

ANOSMIA: DESCRIÇÃO DESTA CONDIÇÃO POR PROFISSIONAIS DE SAÚDE E RELATOS DE PESSOAS QUE CONVIVEM COM A CONDIÇÃO

ANOSMIA: DESCRIPTION OF THIS CONDITION BY HEALTH PROFESSIONALS AND REPORTS FROM PEOPLE WHO LIVE WITH THE CONDITION

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ABSTRACT

Aim: This research was qualitatively dedicated to apprehending the knowledge of health professionals from a basic health unit in the Baturité massif about anosmia and reports of people living with this condition. Methods: Data collection with health professionals was carried out on the premises of the health unit, following all preventive measures against Covid-19, through a script with open questions, on the other hand, the collection of reports from the individuals living with anosmia was made through a social network application (WhatsApp®). Results: Nine health professionals (n=09) and eight people living with anosmia (n=8) participated in the study. The lines seized from the interviews with health professionals were used to complement the approach to the theme by people living with anosmia and representations of the interviews with people living with anosmia were distributed into six categories: anosmia versus taste; odor interpretation; feeling about anosmia; embarrassment/shame/fear/confrontation; diagnostic itinerary; family disbelief/suffering and perception of risks associated with anosmia. Final considerations: From the interview with health professionals, most demonstrated knowledge of the cause and, about people living with the condition, positive and optimistic feelings were observed as a way of coping with the condition, but also negative feelings such as fear, shame, embarrassment, and anxiety that serve as an obstacle to seeking help from specialized professionals and social interaction.

Keywords: Anosmia; Knowledge; Report.

RESUMO

Objetivo: Essa pesquisa dedicou-se qualitativamente, apreender o conhecimento dos profissionais de saúde de uma unidade básica de saúde do maciço de Baturité sobre a anosmia e relato de pessoas que convivem com essa condição. Métodos: A coleta de dados com os profissionais de saúde foi feita nas dependências da unidade de saúde, seguindo todas as medidas preventivas contra Covid-19, por meio de um roteiro com questões de caráter aberto, por outro lado, a coleta dos relatos dos indivíduos que vivem com anosmia foi feita por meio de um aplicativo da rede social (WhatsApp®). Resultados: Participaram nove profissionais da saúde (n=09) e oito pessoas que convivem com anosmia (n=8). As falas apreendidas da entrevista com os profissionais de saúde foram utilizadas para complementar a abordagem da temática pelas pessoas que convivem com anosmia e as representações das entrevistas com as pessoas que convivem com anosmia foram distribuídas em seis categorias: anosmia versus paladar; interpretação do odor; sentimento em relação constrangimento/vergonha/medo/enfrentamento; anosmia; itinerário diagnóstico; familiar/sofrimento e percepção de riscos associados a anosmia. Considerações finais: Da entrevista com os profissionais de saúde, a maioria demonstrou conhecimento da causa e no que concerne as pessoas que convivem com a condição, foi observado sentimentos positivos e otimistas como forma de enfrentamento à condição, mas também sentimentos negativos como medo, vergonha, constrangimento e ansiedade que servem de obstáculo para busca ao auxílio de profissionais especializados e de interação social.

Palavras-chave: Anosmia; Conhecimento; Relato.

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INTRODUCTION

Smell is an important sensory function for basic functions such as orientation, feeding, recognition of danger and socialization. The word anosmia is subdivided into two parts: "a" which means without and "nosmia" (1). In this sense, anosmia is characterized by the absence of the olfactory sensation and this absence can be congenital or acquired.

Congenital is the condition in which there is an absence of smell at birth due to some type of genetic disorder and the acquired one is caused by the sequelae of an infection, damage to the sensory neurons of smell, nasal diseases, head trauma and the use of some toxins. There are 3 types of anosmia: complete anosmia, characterized by the total loss of the individual's olfactory functions; functional anosmia, when there is severe limitation of the olfactory function, and partial anosmia, when there is a marked reduction in odor sensitivity (1).

There are several causes associated with the smell disorder, such as: sinus pathology (chronic rhinosinusitis and infectious processes); aging; trauma (intracranial facial involvement); or neurodegenerative diseases (Parkinson's disease, Alzheimer's disease, cognitive deficit and multiple sclerosis); iatrogenics (chemotherapeutic drugs, sinus surgery, tracheostomy); congenital diseases (Turner's



syndrome and Kallman's syndrome); exposure to toxins; nutritional deficiency (malnutrition and pernicious anemia); HIV; psychological disorders (schizophrenia and depression); surgery and idiopathy (1-2).

In addition, (3) consider that the loss of olfactory ability also has an impact on the individual's personal hygiene, as people can exaggerate their personal hygiene, taking a shower several times a day or using perfume excessively.

Epidemiologically, decreased olfactory function is very common, especially in the elderly population, being present in more than 50% of individuals between 65 and 80 years of age, and in 62 to 80% of those aged over 80 years. In Europe, about 5% of people suffer from olfactory disorders and, nevertheless, olfactory disorders are often undervalued perhaps because olfactory information is processed largely unconsciously.

Thus, the prevalence of self-reported olfactory loss is between 14% and 15% of cases, with the real prevalence of these disorders being underestimated. Some authors point to a prevalence of anosmia of one in every 200 people (1).

According to (4), the sense of smell is greatly underestimated in importance in humans, despite its usefulness not only in monitoring the entry of harmful agents into



the upper airway but also in determining the taste and palatability of a food, for example.

The current context observed in the literature, regarding the number of materials produced and published on the study of diseases related to the human senses, leads us to face these issues in a different way, especially among health professionals.

There are still limited researches in the health area and, more specifically, that are located in the search for information regarding anosmia.

This lack can have a direct influence on the effectiveness and efficiency in the provision of care in these cases by professionals and, as stated (5), the lack of knowledge and training of health professionals in the daily routine about this condition can lead to management errors and diagnosis of olfaction disorder.

In this line of thought, this research is justified by the concern to know more about anosmia, emphasizing the knowledge and experience of health professionals. On the other hand, apprehending the reports of people living with the condition is also necessarv support the research. Additionally, the interest in this work is explained by the fact that the researcher lives with this condition and by the recognition of the need for expansion and dissemination of information related to anosmia. And the hypotheses that guide the development of the



work are: 1- professionals have limited knowledge and experience regarding this condition; 2- people living with anosmia face physical and social maladjustments throughout their lives.

AIM

Seize the knowledge of health professionals about anosmia and reports of individuals living with the condition

METHODS

This is an exploratory study, with a qualitative approach, conducted in December 2020 with health professionals and people living with anosmia.

Research with people living with anosmia

Data collection about the reports of people living with this condition was done through a social network application (WhatsApp®).

The sampling technique used was the non-probabilistic type, following the snowball model (snowball) for people living with anosmia, depending on their time availability, in which each participant indicates new participants until they reach the proposed objective (6). In this sense, the sample consisted of eight participants (n=8), and the number of people accessed from the return of contact through the researcher's social network.

The following inclusion criteria were chosen: living with anosmia, being over 18



years old, having a cell phone, computer or tablet with internet connection and access to the WhatsApp application and personal email; and as exclusion criteria: having some type of communication limitation, previously reported by the participant in the first contact with the researcher, which prevents their manipulation of the technology; present transient or transient anosmia, related to various causes, including COVID-19.

Proof of adulthood was done by sending the image of the participants' identity document, the communication limitations were asked directly to the participants so that, if applicable, identify diseases such as Alzheimer's, Parkinson's and Down's Syndrome, for example. In cases of recent anosmia related to COVID-19, the condition was evaluated based on the duration of the absence of sense, considering recent with a report for less than one year.

The research steps were: dissemination of information about the research through the researcher's social network, including invitation and request to contact people within the inclusion criteria; return of participants and establishment of contact through WhatsApp; proof of age and clarification of research objectives; sending the consent form for reading and signing; beginning of the audio interview; end of interviews; analysis of the data obtained. This interview had as a guiding question: "how is your experience



with this condition?". The finding of anosmia was considered based on self-report and on the context associated with the participant's speech and on the reported duration of the absence of smell.

Survey with health professionals

Data collection with health professionals was carried out on the premises of a basic health unit in the Massif de Baturité, considering all prevention and protection measures against Covid-19 recommended by the WHO.

The intentional sampling technique was sample form used to the of health professionals, and the choice of participants was made based on the researcher's own judgment, based on pre-established criteria. The sample consisted of nine health professionals (n = 9) who make up the unit's framework. obeying the criterion theoretical saturation, data considering saturation when there is no new element and it is no longer necessary to add information, since it does not alter the understanding of what is being studied (7).

The following inclusion criteria were established: being regularly linked to the health unit, having at least six months of professional experience; and as an exclusion criterion: being on vacation, leave or leave. Data collection had the following steps: clarification of the research objectives;



delivery of an informed consent form (TCLE) for reading and signing in case of agreement; beginning of data collection through a script with open-ended questions; end of data collection; analysis of the data obtained.

The script contained four questions to guide the completion of this by the professionals, namely: Have you ever heard about anosmia? If so, what do you know about this condition? Do you know or have you seen any person who lives with this condition? What would be the cause? Which risk(s) can present a person in this condition?; How could a health professional help this patient? In addition, age, gender, professional category, working and training time were also included in the script as a way to identify the profile of each participant.

Data organization and analysis

After completing the interviews with professionals as well as people living with anosmia, full transcriptions of the audio recordings and the responses obtained in completing the script were made for each participant. The data analysis step was carried out as follows: pre-analysis, in which the material was organized as part of the research corpus; exploration of the material and treatment of results (8).

After transcribing the audios and analyzing the data, the recordings were kept saved in the researcher's notebook computer



and, after the recommended four years of storage, for the purposes of review and formal proof of the research, the files will be permanently deleted. The data obtained were organized in Word version 2010. Then, a qualitative analysis was performed, obtaining the frequencies of categorical variables, standardized by counting the number of words in the total corpus in relation to the categories obtained.

Ethical issues

The ethical principles of scientific research were observed, which aims to be concerned with the ethical dimension, confidentiality ensuring and reducing physical, financial or emotional damage to the participant, as regulated by the National Ethics and Research Commission (CONEP). This research sought to minimize damage to participants and avoid predictable risks, even if categorized as minimal, in the moral, social and psychological scope, in the short and long term, complying with Resolution 466/12 of the National Health Council. : annoyance; from tiredness; discomfort; embarrassment; social tension or even in the relationship with the researcher; access limitations in relation to internet connection and stress related to the recall of negative life experiences, amplified by the context of the situation of social distancing related to the COVID-19 pandemic.



So, to minimize these risks, the preventive measure was: data collection in the shortest possible time; and, in the event of an internet connection failure, the momentary suspension of the survey, with a forecast to resume on the following day or another day designated by the participant, within the time limit determined to complete the entire survey.

The project object of this work, was submitted to the appreciation of the Research Ethics Committee of UNILAB, having been approved, according to CAAE and 33428720.4.0000.5576 opinion no 4.444.498. The subjects' autonomy, nonmaleficence and beneficence of the research were guaranteed, as recommended Resolution 466/12 of the National Health Council.



RESULTS AND DISCUSSION

This chapter is dedicated to the analysis of the content that emerged from the speeches of the research participants interviewed about living with anosmia in its qualitative dimensions. Eight people with anosmia from different nationalities participated in this research, three of which were of Brazilian nationality, two of Angolan nationality, two of Santomean nationality and one of Guinean nationality, aged between 21 and 49 years.

The representations will be discussed from six categories and six subcategories found in the speeches of those involved in the research with people living with anosmia and will be complemented with the speeches involved from the research with health professionals throughout the text.

Table 1 - Characterization of health professionals.

Professional category	Age	Working time	Graduated time	
Doctor	59	25 years	20 years	
Doctor	37	04 years	06 years	
Community health agent (CHA)	-	04 years	04 years	
Community health agent (CHA)	34	04 years and 06 months	08 years	
Nursing technique	49	20 years	25 years	
Nursing technique	60	10 years	30 years	
Nurse	24	01 year and 08 months	01 year and 08 months	
Nursing assistant	49	19 years	15 years	





Nursing assistant	53	02 years	20 years
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Source: The authors

It is noteworthy, in an isolated way, based on the research with health professionals, that the concept of the subject was questioned based on the following question: Question 01 (PR01): Have you ever heard about anosmia? if so, what do you know about this condition? five of the nine participants conceptualized it more accurately and closer to reality. On the other hand, four of the nine participants did not know how to go deeper into the theme, therefore, these

participants did not feel able to continue and answer the other questions in the research script.

Participants who were unable to answer the questions posed could perceive a small inconvenience and, at the same time, an interest in researching and seeking knowledge about the subject, in addition, it is believed that this contact with the topic has been a positive experience.

Table 2 - Distribution of categories and subcategories emerged from the speeches of research participants – people living with anosmia. Redemption - CE, 2021.

CATEGORIES AND SUBCATEGORIES	REGISTRAT ION UNITS*	PROPORTI ON [%]
CATEGORY 1: DIAGNOSTIC ITINERARY	1.240	39,1
Subcategory 1.1. Etiological factors: upper airway infections; head trauma and irrational use of medications	882	71,1
Subcategory 1.2. Etiological factors: idiopathy and genetics	358	28,9
CATEGORY 2: FEELINGS RELATED TO ANOSMY	696	21,9
Subcategory 2.1. Negative: Embarrassment/Shame/Fear/Anxiety	399	57,3
Subcategory 2.2. Positive: Coping	297	42,7
CATEGORY 3: FAMILY DISBELIEF/PSYCHIC SUFFERING	328	10,3
CATEGORY 4: PERCEPTION OF RISK ASSOCIATED WITH ANOSMIA	314	9,9
CATEGORY 5: IMPACT OF ANOSMIA ON THE TASTE	305	9,6
Subcategory 5.1. Absence of taste change	168	55,1
Subcategory 5.2. dysgeusia	137	44,9
CATEGORY 6: ODOR INTERPRETATION	292	9,2

^{*}Registration Units: number of characters with space that make up each of the speech segments. Source: The authors





Category 1: Diagnostic Itinerary

This category represents the path taken by individuals with anosmia from the perception of a change in smell to the search or not for medical help. The clinical trajectory of the participants is important to understand the challenges in their relationships with health services, their etiological factors as well as their feelings about anosmia, which can interfere in the search for help from qualified health professionals for the condition in cause.

Table 3- Verbalizations of the diagnostic itinerary category and its subcategories

Unit of Meaning	Absolute	Proportion
Category 1- Diagnostic itinerary	Frequency	(%)
Subcategory 1: etiological factors: upper airway infections, irrational use of medications and head trauma	882	71,0
Subcategory 2: Etiological factors: idiopathy and genetics	358	29,0
Total	1.240	100,0

Source: The authors

Subcategory 1 - etiological factors: upper airway infections, irrational use of medications and head trauma

Rhinitis (allergic or not) and sinusitis (occupational or not) stand out as the most common upper airway infections among people. These infections are directly related to direct inhalation of toxic products, allergens, drugs and metals that, depending on the concentration and time of exposure, can cause serious damage to the airways (5).

[...]I worked for a long time in a closed environment, handled a lot of

antibiotics, I don't know if that influenced [...]. It was a closed environment and antibiotics were very strong, you have to dilute, wait a long time to be able to dilute that powder and there were days when I didn't have adequate PPE to work (Participant 1, Brazilian, 49 years old, female).

[...]because I have allergic rhinitis and rhinitis ends up causing this anosmia [...] it is already something, let's say, chronic. [...] I never went to an ENT consultation because I know that it is rhinitis that causes this (Participant 3, Guinean, 25 years old, female).

The cause was the exaggerated use of nasal decongestants, as it is a





vasoconstrictor and its irrational use causes problems in the nasal mucosa and even in more serious cases, heart problems (Participant 6, Brazilian, 25 years old, male).

According to the authors (1-2), there are several factors involved in post-trauma anosmia, such as damage to the nasal cavity, neuroepithelium or olfactory nerve, contusions, hemorrhages in brain regions, especially in situations of frontal or occipital impact. One study showed trauma in the frontal area sometimes lead to loss of smell, but complete anosmia is 5 times more prevalent in people with trauma in the occipital region, and it can appear soon after the trauma or months later:

[...] I don't know what caused me to lose my sense of smell, but I'm 90% sure it's trauma because I've already suffered a lot of fall and hit my head. I never had rhinitis, sinusitis, nothing like that [...] (Participant 2, São Tomé, 25 years old, female).

Subcategory 2 - etiological factors: idiopathy and genetics

On the other hand, there are cases in which there are not enough reasons to justify the olfactory dysfunction, which is called an idiopathic cause. Congenital anosmia is the total loss of smell since birth in fully healthy individuals (1). These two situations are notable between the lines of the following speeches:



[...] I never went to the doctor to find out [...] because I always thought it was normal. I don't even know what caused it (Participant 4, São Tomé, 26 years old, female).

I knew that I don't smell from 7 to 8 months of my pregnancy and I didn't look for treatment thinking that when I was in the postpartum period I would recover my sense of smell, but until today, nothing and Pedro will already be 6 years old [. ..] I'm not sure of anything that caused this (Participant 5, Brazilian, 48 years old, female)

[...] I was born with this problem [...] Besides me, there is no one else in my family with this problem[...] (Participant 7, Angolan, 24 years old, male).

I don't know what concrete caused it, because at 12 years of age, I sometimes smelled it, despite being a rare situation [...] I never went to a consultation to find out what caused it[...] (Participant 8, Angolan, 21 years old, male).

As can be seen in these speeches, anosmia does not always have an apparent cause and when medical help is not sought, doubt and uncertainty are even more present. In addition, the help of health professionals includes essential requirements for the recovery of smell or even preventing future complications such as ageusia. Health professionals add more about this, as shown below, based on the following question: PR04 How could a health professional help this patient?



Early diagnosis and treatment (Participant 1, Physician, 59 years old, male).

Control of symptoms, etiology and general guidelines (Participant 2, Physician, 37 years old, male)

Try to guide the patient to seek medical help (Participant 4, CHA, 34 years old, female)

Choosing a good perfume and saying that the food is not good (Participant 5, Nursing technician, 49 years old, female).

Refer them to the specialist and help them devise strategies to identify certain situations in other ways (Participant 7, Nurse, 24 years old, female).

Taking them to the doctor (Participant 9, Nursing assistant, 53 years old, female).

However, most participants never sought help to try to resolve the condition, some due to lack of knowledge about the condition and others out of shame. And the speeches of some health professionals corroborate the speeches presented by people who live with anosmia about the etiology. This fact can be seen in the following speeches, based on the question:" PR02. Do you know or have you seen any person with this condition? What would be the cause?"

Yes, with Covid-19 (Participant 1, Physician, 59 years old, male).



Yes, currently increasing number due to the new coronavirus pandemic (Participant 2, Physician, 37 years old, male).

Yes, cause unknown (Participant 4, CHA, 34 years old, female).

Brother, because of allergic rhinitis (P5, Nursing technician, 49 years old, female).

Despite not being the focus of the research, two professionals mentioned Covid-19 as the etiology of anosmia. So, it is assumed that this quote is due to the fact that we are currently living in the world, the Covid-19 pandemic) in which many people have complained about the loss of smell and because it is a subject that directly or indirectly surrounds us every day, especially the health professional in the exercise of their profession (9).

Category 2: Feelings about anosmia

This category emerges in what participants with anosmia are able to feel in the face of the situation they experience daily. The feeling is something intrinsic to all human beings and can be negative or positive, in addition, it can manifest itself in different ways depending on each person and the context in which it is inserted.





Table 4: Verbalizations of the diagnostic itinerary category and its subcategories.

Unit of Meaning	Frequency	Proportion	
Category 2 - Feelings about anosmia	absolute	(%)	
Subcategory 1: negative:	399	57,3	
embarrassment/shame/fear/anxiety		2 / ,2	
Subcategory 2: positive: coping	297	42,7	
Total	696	100,0	

Sourse: The authors

Subcategory 1 - negative: embarrassment/shame/fear/anxiety

Feelings are part of a state of mind that arise according to external stimuli or triggered by self-failure when trying to meet goals and and unlike positive feelings, standards negative feelings cause unpleasant feelings in people. Shame and embarrassment feelings that have varied and peculiar characteristics. They appear in different intensities, and can manifest in a simple way until reaching a complex degree of suffering, which often becomes irreversible. These feelings are unavoidable, as they help us to protect our privacy and intimacy simultaneously, however, they are capable of punctual blocks serious causing and difficulties in development, social interaction, self-knowledge and requesting help in situations that are needed (10).

[...] that's how Ι feel even embarrassed about, for example, I'm working, there's an odor, a smell, something, people ask, are you feeling this smell? Did vou understand? I feel embarrassed to say that I don't smell that smell (Participant 1, Brazilian, 49 years old, female).

I've gone through many embarrassments because of this, with friends, family and classmates. [...] I'm ashamed to tell people that I don't smell (Participant 2, São Tomé, 25 years old, female).

I did not seek help from a doctor because of the fear of people also knowing that I don't feel it. Sometimes it's embarrassing, right (Participant 5, Brazilian, 48 years old, female).

I don't usually speak, but sometimes I'm afraid of being noticed, and I'm also ashamed of using too much perfume, sometimes I get close and notice annoyed looks with smell (Participant 6, Brazilian, 25 years old, male).



Sometimes I feel embarrassed (Participant 8, Angolan, 21 years old, male).

Another reported feeling is fear, characterized by an emotion that has its direct and clear cause, for example, the fear of dying. Fear influences the physical and emotional well-being of human beings, fitting into anxiety patterns, as it is related to intense, excessive, persistent worry and fear of everyday situations that already exist or have not happened yet (11).

Another important factor is insecurity for the future, as aging naturally reduces the perception of smell and this leads me to believe that in old age my problem will get worse. And then I am already preparing myself psychologically for this (Participant 6, Brazilian, 25 years old, male).

I live in fear of this situation, because a tragedy could happen because of it (Participant 8, Angolan, 21 years old, male).

The importance of correct management of negative feelings is perceived as the frustration of not smelling can lead an individual to loss of appetite and eating disorders, which can ultimately cause problems in physical as well as psychological health, leading to a more serious situation of a depressive or anxiety disorder.



Subcategory 2- positive: coping

On the other hand, some participants reported positive feelings related to the cognitive and behavioral effort that people demonstrate to deal with different situations they experience in their daily lives, and this is aimed at accepting the situations experienced, as can be seen in these speeches.

I'm not ashamed to talk to people, I talk normally. I am of the opinion that you have to warn, at least to the people around you[...] (Participant 3, Guinean, 25 years old, female).

[...] My living with this is normal [...] when I buy cream or something else, I don't smell it, but I use it anyway. I'm not ashamed to say[...] that I don't smell, I say good (Participant 4, São Tomé, 26 years old, female).

[...] I'm not afraid to tell people that I don't smell because I've learned to live together and accept myself that way. This is already part of me [...] (Participant 7, Angolan, 24 years old, male).

I'm not ashamed to tell people that I don't smell (Participant 8, Angolan, 21 years old, male).

These people showed positivity in their speeches, even in the face of this condition. In fact, this is one of the few ways to internalize that your condition is not enough reason to give up on living happily. And this thought is essential for the person to live a life of tranquility, without excessive worries that only bring health consequences.





In this category, the participants highlighted the reaction of their families and, as the family represents union, security, love, support, coexistence, affection and sharing of feelings, it stands out as essential in the process of understanding and accepting the condition in which the participants meet, which is to live with a condition that for some, is unknown, which, however, raises many doubts.

Family disbelief has a strong impact on the individual's life, and can cause strong psychological distress that is usually consummated by a set of actions manifested over a short or long period of time and this significantly influences the way the individual will deal with a given situation, therefore, it is believed that when in difficult situations, the first support that the individual can count on is that of their family members (12). The following statements demonstrate that families do not always support each other, not for lack of love, but for lack of knowledge of the cause:

[...] I was sure that I didn't smell it when I was 14 and my parents also started to believe, but before that I suffered a lot because my parents didn't believe in it, especially my mother, for lack of knowledge or whatever. Several times my mother hit me because I let the food burn and I always told her that I didn't



know it was burning [...] Thank God, one day my parents were feeling that there was something bad about entered House[...]. They room[...], they found a dead mouse right under my bed[...] They were perplexed [...]. In the morning they called me, told me what had happened and then asked me to close my eyes and did a series of tests with me to see if I really didn't smell it [...]. After that day, they started to support me psychologically and took me for consultations[...] (Participant 2, São Tomé, 25 years old, female).

When it started, my parents didn't give it much credibility, they thought it would pass, but it didn't and I got like that... and they still think it's funny[..] (Participant 4, São Tomé, 26 years old, female).

I highlight, however, participant 2's speech as one of family disbelief, but at an extreme level because, in addition to distrust, her parents made her undergo tests so that she could really prove that she doesn't smell. It is understood that it was a remarkable situation in his life and that it had enormous significance, which unfortunately, does not portray a good memory. As mentioned in other statements by this same participant, she feels ashamed of her condition and analyzing the statements in this category, it is possible to make a list of one of the factors that triggered this negative feeling.

Category 4: Perception of risk associated with anosmia



It is believed that individuals with anosmia have an advantage, such as not having to smell unpleasant smells, but it turns out that anosmia also negatively affects the quality of life of these people, being essential to detect dangerous situations found in everyday life, like smoke, gas leaks and spoiled food. Individuals with anosmia are three times more likely to be at risk of experiencing one of these events accidentally compared to normosmic individuals. They are also required to double personal hygiene care, and some may unconsciously overuse the products (3).

Although anosmia is a little debated topic in its broadest aspect, some discourses show that there are also risks of developing some mental disorder due to this daily concern with oneself, because there are still cases in which the individual has difficulty in purchasing some hygiene products personal like perfume, deodorant, body creams and more. So, it is essential that there is also adequate psychological support on an individual basis, so that these necessary cares do not become a burden.

When I'm cooking, I have to keep looking at the pan so I don't run the risk of burning. This condition of mine also led me to be much stricter with my hygiene and my room and pay more attention to gas at home[...] (Participant 2, São Tomé, 25 years old, female).



[...] I remember that sometimes my brother would pass by and notice that the gas was open and it would close, while I couldn't handle it there [...] the only problem that I once had is because I put a pan on the fire and like I burned the pot until the fire really came out, I almost burned down a house (Participant 3, Guinean, 25 years old, female).

[...] there was a day when there was a gas exhaust, when the house was already fully taken, I came to take care of it (Participant 5, Brazilian, 48 years old, female).

[...] I have some coexistence problems, such as choosing a perfume, smelling the smell of burnt food, of sour food (Participant 7, Angolan, 24 years old, male).

I run the risk of being in a fire situation, for example, and I can't handle it (Participant 8, Angolan, 21 years old, male).

The speeches of health professionals reinforce the risks that these people face daily.

Depending on how, it can even pose a risk of death associated with covid (Participant 1, Physician, 59 years old, male).

Impact on social life and relationship with food (Participant 2, Physician, 37 years old, male).

Risk of eating spoiled food (Participant 4, CHA, 34 years old, female).

Eating spoiled food, wearing strong perfume and risk of loss of taste





(Participant 5, Nursing technician, 49 years old, female).

Smell is a protective instinct. A person with this condition runs the risk of going through some dangerous situation where they can be identified by their sense of smell (fire, gas leak) (P7, Nurse, 24 A, female).

Some of the risks presented by the participants, if not avoided, can cost their lives, therefore, the importance of health professionals in their screenings to assess the

degree of impairment of each individual's sense of smell, to understand in a holistic way the situation of each one, of to provide guidance on the prevention of these risks.

Category 5: Impact of anosmia on taste

This category represents the influence of anosmia on taste over time, based on the self-report of some participants, as a consequence of this condition.

Table 5: Verbalizations of the impact of anosmia on taste category and its subcategories

Unit of meaning		Absolute	Proportion
Category 5- Impact of anosmia on taste		Frequency	(%)
Subcategory 1: Absence of taste alteration			
		168	55,1
Subcategory 2: Dysgeusia		137	44,9
	Total	305	100,0

Source: The authors

Subcategory 1- Absence of taste alteration

Through some speeches, it is clear that not all individuals with anosmia have difficulty in identifying the taste of food and beverages, which is in fact positive, considering that it is one less concern, compared to other participants who face changes in the taste as a consequence of anosmia.

- [...] The taste is like that, I feel the salt, I feel the sugar, but I don't have a sense of smell[...] (Participant 1, Brazilian, 49 years old, female).
- [...] I can usually differentiate food flavors, well, at least until now, right. I really like cooking, baking, these things, right[...] (Participant 3, Guinean, 25 years old, female).
- [...] I can handle food normally, thank God. I know different flavors too, so my taste buds are still sharp. I



didn't lose my taste buds because of this (Participant 4, São Tomé, 26 years old, female).

I like cooking a little and I really enjoy the food[...] My taste buds are really fine (Participant 8, Angolan, 21 years old, male).

Fortunately, these people did not have the displeasure of also losing their taste buds, but, on the other hand, there are people in more challenging situations, who, in addition to losing their sense of smell, also have difficulties in identifying food flavors, which influences the performance of their activities daily, such as cooking.

Subcategory 2- Dysgeusia

Not all people with anosmia have the privilege of keeping their taste buds sharp. Some lose this ability to taste food and drink. The sense of smell plays an important role in eating behavior, including appetite stimulation and flavor perception during the preparation or consumption of any food. Some studies have shown that the reduction or loss of taste is one of the common complaints among people living with anosmia (13). This change is notable between the lines of the following self-reports:

[...] I've been realizing for a year that I'm also losing my taste buds[...] (Participant 2, São Tomé, 25 years old, female).



I have difficulty handling food. Nowadays, I need people's help to check the food[...] making me afraid and leading me to the habit of sniffing everything I eat, even though I know I don't smell it. [...] I developed systemic arterial hypertension due to less taste of flavors and therefore using more spices in the preparation, such as salt and sugar to enhance the flavor (Participant 6, Brazilian, 25 years old, male).

Highlighting the speech of participant 6, the loss of taste can also have health consequences due to the exaggerated use of certain products routinely used for food preparation. Therefore, it is important to have a support network, willing to help people in these situations in order to prevent or reduce possible secondary pathologies, such as hypertension, for example.

Category 6: Odor interpretation

This category describes how participants interpret odor based on their daily perceptions, even if they do not actually smell the smell itself. Some people are born smelling and then lose the ability to smell it, so there is an olfactory memory (5).

So, if, before losing the sense of smell, the person liked the coffee a lot, and when he drinks the coffee again, he will imagine that he is smelling that smell given the memory he has of the coffee. This fact is reported in one of the speeches:



[...] when I go to change a patient, his diaper is very full, I feel the acid burning my nose, it's not burning, it bothers me to burn, but I feel his presence entering my pits [...] [...] some foods, I believe it's because the flavor is stored in my brain, I still enjoy eating because I remember the taste and I put it in my mouth[...] (Participant 1, Brazilian, 49 years old, female).

[...] Sometimes when I make coffee and you can smell it, it's a joy, I think it's because I already have the smell of coffee engraved in my memory, I think like that (Participant 5, Brazilian, 48 years old, female).

In these speeches it is noticeable that we as human beings have the ability to associate the smells we feel and generate memory in the brain, so it can be said that odors have the power to influence human behavior. And this memory becomes an important useful tool for individuals living with anosmia, helping in this process of living with this condition.

FINAL CONSIDERATIONS

From the results obtained, it was considered that anosmia is not a topic totally unknown by health professionals, as these health professionals who participated in the research demonstrated knowledge about the condition.

It is just a little discussed subject in the academic environment during the training of these professionals, in addition to the fact that many people who live with the condition do



not seek help from professionals due to shame and lack of knowledge. Therefore, the lack of search for professionals reduces the chances of having experience with these cases and, consequently, approaching very little about the subject when questioned.

It emphasizes the importance of health professionals intervention by in this relation to condition, preventing complications such as ageusia and some of these professionals reported in their speeches offering help such as: early diagnosis and treatment; control of symptoms, etiology and general guidelines and outlining strategies to identify certain dangerous situations in other ways. Situations such as gas leaks, fire and ingestion of spoiled food, noticeable between the lines of the speeches of people living with anosmia.

It was also noticed the interest of these health professionals in seeking and acquiring more knowledge about the subject. This research, in a way, instigated these people to be willing to reflect on the theme and it is believed that this contact with the theme has been a positive experience, which can be of great use to these professionals in their daily practices.

On the other hand, the path taken by individuals with anosmia from the perception of a change in smell to seeking medical help or not, it was noticed that some of these participants did not seek help from



professionals because of negative feelings such as fear, embarrassment and shame. But it was also observed positive and optimistic feelings on the part of these people as a way of coping with the condition, despite being to a lesser extent.

In addition, some of these participants showed interest in knowing more about the condition in which they live, asking specific questions during the research as a way to learn more about it.

Through the speeches, it could be seen that the walk is light for some and not for others, since each person in their particularity deals with a certain situation differently. And this particularity must be respected and understood when it is seen in this research that there are participants who look at their condition as a passing situation without showing hopeless feelings, but on the other hand there are participants who feel intensely affected, with both groups living the same event.

In general, this research had limitations in relation to the small number of recent studies that directly address the topic and the difficulty in recruiting people living with anosmia, which is why the sample was so small.

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