

SERVICE USERS CLASSIFIED AS RISK LEVEL 'BLUE' IN AN EMERGENCY DEPARTMENT

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ABSTRACT: This study aimed to identify the sociodemographic characteristics, nosological profile and the reasons for seeking attendance of these service users, of 300 service users categorized as level of risk 'blue', in an Emergency Department in Campo Grande, Mato Grosso do Sul. The primary data were collected through interviews, and the secondary data from medical records, for the identification of the International Classification of Diseases code. Women predominated - 186 (62%), aged from 26 to 45 years old - 155 (51.7%), with an educational level of senior high school completed - 169 (56.4%). Headache was the principal complaint mentioned by the service users. The demand for services was due to the delay in attendance in the primary care centers, as well as the absence of doctors at that level of care. There was a predominance of diagnoses of the International Classification of Diseases and Health-related Problems, Z00 (General examination and investigation of persons without complaint; 23.3%).

DESCRIPTORS: Embrace; Emergency Medical Services; Prehospital Care; Urgent care.

USUÁRIOS DE CLASSIFICAÇÃO DE RISCO AZUL EM UMA UNIDADE DE PRONTO ATENDIMENTO

RESUMO: Este estudo objetivou identificar as características sociodemográficas, perfil nosológico e as razões pela busca desses usuários de 300 usuários de serviços na categoria de "risco azul" em uma Unidade de Pronto Atendimento em Campo Grande, Mato Grosso do Sul. Os dados primários foram coletados mediante entrevista e os secundários em prontuários, para identificação do código da Classificação Internacional de Doenças. Houve predominância do sexo feminino, 186 (62%), de idades de 26 a 45 anos, 155 (51,7%) e de escolaridade de ensino médio completo, 169 (56,4%). A cefaleia foi a principal queixa referida pelos usuários. A busca aos serviços foi em razão da demora do atendimento nas unidades de atenção primária, bem como a ausência de médicos neste nível de atenção. Predominaram diagnósticos da Classificação Internacional de Doenças e Problemas Relacionados à Saúde, Z00 (exame médico e investigação de pessoas sem queixas; 23,3%).

DESCRIPTORIOS: Acolhimento; Serviços médicos de emergência; Assistência pré-hospitalar; Socorro de urgência.

USUARIOS DE CLASIFICACIÓN DE RIESGO AZUL EN UNA UNIDAD DE EMERGENCIA

RESUMEN: Este estudio tuvo por finalidad identificar las características sociodemográficas, el perfil nosológico y las razones por la búsqueda de 300 usuarios de servicios de la categoría "riesgo azul" en una Unidad de Emergencia en Campo Grande, Mato Grosso do Sul. Los datos primarios fueron obtenidos por medio de entrevista y los secundarios por prontuarios, para identificación del código de la Clasificación Internacional de Enfermedades. Lo predominante fue sexo femenino - 186 (62%); edades de 26 a 45 años - 155 (51,7%); y escolaridad de enseñanza media (secundaria) completa - 169 (56,4%). La cefalea fue la principal reclamación hecha por los usuarios. La búsqueda por los servicios ocurrió a causa de la tardanza del atendimento en las unidades de atención primaria, así como la ausencia de médicos en este nivel de atención. Predominaron diagnósticos de la Clasificación Internacional de Enfermedades y Problemas Referentes a la Salud, Z00 (examen médico e investigación de personas sin quejas; 23,3%).

DESCRIPTORIOS: Acogimiento; Servicios médicos de emergencia; Asistencia prehospitalar; Urgencia.

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● INTRODUCTION

In order to extend the right – and qualify the access to health – of the service users in the health services, the Health Care Network is being implemented. In the urgent and emergency area, the services which comprise the Urgency and Emergency Network (RUE) include primary care, the emergency departments, and the hospital services. In this network, the Emergency Departments (UPA) are intermediate complexity structures which provide care to service users affected by acute or worsened situations of a clinical nature, as well as providing care in surgical or trauma situations⁽¹⁾.

The RUE, however, remains a weak area of the Unified Health System, due to the demand resulting from non-emergency cases which could have been seen in primary care and which, because of this, overload the urgent services, added to the insufficient structure of the points of the network and to the failure to follow this flow⁽²⁻⁴⁾.

The Ministry of Health's proposal to better organize the health service and the quality of the care is to move from the strategy of attendance by "order of arrival" to that of clinical priority, through the implementation of User Embrace and Evaluation with Risk Classification (AACR), providing greater speed in attendance with attention to the service users' needs, and promoting the reduction of risks⁽⁵⁾.

The AACR protocol recommends the stratification of risk in levels of priority, referred to by color, and related to waiting time for medical attendance, presenting greater credibility, validity and reliability in the evaluation of the patient's actual status⁽⁶⁾.

Among the protocols, there are those which have achieved a high degree of improvement, among these being the Canadian Triage Acuity Scale and the Manchester Triage System⁽⁷⁾.

In the municipality of Campo Grande, in the State of Mato Grosso do Sul (MS), the urgent and emergency services use AACR, based on the risk classification attendance protocol of the Odilon Behrens Hospital in Belo Horizonte, Minas Gerais, supported by the Manchester System⁽⁸⁾.

The risk classification system adopted presents four colors, red being for immediate attendance, yellow for urgency, without immediate risk of death, green being for no immediate risk of death, and blue for a chronic situation without acute suffering, or social cases (situations in which referral to the Basic Health Center is possible) and which can be attended after all the patients classified as red, yellow and green have been seen⁽⁸⁾.

In 2012, the UPA studied presented a total of 72,359 attendances, with a predominance for 'blue' classification – 34,353 (47.5%), followed by green – 31,543 (43.6%), yellow 6,312 (8.7%) and red - 151 (0.2%)⁽⁹⁾.

In the light of the high demand for attendance to users with the 'blue' risk classification, this study aimed to identify the sociodemographic characteristics, nosological profile and the reasons for which these service users sought attendance at the Emergency Department.

● METHOD

This is a transversal study with a quantitative approach, undertaken in an Emergency Department (UPA), in Campo Grande, Mato Grosso do Sul, in 2012 and 2013.

The convenience sample was made up of 30 service users/day, classified as 'blue' risk, distributed in the morning, afternoon and night shifts, over 10 intercalated days, totaling 300 participants. Participants of both sexes were included, aged 18 years old or over, and below 60 years old. People below 18 years old and over 60 years old were excluded. Being aged over 60 years old is a condition which characterizes the service user as having a 'green' risk classification⁽⁸⁾.

For the data collection undertaken in April 2013, primary and secondary data were used. The primary data were obtained through an interview applied by the researcher himself to the service

users classified as 'blue' risk, subsequent to the AACR undertaken by the nurse, in the health service itself. The data collection instrument was made up of objective questions, whose variables of interest for the study were: sex, age, education level, principal complaints and reasons for seeking attendance at the service.

As a secondary source, the medical records of the patients classified as 'blue' level of risk were sought, for identification of the International Classification of Diseases (ICD-10) code and in order to investigate the number of classification 'blue' attendances provided during the days studied, making use of the records from a spreadsheet of the service itself.

The data were entered into an Excel version 12.0 spreadsheet (Office 2007), and the results were analyzed using descriptive statistics with absolute frequency and percentage, and were discussed based on the relevant literature.

The study was approved by the Research Ethics Committee of the National School of Public Health/FIOCRUZ, under Opinion N. 238.586/2013.

● RESULTS

Of the total of 3016 attendances recorded in the period studied, 1105 were classified as 'blue', whose sample represented 300 service users. It was observed that the majority - 62% (186) were female. Of the total of the service users, there was a predominance - 51.7% (155) for the age range between 26 and 45 years old, and 56.4% (169) had completed senior high school (Table 1).

In relation to the mentioned place of residence, in the city of Campo Grande, there was a predominance of service users - 141 (47%) who lived in the Eastern Region, who belonged to the same urban region as the UPA studied, followed by 104 (34.7%) from the Southern Region; 33 (11%) from the Western Region and 22 (7.3%) from the Northern Region.

In relation to the principal complaints reported, headache, 21.7% (65) presented a greater occurrence, and among the reasons for attendance by the service users at the UPA, 30% (90) stated that this was due to the slow attendance in the primary care centers, and 55 (18.3%) that it was due to the absence of a doctor in these same centers (Table 2).

Table 1 – Sociodemographic characteristics of the users classified as level of risk 'blue', Emergency Department. Campo Grande, MS, Brazil, 2013

| Age range | N | % |
|-------------------------------|-----|------|
| 18 - 25 years old | 82 | 27.3 |
| 26 - 45 years old | 155 | 51.7 |
| 46 - 60 years old | 63 | 21 |
| Sex | | |
| Male | 114 | 38 |
| Female | 186 | 62 |
| Educational level | | |
| Basic education incomplete | 28 | 9.3 |
| Basic education complete | 31 | 10.3 |
| Senior high school incomplete | 24 | 8 |
| Senior high school complete | 169 | 56.4 |
| Higher education incomplete | 31 | 10.3 |
| Higher education complete | 17 | 5.7 |

Table 2 – Principal complaints and reasons mentioned by the service users classified as level of risk 'blue' of the Emergency Department. Campo Grande, MS, Brazil, 2013

| Principal complaints | N | % |
|--|-----|------|
| Headache | 65 | 21.7 |
| Cough/rhinitis | 37 | 12.3 |
| Fever | 28 | 9.4 |
| Vomiting | 18 | 6 |
| Diarrhea | 14 | 4.6 |
| Arterial hypertension | 9 | 3 |
| Others | 129 | 43 |
| Reasons for seeking attendance | | |
| Slowness of the attendance in the UBS/UBSF | 90 | 30 |
| Absence of Doctor in the UBS/UBSF | 55 | 18.3 |
| The place closest to their residence | 47 | 15 |
| Inability of the UBS/UBSF to resolve issues | 40 | 13.3 |
| Could not arrange a consultation in the UBS/UBSF | 29 | 9.7 |
| The place closest to their workplace | 10 | 3.3 |

The majority of the service users - 157 (52.3%) - mentioned unawareness of the functioning of the risk classification system adopted by the UPA and 199 (66.3%) stated that they did not seek attendance in the Basic Care Centers.

It was observed that among the medical diagnoses, there was a predominance of ICD-Z00 (general examination without complaint) in 70 (23.3%) attendances (Table 3).

Table 3 – Most frequent pathologies, according to the International Classification of Diseases-10, Emergency Department. Campo Grande, MS, Brazil, 2013

| Variables | N | % |
|---|------------|------------|
| Z00 - General examination without complaint | 70 | 23.3 |
| J00 - Acute nasopharyngitis (common cold) | 32 | 10.7 |
| A90 - Dengue (classical) | 17 | 5.7 |
| J03 – Acute tonsillitis | 16 | 5.3 |
| M54 – Dorsalgia | 16 | 5 |
| R10 – Abdominal and pelvic pain | 11 | 4 |
| B34 – Viral infection, place unspecified | 10 | 3.3 |
| R51 – Headache | 9 | 3 |
| J11 - Influenza due to unidentified influenza virus | 9 | 3 |
| N30 – Cystitis | 5 | 1.7 |
| M79 - Other and unspecified soft tissue disorders, not elsewhere classified | 4 | 1.4 |
| J06 - Acute upper respiratory infections of multiple and unspecified sites | 3 | 1 |
| N20 - Calculus of kidney and ureter | 3 | 1 |
| A09 - Diarrhea and gastroenteritis, presumed infectious | 3 | 1 |
| R05 – Cough | 3 | 1 |
| K52 – Other non-infectious gastroenteritis and colitis | 3 | 1 |
| Others | 86 | 28.6 |
| TOTAL | 300 | 100 |

● DISCUSSION

The identification of the sociodemographic characteristics of the population attended in urgent and emergency services is fundamental for defining priorities and providing a foundation for the planning of the local actions⁽¹⁰⁾.

The characteristic of the sample population in regard to the variable of sex was superior (62%) to the study undertaken in an emergency service in the Brazilian state of Bahia, which recorded 53.1% of service users being female⁽¹¹⁾. The literature indicates a slightly greater number of attendances provided to women in comparison with men in the urgent services⁽¹²⁾. One should emphasize that the higher presence of women qualifies this as an important protagonist in healthcare⁽¹³⁾.

One study undertaken in an emergency center in a teaching hospital in the non-metropolitan area of the State of São Paulo identified that the age range of patients seeking attendance was from 25 to 44 years old⁽¹⁰⁾. The results obtained in this study were similar, where the age range from 26 to 45 years old predominated.

Results relating to educational level, when compared to those found in this study, were different. Research undertaken in the emergency service of a hospital in the Brazilian State of Santa Catarina identified that about 38.9% of the service users had not completed their basic education⁽¹⁴⁾.

The largest number of service users seeking the services of the UPA center studied lived in the same

region as the center, that is, the Eastern Region. The literature evidences that a lower distance from a person's residence to the emergency service represents the principal reason for seeking attendance there^(11,15).

The main reasons mentioned by the service users for seeking attendance at a UPA were the delay in attendance and the absence of the doctor at the basic health center. This situation points to weaknesses in the municipality's primary health care network, as the primary health care center should be the gateway to the health system. These reasons may also explain these service users' failure to undertake follow-up in these centers.

These results may be explained by the ease of access and the impossibility of having recourse to other health services, which lead to overloading and to difficulty in dealing with the excessive demand in the emergency services from patients who are not seriously ill⁽¹⁶⁾.

The principal complaint mentioned by the service users in the present study was headache, corroborating the study undertaken in an emergency center in the nonmetropolitan area of the State of São Paulo⁽¹⁰⁾. It is worth emphasizing that the main complaints (headache, cough/rhinitis, and fever) are problems which could be attended in primary care. This profile of demand evidences an unequal distribution of the offering of services, not only from the quantitative point of view, but also qualitative, in primary, medium and high complexity care⁽²⁾.

The low population coverage, of 38.12%, in the period of this study, represented by 89 Family Health Strategy (ESF) teams in the municipality of Campo Grande, contributes to a higher demand comprised of attendances classified as 'blue' in the UPAs, causing an overload of attendances in these units.

A similar situation was observed in an urgent service of the municipality of Ribeirão Preto, which identified a reduced demand for the treatment of service users in the primary care centers and, consequently, an overloading of the urgent and emergency services⁽¹⁷⁾. In the restructuring of the care model, through the Urgent and Emergency Care Network, these ESF units must constitute service users' preferred contact, as the principal gateway and center of communication of the Health Care Network⁽¹⁸⁾.

Although publicized in the form of a welcoming banner explaining evaluation and assessment of risk in the reception area of the UPA studied, this strategy seems to be insufficient as a means of information for the majority of service users, who stated that they did not know about the routine of the AACR.

One challenge in this scenario is the consolidation of the work process of the AACR by the health professionals, such that the same may inform and guide the service user in relation to prioritization of attendances and undertake referral and counter referral with the health services which make up the Urgent and Emergency Care Network.

Among the medical diagnoses, there was a predominance of ICD-Z00 (General examination without complaint). This result indicates possible weak points in the records made in the medical records studied, as it does not clearly identify the complaint of the patient attended, resulting in a contradictory nosological profile.

In the investigation of the most frequent causes of attendances in an Emergency Department in Salvador, in the State of Bahia, codified under ICD-10, the presence was observed of illnesses of the "R" groups (symptoms, signs and abnormal findings from clinical and laboratory examinations not classified elsewhere) with 28.5%, and "J" (diseases of the respiratory apparatus), 16.4%⁽¹¹⁾.

● CONCLUSION

The present study evidenced that the majority of attendances to service users classified as 'blue' were for young adults, female, who had completed senior high school, and who came from the same urban region as the UPA.

The management model of the municipality of Campo Grande should ensure appropriate attendance at all levels, with priority for primary care, because primary care is considered the organizing element of the health care networks. It is worth emphasizing the importance of more coherent records, as the characterization of a nosological profile which allows planning of activities closer to the needs of the population assisted depends on these.

The Emergency Departments must have the infrastructure and multidisciplinary health team geared prioritarily towards attendances for patients affected by acute or worsened situations of a clinical nature, besides providing attendance to cases with a surgical or trauma nature, and defining the necessity or not for referral to the hospital services.

It is recommended that studies should be undertaken for investigating the weak and strong points of the attendances provided by the primary care centers, which entail overload of users classified as level of risk 'blue' for the Emergency Departments.

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