Revista Brasileira de Enfermagem
REBEn

THEMATIC EDITION
ADVANCED NURSING PRACTICES

ORIGINAL ARTICLE

Technology for nursing consultation with transsexual women in the light of Leininger's transcultural theory

Tecnologia para consulta de enfermagem às mulheres transexuais à luz da teoria transcultural de Leininger

Tecnología para enfermería de consulta a las mujeres transexuales a la luz de la teoría transcultural de Leininger

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How to cite this article:
Sousa JC, Araújo EC, Vasconcelos EMR, Galindo-Neto NM, Ramalho MNA, Abreu PD. Technology for nursing consultation with transsexual women in the light of Leininger's transcultural theory. Rev Bras Enferm. 2022;75(5):e20210769. https://doi.org/10.1590/0034-7167-2021-0769

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Submission: 12-21-21 **Approval:** 07-12-2022

ABSTRACT

Objective: to describe the construction and validation of a nursing consultation technology for transgender women. **Methods:** a methodological study developed in three stages with construction based on the Leininger's Cross-Cultural Theory, content validation performed by experts in transgender sexual health and evaluation by nurses of care for transgender women. Items with a minimum agreement of 80% were considered validated, according to the Content Validity Index and binomial test. **Results:** the technology contains 59 items in three blocks: the first, for identification of the transsexual woman; the second, with the Clinical Data; and the third, regarding the Propaedeutics of Care. All items reached agreement higher than 0.8 and an overall Validity Index of 80%. **Conclusions:** the technology was content-validated and evaluated by nurses and can be applicable in clinical and outpatient practice as well as in academia to promote quality care for transgender women.
Descriptors: Technology; Nursing Consultation; Transgender People; Validation Study; Culturally Competent Health Care.

RESUMO

Objetivo: Descrever a construção e validação de tecnologia para consulta de enfermagem às mulheres transexuais. **Métodos:** Estudo metodológico desenvolvido em três etapas com construção pautada na Teoria Transcultural de Leininger, validação de conteúdo realizada por especialistas em saúde sexual de transgêneros e avaliação por enfermeiros da assistência às mulheres transexuais. Consideraram-se validados os itens com concordância mínima de 80%, conforme o Índice de Validade de Conteúdo e teste binomial. **Resultados:** A tecnologia contém 59 itens em três blocos: o primeiro, para Identificação da mulher transexual; o segundo, com os Dados Clínicos; e o terceiro, referente à Propedêutica da Assistência. Todos os itens alcançaram concordância superior a 0,8 e Índice de Validade global de 80%. **Conclusões:** A tecnologia foi validada quanto ao conteúdo e avaliada pelos enfermeiros e pode ser aplicável tanto na prática clínica e ambulatorial quanto na academia a fim de promover a qualidade assistencial às mulheres transexuais.
Descritores: Tecnologia; Consulta de Enfermagem; Pessoas Transgênero; Estudo de Validação; Assistência à Saúde Culturalmente Competente.

RESUMEN

Objetivo: Describir construcción y validación de tecnología para enfermería de consulta a mujeres transexuales. **Métodos:** Estudio metodológico desarrollado en tres etapas con construcción basada en la Teoría Transcultural de Leininger, validez de contenido realizada por especialistas en salud sexual de transgéneros y evaluación por enfermeros de la asistencia a mujeres transexuales. Consideraron validados los ítems con concordancia mínima de 80%, conforme el Índice de Validez de Contenido y prueba binomial. **Resultados:** La tecnología contiene 59 ítems en tres bloques siguientes: la Identificación de la mujer transexual; los Datos Clínicos; y el referente a la Propedéutica Clínica. Todos los ítems alcanzaron concordancia superior a 0,8 e Índice de Validez global de 80%. **Conclusiones:** La tecnología fue validada cuanto al contenido y evaluada por los enfermeros y puede ser aplicable tanto en la práctica clínica y ambulatoria cuanto en la academia a fin de promover la cualidad asistencial a mujeres transexuales.
Descriptores: Tecnología; Enfermería de Consulta; Personas Transgénero; Estudio de Validación; Asistencia Sanitaria Culturalmente Competente.

ONLINE VERSION ISSN: 1984-0446

INTRODUCTION

There is a shift away from the dichotomized adequacy between sex and gender, so transsexual (transgender) women are people who are assigned their gender based on male genitalia, but claim to be female and seek to adjust their bodies to that gender[1].

The break with the cisgender pattern expressed by trans women culminates in discrimination as a social determinant of health, which contributes to the increase of their vulnerability[2]. These women are more likely to develop mental health problems, use licit and illicit drugs, and have a higher prevalence of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) when compared to the general population in many countries[3].

Contrary to the idea that the need to attend to the transgender population is rare, a study carried out in a capital city of the Brazilian Northeast showed that 67.5% of the nursing professionals of a private hospital have already attended transgender people[4].

Consequently, nurses provide care to transgender people, through nursing consultation, which relies on clinical judgment and scientific knowledge, and is based on the principle of integral care[5].

In order to raise the standards of care, it is necessary to add new technologies to the profession, aiming at the systematization of care and the technical and scientific basis of knowledge[6]. The use of nursing theoretical references is useful to support the construction of instruments that provide standardization in data collection and guide care so that no important item is overlooked in the nursing consultation.

Leininger's Theory of Culture Care Diversity and Universality also known as the Culture Care Theory (CCT) was chosen for this study because its assumptions allow observation and association of data on the habits, beliefs and culture of transgender women, with foundations for nursing care practice, as a mechanism of instrumentation and record for consultation[7].

The inexistence of care technologies focused on the specificities experienced by transsexual women in Brazil[8] reinforces the importance of building an instrument based on Leininger's theoretical model for planning nursing care. The goal of this is to develop strategies for comprehensive care for transgender women, who share needs common to any person, such as the adoption of healthy lifestyle habits, prevention and screening of diseases, treatment and rehabilitation, but who, however, are exposed to the particularities inherent to the transgender context that they experience.

OBJECTIVE

The purpose of this article is to describe the creation and validation of a technology that enables nursing consultations with transgender women.

METHODS

Ethical aspects

This study complied with the precepts of Resolution 466/12 of the National Health Council and was approved by the Ethics Committee on Human Research of the Health Sciences Center of the Federal University of Pernambuco (UFPE).

Study design, time and place

This is a methodological study developed in three stages: construction of a nursing technology for transsexual women, content validation by expert judges, and evaluation by care nurses who serve this population[8]. It was carried out between the months of September and December 2019, at the *Hospital das Clínicas* of UFPE and at the *Policlínica Lessa de Andrade*, in Recife, state of Pernambuco (PE). Such places are the state references for health care for the transgender population.

Population or sample; inclusion and exclusion criteria

The population of the content validation stage was composed of nurses specialized in transgender sexual health, belonging to the network of contacts of the sexual and reproductive health professors of the Department of Nursing of the UFPE. The inclusion criterion adopted was having teaching and care experience of at least six months in the areas of women's health, sexual health and nursing care for the LGBTQI+ public (lesbian, gay, bisexual, transgender, queer, intersex and other sexual orientations, identities and gender expressions)[9]. Incomplete completion of the data collection instrument was a criterion for exclusion.

The sampling was of the snowball type, or by convenience, in which the participating subject indicates others who are part of the eligibility criteria[10]. The sample was composed of 11 judges and followed the methodological proposal that recommends a group of 6 to 20 experts, taking into consideration the training, qualification and availability of the necessary professionals[11].

In the evaluation stage, the population consisted of nurses working in two reference services for the LGBTQI+ population. The inclusion criterion was having at least six months of experience in trans women's health care; and the exclusion criterion was being on vacation or on any other work leave during the data collection period. The sample was defined by convenience, in which six care nurses, working in reference services for the LGBTQIA+ population in the state of Pernambuco, were selected[11].

Study protocol

The construction of the technology was subsidized by the assumptions of CCT, based on the conceptual model called Sunrise, which proposes four levels of abstraction and the interrelation of the concepts of its theory. By analyzing the dimensions of the proposed model, it is possible to represent the phases of the nursing process[12], but the development of the technology followed only levels I and II of the Sunrise Model since the instrument serves as a foundation for the data collection stage, not contemplating the other phases of the nursing process now represented by the other levels of the model.

At level I, the cultural and social structure dimension involves technological; religious; companionship/kin and social factors; cultural values and ways of life; political and legal; economic and educational factors. Level II, on the other hand, is based on the

study of the previous level, in which the nurse will perform this knowledge with the patient and/or population, be it the family, the individual or the group within a health system, researching meanings and expressions related to care[13].

The content of the technology was extracted from: the items for transgender health care developed by the World Professional Association for Transgender Health, the seventh version of the Manual of Standards of Care for Trans and Gender Diverse People[3]; and the results of the survey that presented the functionalities considered basic, both from the perspective of trans people and nurses[14].

The first version of the technology was composed of 67 items, inserted in three blocks: the first block has 15 items referring to Identification; the second block, 15 items about Clinical Data; and the third block, 37 about Propaedeutics of Care.

For content validation, the invitation was sent to the e-mail address of the experts, the request for indication of other professionals with an eligible profile, as well as the link to the Google Forms® form, which contained: explanation of the justification and objective of the study, opinion of the Research Ethics Committee (REC), Free and Informed Consent Term (FICT), the technology for Nursing Consultation to Transsexual Women, and the instrument for evaluation as to the clarity, pertinence, and relevance of the 67 items of the technology. The items were evaluated based on the criteria of a Likert scale, with five degrees of agreement: totally agree, agree, neither agree nor disagree, disagree, totally disagree[15]. At the end of each item, there was space for the evaluator to suggest changes that he/she thought necessary.

To evaluate the technology, the nurses were indicated by the coordination of the services where the study was developed and contacted by telephone by the researcher to schedule a face-to-face visit to the workplace to present the proposal and sign the FICT. During the visit, in individual contact, the printed technology was delivered, along with the professional evaluation instrument that was adapted from a previous study[16], composed of 22 items, referring to the objectives; structure, presentation and language; and relevance, with response options ranging from strongly agree to strongly disagree on a Likert-type scale[14]. For each item, there was a space for suggestions.

Analysis of results and statistics

Data analysis was performed using the software R, version 3.3.2. Content validity was analyzed using the binomial test to estimate the items that had a proportion of agreement statistically equal to or greater than 80%, with statistical significance of 5%. The Content Validity Index (CVI) was calculated, per item, by adding the answers "I agree" and "I totally agree", divided by the total number of answers. The items that obtained agreement greater than or equal to 80% were considered validated.

RESULTS

The initial version of the instrument contained 67 items; and, after content validation by experts and nurses' assessment, eight of them were deleted and regrouped with other items according to the modifications suggested during the content validation process. Thus, the final version of the Technology for Nursing Consultation for Transsexual Women consisted of 59 items divided into three blocks, in which the first block refers to Identification and is composed of 15 items that characterize Leninger's cross-cultural dimension and social structure of transsexual women. The second block concerns Clinical Data involving the gender transition process and has 14 items concerning the cross-cultural dimension of cultural care/being healthy. The third block corresponds to the Propaedeutics of Care and has 30 items related to the dimension of cultural care, in which were contemplated from the data referring to the physical examination to the direction for nursing care.

In the process of content validation, the 11 judges were all nurses; the prevalence was female (90.9%), age between 41 and 50 years (36.36%). The degrees ranged from one (10%) with specialization to one (10%) with a post-doctorate, with a predominance of six (54.54%) professionals who had a master's degree. Regarding the areas of work of the participants at the time of data collection, 27.3% worked in Women's Health, 20% in health care for transgender women, 18.1% in Collective Health, 18.1% in health management, and 16.5% in mental health.

All professionals had scientific production on LGBTQI+ care and had participated in training courses on the subject. In addition, 10 (90.9%) were teachers in higher education or specialization courses and taught curricular components related to sexuality and the LGBTQI+ population.

There was a minimum agreement of 80% for the 67 items evaluated, by the CVI or by the binomial test without statistical significance. Eight items obtained CVI lower than 0.8 and were considered validated, because their binomial test did not have statistical significance because the agreement was equal/superior to 80%.

In the validation of the first block, the judges' agreement was unanimous in five items regarding clarity, in six regarding relevance, and in eight regarding relevance, as detailed in Table 1. No changes were suggested in the items of this block, which remained with the 15 items proposed in the initial version.

In the validation of the second block, referring to relevance, all items reached CVI higher than 0.80. Regarding clarity and relevance, the value of 0.63 was observed for two items. Regarding clarity and pertinence, a value of 0.63 was observed for two items. However, it was identified the adequacy of all items, since there was no statistically significant difference in the 15 items evaluated. The suppression of the item "eating disorders" is noteworthy, because it was suggested that it should be inserted in the mental evaluation. Thus, the final version of this block was composed of 14 items.

In the validation related to the items of the third block, 30 items were considered clear and pertinent, with results for the CVI ranging from 90% to 100%, as presented in Table 3. The suggestions given by the expert judges led to the deletion of seven items that were regrouped. The items "weight and height", "Body Mass Index", "blood pressure", "temperature", "pulse", and "pulse: rhythm and amplitude" were now part of a single item called "vital signs and anthropometry". The item "frequency of bowel movements" became part of the item "elimination and excretion", and "peripheral perfusion" was now considered together with the "cardiovascular system". Thus, the block had 30 items in the final version.

Table 1 – Inter-rater agreement regarding clarity, relevance and pertinence of the items of Block 1 - Identification, of the Technology for Nursing Consultation to Transsexual Women (n = 11), Recife, Pernambuco, Brazil, 2020

Item	Clarity		Pertinence		Relevance	
	CVI*	*p*†	CVI*	*p*†	CVI*	*p*†
1. Social name	1	1	1	1	0.90	0.914
2. Date of birth	1	1	1	1	0.81	0.676
3. Date of admission	1	1	1	1	1	1
4. Contact	1	1	1	1	1	1
5. Have a partner	0.8	0.677	0.7	0.382	1	1
6. Sexual orientation	1	1	0.8	0.67	1	1
7. Ethnicity	0.9	0.914	1	1	1	1
8. Natural	0.72	0.382	0.90	0.914	1	1
9. Family situation	0.81	0.677	0.81	0.677	1	1
10. Religion	0.90	0.914	0.90	0.9141	0.81	0.677
11. Education	0.90	0.914	1	1	1	1
12. Profession/Occupation	0.72	0.382	0.72	0.382	0.9	0.914
13. Monthly income	0.9	0.914	0.72	0.382	0.81	0.677
14. Access to health services	0.9	0.914	0.9	0.914	0.9	0.914
15. Difficulty in access	0.9	0.914	0.9	0.914	0.9	0.914

** Content Validity Index. † Binomial test.*

Table 2 – Inter-rater agreement regarding clarity, relevance and pertinence of the items of Block 2 - Clinical Data of the Technology for Nursing Consultation with Transsexual Women (n = 11), Recife, Pernambuco, Brazil, 2020

Item	Clarity		Pertinence		Relevance	
	CVI*	*p*†	CVI*	*p*†	CVI*	*p*†
16. Main Complaint	1	1	1	1	1	1
17. Time of gender identification	0.81	0.677	0.81	0.677	0.81	0.677
18. Mental evaluation	0.63	0.161	0.63	0.161	1	1
19. Personal sexual disorders	0.63	0.161	0.63	0.161	1	1
20. Eating disorders	0.90	0.914	0.90	0.914	0.90	0.914
21. Psychological therapy	0.81	0.677	0.81	0.677	1	1
22. Hormone therapy	0.81	0.677	0.81	0.677	1	1
23. Medical prescription for hormone therapy	1	1	1	1	1	1
24. Effects of hormone therapy	1	1	1	1	1	1
25. Breast/breast surgery	0.81	0.677	0.81	0.677	1	1
26. Genital surgery	0.90	0.914	0.90	0.914	1	1
27. Voice therapy/voice surgery	0.90	0.914	0.90	0.914	0.90	0.914
28. Thyroid cartilage surgery	0.90	0.914	0.90	0.914	0.90	0.914
29. Buttock augmentation	0.90	0.914	0.90	0.914	0.90	0.914
30. Examinations performed	0.81	0.677	0.81	0.677	0.81	0.677

** Content Validity Index. † Binomial test.*

Table 3 – Inter-rater agreement regarding clarity, relevance and pertinence of the items of Block 3 - Propaedeutics of Care, of Technology to Transsexual Women (n = 11), Recife, Pernambuco, Brazil, 2020

Item	Clarity		Pertinence		Relevance	
	CVI*	*p*†	CVI*	*p*†	CVI*	*p*†
31. Weight and height	1	1	1	1	1	1
32. Body Mass Index	1	1	1	1	0.81	0.677
33. Blood pressure	1	1	1	1	1	1
34. Temperature	1	1	0.90	0.914	1	1
35. Pulse	1	1	1	1	0.81	0.677
36. General condition	1	1	1	1	1	1
37. Neurological Assessment	1	1	0.90	0.914	1	1
38. Visual Acuity	1	1	1	1	0.90	0.914
39. Auditory Acuity	1	1	1	1	0.81	0.677
40. Tonsils	0.90	0.914	0.90	0.914	0.81	0.677
41. Thyroid	1	1	1	1	0.90	0.914
42. Skin changes	1	1	1	1	1	1
43. Pulse: rhythm and amplitude	1	1	1	1	1	1
44. Peripheral perfusion	1	1	1	1	0.90	0.914
45. Cardiovascular system	1	1	1	1	0.90	0.914
46. Respiratory system	1	1	0.90	0.914	1	1
47. Breast examination	1	1	1	1	1	1
48. Digestive system	0.90	0.914	0.90	0.914	0.90	0.914
49. Genital evaluation	1	1	1	1	1	1
50. Inguinal hernias and lymph nodes	1	1	1	1	1	1
51. Hygiene of the neovagina	0.90	0.914	0.90	0.914	1	1
52. Perianal	1	1	1	1	1	1

To be continued

Chart 3 (concluded)

Item	Clarity		Pertinence		Relevance	
	CVI*	*p*†	CVI*	*p*†	CVI*	*p*†
53. Elimination and excretion	1	1	1	1	1	1
54. Frequency of bowel movements	1	1	1	1	1	1
55. Hours of sleep per night	0.90	0.914	1	1	1	1
56. Use of medicine to sleep	1	1	1	1	1	1
57. What medication do you use	1	1	1	1	1	1
58. Performs physical exercises	1	1	1	1	1	1
59. Time dedicated to leisure	1	1	1	1	1	1
60. Participates in social activities	0.90	0.914	1	1	1	1
61. Smoking	1	1	1	1	1	1
62. Drinks alcoholic beverages	1	1	1	1	1	1
63. Uses condoms	1	1	1	1	1	1
64. Multiplicity of partners	0.90	0.914	1	1	1	1
65. Use of psychoactive substances	1	1	1	1	1	1
66. Conduct	0.72	0.382	0.81	0.677	0.72	0.382
67. Referrals	0.72	0.382	0.81	0.677	0.72	0.382

** Content Validity Index. † Value of p.*

Table 4 – Agreement of nurses about the objective, structure, presentation, language and relevance of the Technology for Nursing Consultation for Transsexual Women (n = 6), Recife, Pernambuco, Brazil, 2020

Questions	CVI*	*p*†
1. Objective		
1.1 Content is clear and objective	0.83	0.622
1.2 Content is important for transgender care	1	1
1.3 Instigates changes in the attitudes of nursing professionals	0.83	0.622
1.4 Can be circulated in the scientific environment of the area	1	1
2. Structure, presentation and language		
2.1 It is appropriate for nursing care	1	1
2.2 Considers health promotion of transgender women	1	1
2.3 Instigates a change in nurses' attitudes	0.83	0.622
2.4 Can be circulated in the scientific environment of the field	1	1
2.5 It is appropriate for nursing care	1	1
2.6 Considers the promotion of transgender women	1	1
2.7 The content is easy to understand	1	1
2.8 The information is clear and objective	0.83	0.83
2.9 The content is scientifically correct	1	1
2.10 There is a logical sequence of the proposed content	1	1
2.11 Information is in agreement and spelled correctly	1	1
2.12 Writing style is appropriate for comprehension	1	1
2.13 The formulation of the sentences is attractive and not tiring	0.83	0.622
2.14 The number of pages is adequate	1	1
3. Relevance		
3.1 It is relevant for nursing care	1	1
3.2 It facilitates nursing care	1	1
3.3 It contemplates the stages of the nursing consultation	1	1
3.4 It is adequate to be applied to trans women	1	1

** Content Validity Index. † Value of p.*

In the evaluation of the technology by the six nurses working in care for transsexual women, the prevalence was female, with five (90.9%) nurses, the age range between 30 and 45 years, the master's degree in four (66.6%), followed by the specialist title, present in two (33.3%).

According to the nurses' evaluation, the instrument was considered understandable and obtained a minimum agreement of 83%. Of the 22 items evaluated, 15 (78.9%) obtained unanimous agreement regarding the objective, structure, presentation, language and relevance. Moreover, there was 100% agreement about the relevance and effectiveness as well as the clarity and importance of the instrument for clinical practice (Table 4).

DISCUSSION

The nursing practice occurs: through the Nursing Care Systematization (NCS), legally recognized in Brazil by Resolution No. 358 of October 15, 2009, of the Federal Council of Nursing (COFEN); by the implementation of the nursing process; and by the nursing consultation, a private activity of the nurse, regulated by the Law of Professional Practice No. 7.498/1986 and Decree No. 94.406/1984. Thus, the technology built for the nursing consultation with transsexual women configures itself as a tool that adds technical and scientific knowledge to the care of this population.

The items considered to compose the technology were organized into three blocks: Patient Identification, Clinical Data, and Propaedeutics of Care. This finding corroborates a study conducted in Brazil, state of Minas Gerais, which built and validated an instrument for nursing consultation to men's health in Primary Health Care (PHC). It was identified by professional experts the importance of using recording instruments that comprise interrelated and interdependent actions, which are data collection, nursing diagnosis, planning, implementation and evaluation of nursing[17].

The availability of a validated instrument supports the process of universality and inclusion in nursing care for the transgender population, since the invisibility of care for transgender women implies a barrier to the access of this population to comprehensive health care. This is observed in a research conducted in Espírito Santo, Brazil, whose results show that transgender women report the lack of respect for the social name, restricted tests for HIV/AIDS, as well as superficial guidance from professionals in health care[18].

In this context, the structure of the technology followed the assumptions of the nursing process and involves the identification of transsexual women regarding clinical aspects such as mental health care, hormone therapy, aesthetic surgery and sexual reassignment. The indicators that make up the technology have scientific evidence regarding its use[1] to subsidize the nursing consultation.

The experts agreed with the content for practical application in nursing care. This finding confirms the methodological research that built and validated an instrument for nursing consultation in an adult chemotherapy outpatient clinic, whose results showed that the judges considered the instrument applicable to guide nurses in oncology care and standardize the professional's action and record[19].

The choice of Leininger's theory for the basis of the technology provides a meaningful and effective nursing consultation for people according to their origins, characteristics, cultures and diverse discourses. The practice supported by this theory was also used in the care for women who experienced home birth in Spain: the use of the Sunrise Model in the nursing process allowed the identification of the multiple factors interfering in maternal health care, and may provide subsidies for the planning of health interventions[20]. Thus, there is the viability of using this theoretical reference in different contexts of nursing care.

From this perspective, the social structure and worldview of transgender women were listed through levels I and II of the Sunrise Model, in an understanding about the social determinants of health experienced. Thus, the instrument was built following the steps involving the nursing consultation to assist nurses in developing a cultural care congruent with the needs of transgender women.

The specificities of the technology were validated after the specialists agreed on the clarity, objectivity, organization and language of the instrument, aspects that are in line with the minimum recommended to consider the instrument valid[21].

This agreement is similar to that found in a Brazilian study that validated an instrument for nursing consultation to men's health in the state of Minas Gerais. Meeting the specificities that involve the uniqueness of men was reflected in the agreement of experts regarding the clarity, objectivity, organization and language of the instrument[22].

The items of the Identification block are related to the social structure dimension to which the individual belongs and include kinship, religious, political, economic, educational, technological, and cultural factors. These items are relevant for nursing care, because knowledge of the social context of trans women enables nurses to formulate an individualized care plan, aiming at comprehensive care.

In this sense, the instrument built for the nursing consultation with people with tuberculosis characterized the data collection as primordial for the nursing process and had as objective to analyze the environment where he/she is inserted and repercussions for the health-disease process[23]. Data collection suggests the use of recording instruments in order to make it systematic and sufficient to support the other steps that involve the nursing process[24].

Among the socio-demographic variables present in the instrument, the one related to work stands out, subdivided into occupation and profession, because this is also a social determinant that influences the individual's well-being. In the transsexual context, the insertion in the labor market is permeated, most of the time, by prejudice or as a consequence of it. Thus, information about work must be investigated in the data survey and be part of the instrument to be used in the nursing consultation with transsexual women.

Another variable of note refers to family composition. A Brazilian study conducted with transvestites living in Rio Grande do Sul found that they rarely live with family members, especially those who work as sex professionals. In addition, there is also drug use and reports of attempted suicide in times of suffering[25]. This justifies the fact that economic, family and social conditions have been included in the dimensions of the Sunrise model.

Another issue present in the context of transsexual women is the prejudice and/or repulsion they experience, called transphobia, which reflects discrimination and suffering in different moments and spaces of their lives: in the family, in the school environment, in social environments and at work. This prejudice culminates in social exclusion, evidenced by the reality of lower educational levels, underemployment, and prostitution to which these people are subjected[26].

The second block of the instrument contemplated the bio-psychosocial aspects, treatments, and exams in general. These are directly related to the procedures that involve the feminization of body appearance[27] and are inserted in the "Cultural Care" dimension, which represents the broadest holistic means to know, explain, interpret and predict the phenomenon of nursing care, to support guidance on women's care practices[28].

The judges' critical analysis for the second block indicated the insertion and more specific description of items such as hormonization, specific effects of its use, and the nomenclature that defines the types of genital surgery. The items inserted contemplate the demands necessary for body changes, such as hormones, prostheses, and sexual reassignment surgery, as well as hygiene care.

Hormones occupy a special place among the gender technologies appropriated early on by transsexual women; in this sense, self-prescription of the dosage or type of hormone is associated with greater control to accelerate the time of transition or to stop when results are achieved with other procedures[29]. These findings are related to research conducted in Rio de Janeiro, Brazil, in which low-income transgender women and transvestites reported side effects such as circulatory and liver problems and impotence/sexual disinterest arising from the continued use of these substances[30].

The clinical follow-up of hormonization should be individualized based on the goals of the person using the service,

the risk/benefit ratio of the drugs, the presence of other clinical conditions, and consideration of social and economic issues, as well as explanation of side effects among others[31]. Additionally, the transsexualization process involves a variety of surgical procedures. In today's surgical practice, pathological tissues are removed in order to restore altered functions, or body features are altered to enhance the self-esteem of the service user[32]. These aspects need to integrate the nursing consultation and be the target of the health education process, inherent to the professional nursing performance.

The third block of technology included the Propaedeutics of Care, which directs the physical examination of trans women, as well as indications of the main procedures that can support the nursing care plan; these are adapted to the particularities of these women, in search of the cultural congruence of care, in which the nurse can interact with the client in order to preserve, negotiate or standardize care[33]. It is important to point out that the constructed technology does not contemplate nursing diagnoses and interventions, but serves as a foundation for their construction, following the steps of the nursing process.

The physical examination constitutes the first phase of the nursing process and requires consistent clinical reasoning. With this, the nurse identifies the patient's needs and provides a plan of care based on human responses in order to select appropriate interventions[16]. A study conducted in Portugal evaluated the nursing consultation for people with diabetes: the collection of clinical data and vital signs as well as the physical examination including weight and height measurement were considered both for surveillance and therapeutic control and for planning care with individual goals and objectives[34].

In this perspective, the knowledge of cultural care can be developed after the nurse recognizes the dimensions that involve trans women, because it also considers the totality of human life, which allows the construction of a quality care[13]. These findings are justified since the identification of physical well-being and self-care conditions enables the transformation of clinical practice, impacting, especially, the planning of nursing care based on cultural care accompanied by conduct and referrals.

Study limitations

The study was limited because it was conducted with professionals from public health institutions, so that its findings may not correspond to what would be found among professionals working in the private network. Thus, it is suggested that the research be expanded to other Brazilian realities, since its application to other professional and cultural contexts may result in other demands for adjustments in nursing consultations. Another limitation refers to the fact that the technology supports only the stage of data collection, so that it is necessary to expand the instrument to the other stages of the nursing process.

Contributions to the Field

This study contributes to the professional practice of nurses, since the instrument proved to be directed to nursing care, with indicators that subsidize the clinical decisions of nurses to meet the health needs of transsexual women, based on the congruence of equitable care for integral needs.

CONCLUSIONS

The technology for nursing consultation with transsexual women was developed and its content was validated. The final version was composed of three blocks: Identification, Clinical Data, and Propaedeutics of Care. Each block contemplated aspects that involve the health process of transsexual women as well as the direction to the nurses in the care scope.

The items achieved content validity higher than 80%, which points to the feasibility of its application in other studies on the care for transsexual women in Brazil.

This technology represents an innovative tool to guide the nurse at the time of the nursing consultation in services that provide care for transsexual women; and can also be used in the academic field to contribute to the training of nurses. The need to investigate the effectiveness of the use of technology in clinical practice and the development of other instruments to support the other steps of the nursing process is highlighted.

REFERENCES

1. Pinto TP, Teixeira FB, Barros CRS, Martins, RB, Saggese GSR, Barros DD, et al. Silicone líquido industrial para transformar o corpo: prevalência e fatores associados ao seu uso entre travestis e mulheres transexuais em São Paulo, Brasil. Cad Saúde Pública. 2017;33(7):e00113316. https://doi.org/10.1590/0102-311x00113316
2. World Professional Association for Transgender Health (WPATH). Standards of care for the health of transexual, transgender, and gender nonconforming people [Internet]. 7ª ed. 2011 [cited 2021 Feb 05]. Available from: https://www.wpath.org/media/cms/Documents/SOC%20v7/SOC%20V7_English2012.pdf?_t=1613669341
3. Magno L, Silva LA, Veras MA, Pereira-Santos M, Dourado I. Stigma and discrimination related to gender identity and vulnerability to HIV/AIDS among transgender women: a systematic review. Cad Saúde Pública. 2019;35(4):e00112718. https://doi.org/10.1590/0102-311x00112718
4. Duarte DD, Carvalho Queluci G, Ferreira H, Chiszostimo MM. The nurse's respective in trans-person care. Res, Soc Develop. 2020;9(4):5. https://doi.org/10.33448/rsd-v9i4.2845
5. Fernandes MC, Silva W, Sousa Tolentino T, Araújo MJ, Souza Joventino ML, Silva PE. Conhecimento de profissionais de enfermagem acerca da assistência à saúde dos transexuais. Rev Ciênc Saúde Nova Esperança. 2019;17(2):34-44. https://doi.org/10.17695/revnevol17n2p34-44
6. Duarte MR, Alves VH, Rodrigues DP, Souza KV, Pereira AV, Pimentel MM. Care technologies in obstetric nursing: contribution to childbirth

and birth. Cogitare Enferm. 2019;24:e54164. https://doi.org/10.5380/ce.v24i0.54164

7. Preciado MM. Enfermería cultural: para cuidar en tiempos complejos. Cult Cuidados. 2018;22(51):7-10. https://doi.org/10.14198/cuid.2018.51.01
8. Olegário WKB, Fernandes LTB, Medeiros CMR. Validation of ICNP® nursing results for assistance to patients in the postpartum period. Rev Enferm UFPE. 2016;10(suppl 4):3507-16. https://doi.org/10.5205/1981-8963-v10i4a11124p3507-3516-2016
9. Jasper MA. Expert: a discussion of the implications of the concept as used in nursing. J Adv Nurs.1994;20(4):769-76. https://doi.org/10.1046/j.1365-2648.1994.20040769.x
10. Vinuto J. Amostragem em bola de neve na pesquisa qualitativa: um debate em aberto. Temáticas. 2014;22(44):203-20. https://doi.org/10.20396/tematicas.v22i44.10977
11. Pasquali L. Psychological instrumentation: fundamentals and practices. Porto Alegre, Brazil: Artmed; 2010.
12. Couto AM, Caldas CP, Castro EAB. Family caregiver of older adults and Cultural Care in nursing care. Rev Bras Enferm. 2018;71(3):959-66. https://doi.org/10.1590/0034-7167-2017-0105
13. McFarland MR, Wehbe-Alamah HB. Leininger's Theory of Culture Care Diversity and Universality: an overview with a historical retrospective and a view toward the future. J Transcult Nurs. 2019;30(6):540-57. https://doi.org/10.1177/1043659619867134
14. Costa CMA, Corrêa MCDV, Ribeiro CDM. Basic Capabilities for Transsexual Women: Strategies for the Evaluation of the Brazilian "Processo Transexualizador". DIVERSITATES Int J[internet]. 2015 [cited 2021 Feb 05];7(1):18-39. Available from: http://www.diversitates.uff.br/index.php/1diversitates-uff1/article/view/91
15. Silva Júnior SD, Costa FJ. Measurement and Verification Scales: a comparative analysis of Likert e Phrase Completion. PMKT Rev Bras Pesqui Market, Opinião Mídia[Internet]. 2014 [cited 2021 Feb 05];7(1):1-16. Available from: http://www.revistapmkt.com.br/Portals/9/Volumes/15/1_Mensura%C3%A7%C3%A3o%20e%20Escalas%20de%20Verifica%C3%A7%C3%A3o%20uma%20An%C3%A1lise%20Comparativa%20das%20Escalas%20de%20Likert%20e%20Phrase%20Completion.pdf
16. Bellucci Júnior JA, Matsuda LM. Acolhimento com classificação de risco em serviço hospitalar de emergência: avaliação da equipe de enfermagem. Rev Min Enferm[Internet]. 2012 [cited 2022 Apr 12];16(3):419-28. Available from: https://cdn.publisher.gn1.link/reme.org.br/pdf/v16n3a14.pdf
17. Santos KC, Fonseca DF, Oliveira PP, Duarte AGS, Melo JMA, Souza RS. Men's health care: construction and validation of a tool for nursing consultation. Rev Bras Enferm. 2020;73(3):e20190013. https://doi.org/10.1590/0034-7167-2019-0013
18. Rocon P, Rodrigues A, Zamboni J, Pedrini M. Difficulties experienced by trans people in accessing the Unified Health System. Ciênc Saúde Colet. 2016;21(8):2517-25. https://doi.org/10.1590/1413-81232015218.14362015
19. Tolentino GS, Bettencourt ARC, Fonseca SM. Construction and validation of an instrument for nursing consultation in outpatient chemotherapy. Rev Bras Enferm. 2019;72(2):391-9. https://doi.org/10.1590/0034-7167-2018-0031
20. Andina-Díaz E, Siles-González J. Cultural Care of Pregnancy and Home Birth: An Application of the Sunrise Model. Res Theory Nurs Pract. 2020;34(4):358-370. https://doi.org/10.1891/rtnp-d-19-00090
21. Martins FDP, Pontes CM, Javorski M, Gomes LF, Barros ACR, Leal LP. Design and validation of an evaluation instrument on knowledge of schoolchildren about breastfeeding. Acta Paul Enferm. 2017;30(5):466-78. https://doi.org/10.1590/1982-0194201700068
22. Santos KC, Fonseca DF, Oliveira PP, Duarte AGS, Melo JMA, Souza RS. Attention to men's health: construction and validation of an instrument for nursing consultation. Rev Bras Enferm. 2020;73(3):e20190013. https://doi.org/10.1590/0034-7167-2019-0013
23. Vale DL, Freire VECS, Pereira LFB. Nursing consultation in people with tuberculosis. Ciênc Cuid Saúde. 2020;19:e50102. https://doi.org/10.4025/cienccuidsaude.v19i0.50102
24. Mutshatshi TE, Mamogobo PM, Mothiba TM. Experiences of nurses during the implementation of the nursing process in selected public hospitals in the Vhembe District, Limpopo Province, South Africa: leadership in health care. African J Phys Health Educ Recreat Dance[Internet]. 2015 [cited 2021 Feb 05]. 21(suppl 1). Available from: https://hdl.handle.net/10520/EJC183622
25. Souza MHT, Pereira PPG. Health care: the transvestites of Santa Maria, Rio Grande do Sul, Brazil. Texto Contexto Enferm. 2015;24(1):146-53. https://doi.org/10.1590/0104-07072015001920013
26. Pereira LBC, Chazan ACS. The access of transsexuals and crossdressers to the primary health care: an integrative review. Rev Bras Med Fam Comun. 2019;14(41):1795. https://doi.org/10.5712/rbmfc14(41)1795
27. Benedetti M. Toda feita: o corpo e o gênero das travestis. Rio de Janeiro: Garamond; 2005. (Coleção Sexualidade, Gênero e Sociedade).
28. Silva ER, Alencar EB, Dias EA, Rocha LC, Carvalho SCM. Transculturalidade na enfermagem baseada na teoria de Madeleine Leininger. REAS/EJCH. 2021;13(2):e5561. https://doi.org/10.25248/reas.e5561.2021
29. Silva BP, Schons AAN. Development of a quick guide for the practice of health care for the transgender population. Rev Bras Med Fam Comun. 2019;14(41). https://doi.org/10.5712/rbmfc14(41)2027
30. Monteiro S, Brigeiro M. Experiences of access of trans / transvestite women to health services: advances, limits and tensions. Cad Saúde Pública. 2019;35:e00111318. https://doi.org/10.1590/0102-311x00111318
31. Nieder TO, Elaut E, Richards C, Dekker A. Sexual orientation of trans adults is not linked to outcome of transitionrelated health care, but worth asking. Int Rev Psychiatry. 2016;28(1):103-11. https://doi.org/10.3109/09540261.2015.1102127

32. Heck NC. Group psychotherapy with transgender and gender nonconforming adults: evidence-based practice applications. Psychiatr Clin North Am. 2017;40(1):157-75. https://doi.org/10.1016/j.psc.2016.10.010

33. Silva NRF, Farias DC, Sousa JR, Bezerra FMC, Ferreira LS, Carvalho PMG. [Nursing theories applied in the care of cancer patients: contribution to nurses' clinical practice]. Rev Uningá [Internet]. 2018 [cited 2021 Mar 09];55(2):59-71. Available from: https://revista.uninga.br/uninga/article/view/1385 Portuguese.

34. Sousa Z, Neves MC, Carvalho D. [Nursing Appointment: how, when and why]. Port J Diabetes [Internet]. 2018 [cited 2021 Mar 09];13(2):63-7. Available from: http://www.revportdiabetes.com/wp-content/uploads/2018/07/RPD-Vol-13-n%C2%BA-2-Junho-2018-Artigo-de-Revis%C3%A3o-p%C3%A1gs-63-67.pdf Portuguese.