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Validation of the content of the risk classification and screening instrument used in emergency units

Validación del contenido del instrumento de triaje y clasificación de riesgo utilizado en las unidades de urgencias

Validação do conteúdo do instrumento de triagem e classificação de risco utilizado nas unidades de pronto atendimento

ABSTRACT

Objective: to validate the part of the content of the Pre-Consultation of the instrument used in the Screening and Risk Classification of the Emergency Unit of João Pessoa -PB. **Method:** methodological research, with a quantitative approach, of the content validation type, carried out with 24 specialist nurses in emergency urgency. The analysis was performed in a statistical software in a descriptive way by means of relative and absolute frequencies. **Results:** facets were listed to judge the content of the instrument, namely: Clarity/language, Instrument layout, Risk Classification, Clinical judgment, Communication and organizational flow. The average in terms of facets was low from the judges' point of view. Through the suggestions and comments of the experts. **Conclusion:** in view of the results achieved, the aforementioned Risk Classification checklist has gaps in terms of clarity, language, organization of items, clinical judgment and communication. Based on this, a new instrument proposal was elaborated.

DESCRIPTORS: Emergency Nursing; Prehospital Care; Triage.

RESUMEN

Objetivo: validar la parte del contenido de la Pre-Consulta del instrumento utilizado en el Cribado y Clasificación de Riesgos de la Unidad de Emergencia de João Pessoa -PB. **Método:** investigación metodológica, con abordaje cuantitativo, del tipo de validación de contenido, realizada con 24 enfermeras especializadas en urgencia de emergencia. El análisis se realizó en un software estadístico de forma descriptiva mediante frecuencias relativas y absolutas. **Resultados:** se enumeraron las facetas para juzgar el contenido del instrumento, a saber: claridad / lenguaje, disposición del instrumento, clasificación de riesgos, juicio clínico, comunicación y flujo organizacional. El promedio en términos de facetas fue bajo desde el punto de vista de los jueces. A través de las sugerencias y comentarios de los expertos. **Conclusión:** a la vista de los resultados obtenidos, la lista de verificación de Clasificación de Riesgos antes mencionada presenta lagunas en cuanto a claridad, lenguaje, organización de ítems, juicio clínico y comunicación. En base a esto, se elaboró una nueva propuesta de instrumento.

DESCRIPTORES: Enfermería de Urgencia; Atención Prehospitalaria; Triage.

RESUMO

Objetivo: validar a parte do conteúdo da Pré Consulta do instrumento utilizado na Triagem e Classificação de Risco da Unidade de Pronto Atendimento de João Pessoa -PB. **Método:** pesquisa metodológica, de abordagem quantitativa, do tipo validação do conteúdo, realizada com 24 enfermeiros especialistas em urgência em emergência. A análise foi realizada em um software estatístico de forma descritiva por meio de frequências relativas e absolutas. **Resultados:** foram elencadas facetas para o julgamento do conteúdo do instrumento, a saber: Clareza/língua, Disposição do instrumento, Classificação de Risco, Julgamento clínico, Comunicação e fluxo organizacional. A média no tocante às facetas apresentou-se baixo do ponto de vista dos juízes. Através das sugestões e comentários dos especialistas. **Conclusão:** diante dos resultados alcançados, o referido checklist de Classificação de Risco possui lacunas quanto à clareza, língua, organização dos itens, julgamento clínico e comunicação. A partir disso, foi elaborada uma nova proposta de instrumento.

DESCRIPTORES: Enfermagem em Emergência; Assistência Pré-Hospitalar; Triage.

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INTRODUCTION

Urgent and emergency services are an important element in the health care network in Brazil. Due to the high demand, they present difficulties, which generates organizational problems, such as attendance on a first-come, first-served basis, without establishing clinical criteria and overcrowding the service, which can cause serious damage to patients.¹

In Brazil, one of the components of the Emergency Care Network (RAU - Rede de Atenção às Urgências) is the fixed pre-hospital care - Emergency Care Units (UPAs - Unidades de Pronto Atendimento), being a service that attends a large number of patients who seek urgency and emergency every day for various reasons, among them for being "open-door", with the possibility of offering prompt response.²

As a strategy in the face of the challenges related to the organization of emergency services, the Reception with Risk Classification was pointed out as a device for change in the work of health care, management and production.³

The nurse is the professional who is responsible for the risk classification, with experience in urgent and emergency servi-

ces, through Resolution No. 423/2012 of COFEN, which exclusively confers on the nurse, the function of acting in the risk classification, requiring technical and scientific competence in its execution.

Knowing that the instruments used to support and guide nurses in Screening and Risk Classification are essential tools for the improvement of clinical practice and operationalization of care, the instrument used in UPAs by nurses must be able to provide humanization of care, access, response quick and satisfactory to the user in critical health conditions and, therefore, it needs to be submitted to a validation process by experts, so that these professionals can give an opinion on the suitability of the instrument.⁴

Given this reality, is it possible to validate an instrument with a scientific basis to standardize and guide nursing consultation in the context of the Reception with Risk Classification and Screening?

Nursing pre-consultation in the context of Reception, Risk Classification and Screening must be able to guarantee effective and sufficient assistance planning to promote continuity of patient care.

Based on the theoretical assumptions that support the research, this study pursues the

hypothesis that the instrument used at the UPA is not sufficient to provide a systematic and effective way according to the perspective of Risk Classification and Screening.

In view of the need to guarantee quality care and risk-free care for the patient, as well as the recognition of the multiplicity of factors surrounding the Risk Classification process and, coupled with the concept that the continuity of care is based on the previous history and therefore, in the classification and pre-consultation, the importance of carrying out this study is justified, which aims to validate the part of the content of the Pre-Consultation of the instrument used in the Screening and Risk Classification of the Emergency Unit of João Pessoa-PB.

METHOD

Methodological, quantitative research, such as validation of the content of the pre-consultation of the instrument used in the Screening and Risk Classification - Attendance form of the UPA of João Pessoa PB, in the opinion of experts. The validation was carried out between the months of August and September 2020.

The first stage of the research was the search for possible experts capable of evalua-

ting the instrument. In the meantime, in the next step the experts were defined. In this respect, there was no consensus on who could be considered an expert, but some criteria were observed in the choice. Therefore, selecting nurses to assess the relevance or relevance of the content, that is, defining who the specialist nurses are, was a challenge. The wide knowledge of experts in the area subject to validation must be a premise to be considered.

With regard to the criteria for selecting experts and the use of the Content Validity Coefficient (CVC), the recommendations proposed by Fehring⁵ were used. He recommends a sample of 25 to 50 experts. For that, they were considered as eligible criteria to compose the sample of specialists able to validate the instrument, to those who have experience in clinical practice in the area of urgency and emergency, in addition to scientific production on the subject of study.

The sample size of specialists was established based on a proportion of 85% of EXPERTS WHO CONSIDERED RELEVANT each component evaluated. A difference of 15% was accepted in that PROPORTION, including a range of 70 to 100% in that PROPORTION. Thus, to determine the sample size, a formula was adopted which considers the final proportion of subjects in relation to a given dichotomous variable and the maximum acceptable difference of that proportion.

The characterization of the sample was calculated by the Statistical Package for the Social Sciences (SPSS) version 20.1 in a descriptive manner, by relative and absolute frequencies, with the variables: sex, age, state of residence, higher degree, area of specialization doctorate (when applicable), professional practice, master's and/or doctorate area (when applicable) and participated or taught a course and/or discipline related to risk classification.

The CVC calculation for the instrument's pre-consultation item was performed according to the formula recommended by Pasquali.⁶ The calculation of the Pei error was also performed by means of a formula, resulting in the calculation of the final CVC and the 80% agreement percentage (0,80) was adopted to indicate the pertinence of the items.⁷

Of the 31 invited experts, 24 agreed to participate in the study, for which the Invitation Letter, the Free and Informed Consent Form was sent by email and the right to anonymity was guaranteed, as well as the opportunity to refuse participation in the research or withdraw from it, if they so wished; and explained the stages of the study, exposure of the objectives and the research method and, through a Google form, the instrument was sent for the evaluation/validation by the specialists of the items contained in the "pre-consultation" part of the checklist used for Screening and Risk Classification used in the João Pessoa UPAs - PB. The experts responded on a Likert scale ranging from: I totally agree, I agree, I neither agree nor disagree, I disagree and I strongly disagree. The statements were categorized into facets and the average was calculated according to the number of statements referring to it for later calculation of the CVC.

The project was approved by the Ethics and Research Committee of the CCS/ UFPB, fulfilling the criteria established by Resolution No. 466/2012 of the National Health Council, which regulates research involving human beings. The consent for the execution of the research was obtained under the number 2.674.218.

RESULTS

It was possible to observe that 58.3% of the specialists were female, aged over 30 years and were residents of the state of Paraíba (n=14). In addition, most specialists worked in the hospital area (11; 45,8%), had specialization (11; 45,8%), with specialization in urgency and emergency predominating (12; 49,9%). It was then found that the specialists participating in the study had theoretical and technical knowledge, as well as experience, professional and academic experience with regard to the guiding questions of the themes of urgency and emergency. This data gives the group of nurses the competence to act as specialists.

The experts' responses to the "pre-consultation" item in the screening and risk classification checklist ranged from 0 to 5 according to clarity/language, instrument layout, risk

classification, clinical judgment, communication and flow.

The average of the item regarding the facets was low from the point of view of the judges, namely: 0,37 between the communication of feelings expressed by the patient, 0,41 for clinical judgment, 0,42 in the instrument's disposition, 0,46 in the organizational flow and 0,47 in the clarity and language and classification of the patient's risk.

Regarding the item Clarity / language, an expert suggested that some terms of the checklist be adjusted, for example: changing the term "shocked" by "shock signals", since it is the validation of a legal instrument that will compose the patient record. Another expert suggested to include the shock index score, "because it is of great prognostic value and easy to apply". Due to the consistency of the experts' suggestions, these suggestions were accepted and modified in the instrument.

An expert suggested that other conditions be listed, such as: pain, the presence or absence of injuries (exposed, closed) and also suggested "Split the assessment into clinical and traumatic patients". These suggestions were accepted and modified in the instrument.

Still in relation to the item of general assessment of the patient, an expert suggested that it would be interesting to "add data from the basic neurological exam". Other suggestions from the specialists regarding the disposition of the items of the pre-consultation checklist were answered, namely: "order by systems and severity levels, detailing the question of pre-consultation with the patient's complaints". As well as separating by gravity and having space to classify according to the "screening and risk classification protocol (like Manchester's)".

Table 1 shows the intra-rater CV and the general CVC of the instrument, which is classified as low (0,53), proving the alternative hypothesis of the study that the instrument part that contemplates the item Pre-consultation of the instrument used for Screening and Classification of Risk of patients treated at UPAs in João Pessoa, is insufficient for patient care.

Through the suggestions and comments of the experts, a proposal for a post-content validation instrument was elaborated. The

proposal aims at a practical and objective instrument, in order to systematize the risk classification and reception according to the clinical judgment of the professional nurse.

DISCUSSION

There was a predominance of female specialists, corroborating with other studies.^{8,9} This is explained by the fact that the female gender still prevails in nursing, evidencing the characterization of the performance of women in this professional category.¹⁰

The research results reinforce that the experts in the sample have an ideal profile with regard to the criteria for participating, given their qualification in the study theme. It is

necessary, in addition to practice, scientific deepening in the specific field to favor logical reasoning and increase experience.¹¹

In the risk classification, the investigation should be directed to the main complaint or incident that led the patient to seek care, and this complaint should be well investigated, since a better investigation of the main complaint, raises the priority level assigned to the patient.¹² It emerges from this context, the need for critical evaluation with greater attention and rigor of clinical utility, that is, it is necessary that the items arranged are able to measure and have greater applicability in the context of pre-consultation.

Risk classification and embracement are care strategies that propose to the nurse agi-

lity in assisting emergencies, guaranteeing priority of care for the most serious cases or those with greater risk. Therefore, having a targeted and organized instrument with items that list the priorities based on the dynamics of the service, facilitates the service and the work process.¹³

A study on the importance of neurological assessment in risk classification, states that neurological pathologies are highly prevalent in Emergency Care Units and involve extremely serious situations in which rapid and effective action directly impacts the patient's prognosis.¹⁴ Recognizing the importance of the suggestion to improve the neurological assessment of the patient, the data to assess this domain were included in the instrument.

The suggestions regarding the disposition of the items of the pre-consultation checklist corroborate with the Manchester Risk Classification and Screening protocol, in which the Protocol must be based on clinical priority levels, evaluated through the signs and symptoms reported by the patient.¹⁵

Classifying patients according to clinical severity is inherent to the practice of emergency nurses. That said, the nurse's decision-making should be judicious and based on the identification of the problem, through effective and targeted data collection, in order to identify the main complaint and then carry out the risk classification accordingly.¹⁶

However, in order to be able to assess the general condition of the patient, identify the factors associated with the clinical condition and classify the priority of care, the nurse needs the instrument used to be organized in cohesive and well-defined flows that guarantee the continuity of care in the urgency service.¹⁷

The use of a checklist prevents human errors and errors, through a systematic method and through controls and safety standards. Thus, the information stored in the instrument can serve to provide legal support for the institution and professionals.¹⁸

CONCLUSION

In view of the results achieved, it is proven that the mentioned Risk Classification checklist has gaps in terms of clarity, language

Table – Intra-evaluator and general content validity coefficient of the “pre-consultation” item in the checklist. João Pessoa, Paraíba, Brazil. 2020 (N=24)

JUDGE	AVERAGE	CVC INTRAVALUATOR
1	2,66	0,53
2	2,10	0,42
3	4,29	0,86
4	2,25	0,45
5	2,94	0,59
6	3,67	0,73
7	2,41	0,48
8	3,24	0,65
9	2,54	0,51
10	2,16	0,43
11	4,69	0,94
12	3,79	0,76
13	2,30	0,46
14	3,35	0,67
15	3,67	0,73
16	1,55	0,31
17	2,98	0,60
18	2,48	0,50
19	1,48	0,30
20	1,98	0,40
21	1,98	0,40
22	1,83	0,37
23	2,00	0,40
24	1,75	0,35
CVC		0,53

ge, organization of items, clinical judgment and communication. Therefore, it can be inferred that the content of the instrument that is used in the UPA is not sufficient to meet the assumptions that support the Risk Classification and Screening perspective. The results of the present study confirm the established hypothesis of the work.

After the analysis and discussion of the

results, there was a need to elaborate an intervention proposal with adaptation of the content of the pre-consultation instrument, which was built through the experts' suggestions and the reality of the emergency care services.

In addition, the present study will contribute substantially to attracting the attention of professionals regarding the

importance of adapting a pre-consultation instrument that enables safe care in the emergency department, in order to cooperate for a better prognosis for the patient.

Therefore, it is recommended that further research be carried out for the construction and validation of instruments aimed at the areas of emergency, also evaluating multiprofessional care. ■

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