5. Austin AE, Shanahan ME, Barrios YV, Macy RJ. A systematic review of interventions for women parenting in the context of intimate partner violence. Trauma Violence Abus 2019;20:498-519.
6. Arroyo K, Lundahl B, Butters R, Vanderloo M, Wood DS. Short-term interventions for survivors of intimate partner violence: A systematic review and meta-analysis. Trauma Violence Abus 2017;18:71-155.
7. Khanbabaei Gol M, Mubaraki Asl N, Ghavami Z, Zharfi Z, Mehdinavaz Aghdam A. sexual violence against mastectomy women improved from breast cancer. IJOGI 2019;22:52-60.
8. World Health organization (WHO). Violence against women. 2019. Available from: https://www.who.int/news-room/fact-sheets/detail/violence-against-women. [Last accessed on 2022 Feb 08].
9. Gadmi Azizabad M, Bahari J, Lak Z, Atabaki M, Zare M. Rape in criminal law of Iran. J Law 2019;6:35-64.
10. World Population Review. Rape statistics by country. 2020. Available from: https://worldpopulationreview.com/country-rankings/rape-statistics-by-country. [Last accessed on 2022 Feb 05].
11. Nation Master. Rape rate: Countries compared. 2020. Available from: https://www.nationmaster.com/country-info/stats/Crime/Rape-rate. [Last accessed on 2022 Jan 05].
12. Prior S. Rape Culture. New York: Wiley Online Library; 2019.
13. Rape AINN (RAINN). The Nation's Anti-Sexual Violence Organization. 2020. Available from: https: //www.rainn.org/statistics. [Last accessed on 2022 Jan 02].
14. Maljoo M. Incest: Context, aggressor's strategies and victim's responses. Social Welfare 2009;9:83-114.
15. Oshodi Y, Macharia M, Lachman A, Seedat S. Immediate and long-term mental health outcomes in adolescent female rape survivors. J Interpers Violence 2020;35:252-67.
16. Steele SJ, Abrahams N, Duncan K, Woollett N, Hwang B, O'Connell L, *et al*. The epidemiology of rape and sexual violence in the platinum mining district of Rustenburg, South Africa: Prevalence, and factors associated with sexual violence. PlOS One 2019;14:e0216449.
17. Foa EB, McLean CP, Zang Y, Zhong J, Powers MB, Kauffman BY, *et al*. Psychometric properties of the posttraumatic diagnostic scale for DSM–5 (PDS–5). Psychol Assess 2016;28:1166-71.
18. Keulen-de Vos M, Schepers K. Needs assessment in forensic patients: A review of instrument suites. Int J Forensic Ment 2016;15:283-300.
19. Hockett JM, Saucier DA. A systematic literature review of rape victims versus rape survivors: Implications for theory, research, and practice. Aggress Violent Behav 2015; 25:1-14.
20. Macy RJ, Martin SL, Nwabuzor Ogbonnaya I, Rizo CF. What do domestic violence and sexual assault service providers need to know about survivors to deliver services? Violence Against Women 2018;24:28-44.
21. Speziale HS, Streubert HJ, Carpenter DR. Qualitative Research in Nursing: Advancing the Humanistic Imperative. Philadelphia: Lippincott Williams & Wilkins; 2011.
22. Mayring P. Qualitative Content Analysis: Theoretical Background and Procedures. Germany: Springer; 2015.
23. Vaismoradi M, Snelgrove S. Theme in qualitative content analysis and thematic analysis. Forum Qual Soc Res 2019;20:1-14.
24. Bolarinwa OA. Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. Niger Postgrad Med J 2015;22:195-201.
25. Panicker L. Nurses' perceptions of parent empowerment in chronic illness. Contemp Nurse 2013;45:210-9.
26. Anderson LM, Brownson RC, Fullilove MT, Teutsch SM, Novick LF, Fielding J, *et al*. Evidence-based public health policy and practice: Promises and limits. Am J Prev Med 2005;28:226-30.
27. Hayashi P, Abib G, Hoppen N. Validity in qualitative research: A processual approach. TQR 2019;24:98-112.
28. Vial A, van der Put C, Stams GJJ, Assink M. The content validity and usability of a child safety assessment instrument. Child Youth Serv Rev 2019;107:104538. doi: 10.1016/j.childyouth.2019.104538.
29. Mohammadbeigi A, Mohammadsalehi N, Aligol M. Validity and reliability of the instruments and types of measurments in health applied researches. JRUMS 2015;13:1153-70.
30. Leung L. Validity, reliability, and generalizability in qualitative research. J Family Med Prim Care 2015;4:324-7.
31. Heale R, Twycross A. Validity and reliability in quantitative studies. Evid Based Nurs 2015;18:66-7.
32. Tappen RM. Advanced Nursing Research: From Theory to Practice. United States: Jones and Bartlett Learning Company; 2010.
33. Creswell JW, Hirose M. Mixed methods and survey research in family medicine and community health. Fam Med Community Health 2019;7:e000086. doi: 10.1136/fmch-2018-000086.
34. MacPhail C, Khoza N, Abler L, Ranganathan M. Process guidelines for establishing intercoder reliability in qualitative studies. Qual Res 2016;16:198-212.
35. Clark LA, Watson D. Constructing validity: Basic issues in objective scale development. **In: Kazdin AE, editor**. Methodological Issues and Strategies in Clinical Research. American Psychological Association; 2016. p. 187-203.
36. Loewen S, Gonulal T. Advancing Quantitative Methods in Second Language Research. 1st ed. England: Routledge Company; 2015.
37. Vakili MM. Assessment of construct validity questionnaires in psychological and educational research: Applications, methods, and interpretation of exploratory factor analysis. J Med Educ Dev 2018;11:4-19.
38. Williams B, Onsman A, Brown T. Exploratory factor analysis: A five-step guide for novices. Australas J Paramed 2010;8:1-13.
39. Vakili MM, Hidarnia AR, Niknami S. Development and psychometrics of an interpersonal communication skills scale (ASMA) among Zanjan health volunteers. Hayat 2012;18:5-19.
40. Rabbany Esfahani H, Habibzadeh MJ. Woman's right in embryo preservation or abortion in pregnancy caused by the rape. IJML 2018;12:153-70.
41. Place JMS, Billings DL, Valenzuela A. Women's post-rape experiences with Guatemalan health services. Health Care Women Int 2019;40:278-94.
42. Australian Human Rights Commission (AHRC). Change the Course: National Report on Sexual Assault and Sexual Harassment at Australian Universities. Sydney: Australian Human Rights Commission; 2017.
43. Thomas DB, Oenning NSX, de Goulart BNG. Essential aspects in the design of data collection instruments in primary health research. Rev CEFAC 2018;20:657-64.