## CARE FOR PEOPLE WITH SICKLE CELL IN THE EMERGENCY ROOM: ACCESSING THE KNOWLEDGE OF A MULTIPROFESSIONAL TEAM

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#### **ABSTRACT**

This is a qualitative study aiming to analyze the knowledge of a multiprofessional team on caring of people with sickle cell disease (SCD) in the emergency room of a public hospital in the state of the Bahia, Brazil. Participants were ten health professionals from various categories, who work in the emergency room. For data collection, a semi-structured interview has been used then subjected to analysis based on the Collective Subject Discourse. From the analysis, three central ideas have built: the image of the person with SCD, explain about the disease and its complications and immediate measures employed in caring of people with SCD in an emergency. The speeches show that complications derive from late diagnosis and that there are failures in the reference system and counter reference one. It observed that the image produced on the person with SCD who admitted for the emergency refers to a fragile and vulnerable person; however, there are limitations on the tour. The care process should not be restricted to the identification of clinical signs and symptoms of SCD. It takes a holistic approach in perspective, so that interventions can contribute to overcome the limitations imposed by the disease.

Keywords: Hemoglobin sickle. Hospital emergency service. Patient care team.

## INTRODUCTION

Sickle cell disease (DF) comprises the hereditary Hemoglobinopathies that have in common the presence of hemoglobin S, sickle cell anemia (Publishers) to more serious clinical expression of DF<sup>(1)</sup>. This represents the most prevalent genetic disease in the world. In Brazil, the 3,500 children are born each year with DF and 200,000 with sickle cell trait. The gene can found 2% to 6% in the regions of the country, increasing from 6% to 10% on Afro-Brazilian population <sup>(1)</sup>

These characteristics should not be considered exclusive of this population, although reach large numbers, with high rates of morbidity and mortality, since it is a genetic disorder of Mendelian transmission, and a person can inherit it from your parents possess the gene for hemoglobin  $S^{(2)}$ .

In this group of diseases, hemoglobin undergoes polymerization and causes the deformation of red blood cell normal to sickle, with characteristic rigid and hardened, making it difficult to transport by vessels, which decreases of oxygen in the cells and organs, generating the vase-occlusion (2).

People who affected by this disease are subject to complications such as chronic hemolytic anemia crisis that may lead to increased susceptibility to infections, and systemic changes <sup>(3.4)</sup>. However, the situation that commonly drives people with DF to emergencies is the crisis <sup>(5)</sup>.

These crises are not abrupt, but occur so insidious, shaping up in chronic event, which tends to intensify in situations of increased vaseoclusion became intense and incapacitating <sup>(5)</sup>. People with DF should assisted as quickly as possible, and humanized by a team qualified, being of relevant importance qualified care,

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especially when subjected to pain crises, since they are vulnerable, too.

There are frequent hospitalizations of people with DF in Brazil and the emergency services accessed in 90.8% of hospitalizations <sup>(6)</sup>. In Bahia, a State whose population is mainly descendant, neonatal screening data indicates that the number of people who are born with DF currently is 1: 655 live births <sup>(6)</sup>. The earlier average of deaths reported in Brazil in population with DF was registered in that State, in which mainly young individuals and in adulthood have evolved to death, registering an average of 26.5 years in the period from 2000 to 2002<sup>(6)</sup>.

Emergency Unit (EU) considered gateway to medical care for people in need of an immediate quote, according to the intensity of symptoms and risk of death. First host site under assistance, area in which any individual in trouble will seek resolution <sup>(7)</sup>.

The emergency sector has its own characteristics that influence in the Organization of work and management of care. The health team in this sector needs to be able to treat the clinical pictures of DF for being responsible for providing the first aid (3).

The interest in this study was born from the observation of frequent doubts on the part of professionals working in emergencies to attend to the needs of the population with DF, identified by the authors in the development of training and research practices in hospital emergency scenario. Such reality proved contradictory in the State of Bahia, since this has the highest incidence of the disease in Brazil and, therefore, would expected to demonstrate security professionals to meet the specific needs of the population concerned. In addition, a gap identified in studies that examine the perspective of the health professional who assists people with DF.

Given the above, this study directed from the following guiding question: As a multidisciplinary team takes care of people with sickle cell disease in emergency unit. To answer this question, it is considered as objective: to analyze the speech of a multiprofessional team about taking care of people with sickle cell disease in the emergency unit of a hospital in the State of Bahia, Brazil.

## **METHODOLOGY**

Adopted model of descriptive exploratory study with a qualitative approach. The qualitative research design is flexible and involves a mix of data collection strategies. Is holistic, seeks understanding of the whole, requires that the researcher be involved intensively and the analysis of the data is continuing to formulate subsequent strategies (8)

This study carried out in the emergence of a public hospital in the State of Bahia, which serves its population registered and more surrounding municipalities 127. Currently, the services offered by this emergency health unit are internal medicine, general surgery, Neurology, obstetrics, orthopedics, oral and maxillofacial among other specialties, despite constant enlargements of physical structure and service still shows insufficient to meet local demand and all surrounding counties.

In all stages of the study, were respected the recommendations of resolution No. 196/96 of the National Health Council and was approved by the Ethics Committee of the Adventist College of Bahia CEP/0139 FADBA/2011 - CAAE n. 0135.0.070.000-11. The participants told about the risks and benefits, objectives of the study and signed an informed consent.

Who attended the following professionals participated inclusion criteria: be effective employee of the institution, find themselves in performance in the emergency unit for at least one year, be a part of the multidisciplinary team of health.

Data collection took place by means of semi-structured interviews recorded transcribed in full. For organization, tabulation and analysis of methodological strategy adopted the collective subject discourse (DSC), which consists of fragments of individual speeches as many speeches-how many synthesis necessary for expressing a given representation or way of thinking about the phenomenon studied<sup>(9)</sup>.

The speeches were grouped by themes correspond to the objective proposed. Each DSC was associated with a relevant central idea that allows the analysis of the statements.

### **RESULTS AND DISCUSSION**

Professionals who participated acted in an EU: nurses, nursing technicians, doctors, social workers and nutritionists, who met the inclusion criteria. The amount thereof has omitted in this study to preserve their identities.

The interviews have previously negotiated with the professionals, seeking to comply with the routine of the institution, the specificity of the sector and availability of participants.

It should noted that when asked about his academic training to approach on DF, 50% of the subjects claimed not to have received any information during graduation, and 10% of the subjects stated that they had only participation in events on the subject.

The following are the central ideas that configure the experiences of a multiprofessional team while watching a person with DF in the emergency unit.

## The image of the person with sickle cell disease

Is a patient of risk, which at the same time, it can worsen and wound up in the hospital have to have healthy food, medical follow-up. Affects mainly people of black race, there is no cure, but treatment and if the trace does not develop the disease. We see how a patient feels a lot of pain is intense pain primarily in plaintiff LL. Patient has pain crises throughout the course of the disease [...] are discolored, weakened patients, sometimes they don't even know that depression, STROKE, chronic pain, low immunity, fragility is due to illness, weight loss, priapism is a complication of sickle cell disease and in emergency there's no time to give that kind of guidance and information (DSC1).

In this speech, the pros allude how conceive the figure of the person with the DF as a subject of the black race, fragile, puny body, emaciated, pale, vulnerable to various health problems and uninformed about the disease and its impact.

Study, in Brazil, in the State of Minas Gerais, asserts that the person with DF presents body development slower, not corresponding to their chronological age, which can result in decreased self-esteem, culminating in social isolation (10)

The Association of the disease as "Blacks" prevents envision professionals subject to

other race/color with DF, this refers to little information received by these professionals in their training, since the DF can occur in fair-skinned people due to miscegenation. It is worth mentioning that the fragile appearance as well as vulnerability to opportunistic diseases related to the late diagnosis of the disease that involves delayed access to treatment and adherence to self-care measures can reflect the socioeconomic conditions, the standard of living, and access to health services for control of the disease.

Studies in the United Kingdom <sup>(11)</sup> and USA <sup>(12)</sup> highlight that the image assigned to the person with DF, has been pegged to the stereotype of the person so dependent on drugs frequently these people remain hours waiting for service in an emergency, when are met does not have continuity in treatment and, in the vast majority of the time, receive inadequate assistance.

The various complications in DF appear suddenly and vary in severity, age and sex of the individual <sup>(10)</sup> .Generally, people with DF feature the immune system deficient in combating infections and opportunistic infections, wound healing is slow and sudden dehydration occurs during crises <sup>(13)</sup>

The pale stems from levels of decompensation of the disease and hemolytic crisis evident, not being a person with standard DF, but rather a circumstantial situation secondary to complications (14). The understanding that the pallor is a characteristic of the person with DF can hinder the prompt identification of hemorrhagic frames slowing attendance.

It is important to note that the differences in clinical presentation of these patients related to environmental factors and genetic factors. Among the environmental factors, the socioeconomic status of the patient, especially their family income, type of food, basic sanitation conditions and medical care available, absolutely affects the quality of life and interferes significantly in health <sup>(15)</sup>.

The low educational level linked to economic shortage can generate a backdrop of difficulties for person with DF. Study on blood donation and the Association of persons with DF the city of Uberaba, Minas Gerais assessed the presence

of pain in people with DF in accordance with the personal characteristics, socioeconomic and cultural. It observed that the pain interfered significantly in black and in individuals with low educational level <sup>(10)</sup>. Thus, the lack of information and orientation favors the worsening of complications.

## Explanation about the disease and its complications

Professionals recognize the DF as a pathology characterized by abnormality of red blood cells, hereditary nature of a chronic nature. Point the main situations that culminate with the departure of the people to the emergency room, being they: algic crisis, priapism, infection, STROKE, and splenic sequestration, the latter being, for them, the most common charge by deaths of this population, on the drive on which they operate. As referred to the participants:

Red blood cells deformed, with formation of abnormal sickle shaped cells carrying oxygen. By its irregular blocks easily small veins causing a lot of pain in patients is a hematological disease, genetics, hereditary the son inherits from parent, and degenerative, that downloads the patient's immunity. And piling up in the spleen that in reaction to this and then abducting happens what we call of splenomegaly, enlarged spleen. Splenic sequestration is severe, but sometimes when the diagnosis is closed, the patient is already very serious and ends up going to the death, mostly children. Common complications in emergency service are pain, priapism, splenic sequestration, STROKE, and infection. In an emergency, are patients who arrive with a more advanced framework, by the fact of not having a good assistance in basic attention, it would be a gateway. If the patient diagnosed, the disease soon, so early, would avoid this kind of major complications in the ER. [...] (DSC2).

Through the speech, the team argues that the acute frames forwarded to the emergency are due to late diagnosis and bankrupt of assistance in the basic attention to the management of the disease.

When patients seeking urgent and emergency service, two situations: they are presenting complications or have not instructed on how to proceed in the face of some clinical manifestations. The who says that the mortality in children under five years is 25%, and in young adults under the age of twenty-five years,

reaches 70% percentage, considering that the average life of a patient with DF is approximately forty-two years for men and 48 years for women (16).

Because the DF present intense complications and high morbidity and mortality throughout the national territory, it is necessary an assist with a focus on clinical picture presented, as well as a support to achieve basic levels of attention to urgent and emergency care (14). Before the speeches, revealed that EU workers have basic knowledge, succinct and limited to define DF.

It should noted that splenic sequestration is not the only hemorrhagic event culminates, quickly, with death people with DF, coagulation disorders, hemorrhagic stroke, cholelithiasis and acute abdominal frames with mesenteric ischemia are expected complications in DF <sup>(3)</sup>.

Another complication of DF found in the EU is the acute chest syndrome (STA) which consists of dyspnea, chest pain, fever, tachypnea, and leukocytosis and pulmonary infiltrates on radiography. Affects about 30% of adult patients and can be potentially fatal. It is the second most common cause of hospitalization and the leading cause of death among elderly people with DF (17).

## Immediate measures employed in the care of the person with sickle cell disease in emergency

The speech of the professionals underlines the pain as the prioritized situation in attendance to the person with DF in emergency. In this sense, centered on the pain that every assistance will addressed, with a devaluation of the physical examination for the survey of potential problems that his own algic crisis might signal. As evidenced in the following speech:

Most often, it's just really moisturize and analgesia the patient they have really strong pain crises and need medications well efficient, stronger than a simple analgesic the doctor usually prescribes a large volume of intravenous hydration, pain relievers start always with a weaker and increases as his pain. Everybody hydrates view the dosage of hemoglobin, hematocrit dose, to see if it needs a transfusion and tends to improve their pain with infusion of serum or with cold compresses. In emergency, acting with the medical corps and nursing care, aiming to ease the pain, we do the symptomatic medication, calls for some tests. Depending on

the severity, we internally or not and forwards to the Hematology sector, and he is accompanied not by the diarist and hospital clinical in hematology service. In an emergency, first step is to not only to the client as to family members, psychological support, monitoring of the family is essential to understanding (DSC3).

If the complete physical examination disregarded, the care based solely on what the subject says he is feeling, and health professionals tend to treat only symptoms interpreted by the patient. So, offered exclusively painkillers and hydration to the patient.

Study shows that 90% of hospitalizations occur for the treatment of vase-Occlusive crisis and the emergence of this is unexpected <sup>(14)</sup>. This crisis can relate after dehydration, exposure to cold, emotional stress, intense exercise, use of alcohol or diuretics, acidosis or hypoxia, infection. Therefore, the multidisciplinary team should alert the patient to avoid these situations <sup>(10)</sup>

The algic language crisis is the most frequent symptom of DF occurs by the slowness of the blood flow and hypoxia, which influenced by the amount of fetal hemoglobin present in cells. These episodes of pain acutely are installed, which can last hours or days, and often affect bones and joints, abdomen, back and chest (14). In this way, requires separate intervention, compared to reporting of professionals in relation to cold compresses, and exposure to cold aggravates the clinical picture. Since chronic pain is a public health issue, it is necessary to consider that in your treatment, you must pay attention to overcoming pain and stimulate the adoption of self-care skills (10).

The speeches reveal how pain crises marked the life of these people with DF, from the professional look, so, for them, the person with DF experiences both acute pain such as chronic. These words denote that the professionals anchor the image of person with DF in pain.

Despite professionals focus their attention on pain, this symptom in emergency is undervalued subtracted. The majority of patients experience pain in not relieve as analgesic conduct proposal. The Ministry of health reinforces the importance of standardization of analgesic ducts in the attendance of algic crises, by making a specific protocol for acute events management (18)

Assess the pain majority's responsibility of medical staff and nursing care and, thus, requires critical thinking and effective. Pain relief interventions require evaluating the patient after a period, and the physical examination should be a facilitator for clinical research. Therefore, an adequate assessment of the team makes pipes, in order to minimize possible damage to the patient's health.

To refer to pain, as a condition of chronic disease, in DF, whose person and have a family history and previous experiences in relation to this pain, noted how difficult it is for the health care professional assesses the pain away from the social context, cultural, historical, psychological and emotional in which the person is located. For that, we must establish a trust relationship that patient and family with the multidisciplinary team.

Faced with a disease marked by tissue hypoxia, professionals not cited in any of his statements to oxygen as a measure to offered in the ER. Oxygen must use in order to supplement and, if there is hypoxemia. The blood transfusion should mediated only in refractory seizures, with careful not raise hematocrit above 30%, therefore one must transfuse red blood cells concentrate leucorreduzidos discarding donors with sickle cell to avoid Rh incompatibility (14).

Because of the aggravation of the disease, it is necessary that the multiprofessional team keep watching, paying attention to the signs of pallor, fever, behavior changes, pain, dyspnea, tachypnea, weakness, enlarged spleen, tiredness, and other aggravations. The nurse and the physician should perform thorough physical examination and thorough so that they can be identified in the evaluation, systemic changes, among others (16).

It is clear, as regards the activities of health professionals, the challenge facing to meet and intervene in matters involving people with DF, humans who build their experiences in daily experiences with family, groups, science, society, and politics. These professionals need constant qualification for clinical management and the early recognition of complications, in

addition to hear and understand what the other has to say, guiding your actions and decisions, and respecting their narratives (19).

### **CONCLUSION**

In this study, a multidisciplinary team shows, by means of speeches, the image they make about the person with DF that enters the emergency unit in that Act, refer to the figure of a fragile person, vulnerable and needy of care, however there are limitations in the provision of such assistance to the extent that, despite several serious situations point, presented by these people, show that there are knowledge gaps of this team for the identification of important complications of DF.

In an emergency, to relate to the service offered, these professionals focus his speech on control actions solely from the pain. It presents itself as a problem to fixed, in the unit under study, with a focus on improving the conditions offered to the team for the execution of the work, in addition to constructing protocols that guide that do daily.

As consideration for the care people with DF, it is important that the multiprofessional team have adequate observation and evaluation of clinical pictures making it possible to help the patient, namely, dealing with the problem during the course of life, recognizing signs of complication of the disease, noting the side effects and duration of action of medications and

assisting in the identification of psychosocial problems.

These people need to accompany specialized reference centers capable of providing global, multidisciplinary, multiprofessional care. Faced with this reality, it is clear that we must ensure the person with DF broad access to health, through a policy of comprehensive care, starting by neonatal screening, preventive measures leading to the treatment of acute and chronic complications as early as possible.

By acknowledging the magnitude of the issues that permeate the discussions about health care for people with DF, take care of these constitutes a challenging role for multidisciplinary team, in that the process of care should not be restricted to the identification of clinical signs and symptoms of the disease. Approach is necessary in a holistic perspective, so that interventions can contribute in overcoming the limits imposed by the disease.

This study points to the need to deepen the issues highlighted in new research, from the exploitation of knowledge of each professional group, in particular nurses and doctors because they are those that evaluate and assist directly those with DF in emergencies. In addition, it is evidenced, also, the need for inclusion of topics focused on care to these people in the training of health professionals since graduation.

# CUIDAR DE PESSOAS COM DOENÇA FALCIFORME NA UNIDADE DE EMERGÊNCIA: DISCURSO DE UMA EQUIPE MULTIPROFISSIONAL

### RESUMO

Trata-se de um estudo qualitativo, com objetivo de analisar o discurso de uma equipe multiprofissional sobre cuidar de pessoas com doença falciforme na unidade de emergência de um hospital público do estado da Bahia, Brasil. Participaram 10 profissionais de saúde das diversas categorias, que atuavam na emergência. Para apreensão dos dados, utilizou-se a entrevista semiestruturada, em seguida, submeteu-se a análise mediante a técnica do Discurso do Sujeito Coletivo. A partir da análise, foram construídas três ideias centrais: a imagem da pessoa com doença falciforme, explicação sobre a doença e suas complicações e medidas imediatas empregadas no cuidado à pessoa com doença falciforme na emergência. Os discursos evidenciam que as complicações são provenientes do diagnóstico tardio e que existem falhas do sistema de referência e contra referência. Observa-se que a imagem elaborada sobre a pessoa com doença falciforme que adentra na emergência remete a uma pessoa frágil e vulnerável, contudo, há limitações na assistência. O processo de cuidar não deve se restringir à identificação de sinais e sintomas clínicos da doença falciforme. É necessária uma abordagem na perspectiva holística, para que as intervenções possam contribuir na superação dos limites impostos pela doença.

Palavras-chave: Hemoglobina falciforme. Serviço hospitalar de emergência. Equipe de assistência ao paciente.

## CUIDADO DE LAS PERSONAS CON ENFERMEDAD DE CÉLULAS FALCIFORMES EN LA UNIDAD DE EMERGENCIA: EL DISCURSO DE UN EQUIPO MULTIPROFESIONAL

#### RESUMEN

Se trata de un estudio cualitativo, con el objetivo de analizar el discurso de un equipo multiprofesional sobre el cuidar de personas con enfermedad falciforme en la unidad de urgencias de un hospital público en el estado de Bahia en Brasil. Participaron 10 profesionales de salud de distintas categorías, que actuaban en urgencias. Para la toma de datos, se utilizó la entrevista semiestructurada, a continuación, se sometió al análisis mediante la técnica del Discurso del Sujeto Colectivo. A partir del análisis, se construyeron tres ideas centrales: la imagen de la persona con enfermedad falciforme; explicación sobre la enfermedad y sus complicaciones; y medidas inmediatas empleadas en el cuidado a la persona con enfermedad falciforme en urgencias. Los discursos evidencian que las complicaciones son provenientes del diagnóstico tardío y que hay fallas en el sistema de referencia. Se observa que la imagen elaborada sobre la persona con enfermedad falciforme que entra en urgencias se refiere a una persona frágil y vulnerable, con todo hay limitaciones en la atención. El proceso de cuidar no debe limitarse a la identificación de indicios y síntomas clínicos de la enfermedad falciforme. Hay una necesidad de un abordaje en la perspectiva holística, para que las intervenciones puedan contribuir en la superación de los límites impuestos por la enfermedad.

Palabras clave: Hemoglobina falciforme. Servicio hospitalario de urgencia. Equipo de atención al paciente.

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