

# Specific precautions: experiences of hospitalized patients

Precauções específicas: vivências de pacientes internados Precauciones específicas: las vivencias de pacientes internados

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#### **ABSTRACT**

Objective: To know the perception, meanings and repercussions of specific precautions for hospitalized patients. Methods: Qualitative study with qualitative clinical methodology according to the vulnerability theoretical reference. The semi-directed interview and the Bardin content analysis were used. Results: Identification of three thematic units: (1) guidelines received, in which there was lack of information and misunderstandings about the reason for precautionary implementation; (2) perceptions about private rooms, there with both positive and negative perceptions; and (3) stigma related to the isolation condition, given patients felt constraint for being in a unit of infectious diseases and fear of being separated from the others. Final considerations: Situations of vulnerability were evidenced, both related to hospitalization and feelings aroused. The study can contribute to health services by broadening their vision beyond infection control.

**Descriptors:** Patient Isolation; Universal Precautions; Emotions; Cross Infection; Qualitative Research.

#### **RESUMO**

Objetivo: Conhecer a percepção, significados e repercussões da precaução específica para o paciente internado. Métodos: Estudo qualitativo com metodologia clínica qualitativa sob referencial teórico de vulnerabilidade. Utilizou-se a entrevista semidirigida e análise de conteúdo de Bardin. Resultados: Identificaram-se três unidades temáticas: (1) orientações recebidas, em que se observou insuficiência de informações e equívocos sobre o motivo da implementação da precaução; (2) percepções sobre o quarto privativo, verificou-se tanto percepções positivas, quanto negativas; e (3) estigma relacionado à condição de isolamento, na qual identificou-se constrangimento por estar em uma unidade de doenças infecciosas e medo por estarem separados dos demais. Considerações finais: Situações de vulnerabilidades foram evidenciadas, tanto relacionadas à internação ofertada, quanto aos sentimentos despertados. O estudo pode contribuir com os serviços de saúde, ampliando sua visão para além do controle de infecções.

**Descritores:** Isolamento de Pacientes; Precauções Universais; Emoções; Infecção Hospitalar; Pesquisa Qualitativa.

#### **RESUMEN**

**Objetivo:** Conocer la percepción, los significados y repercusiones de la precaución específica para el paciente internado. **Métodos:** Estudio cualitativo con metodología clínica cualitativa bajo referencial teórico de vulnerabilidad. Se utilizó la entrevista semidirigida y el análisis de contenido de Bardin. **Resultados:** Se identificaron tres unidades temáticas: (1) directrices recibidas, en que se observó la información insuficiente y los conceptos erróneos acerca del por qué la aplicación de precaución; (2) percepciones sobre el cuarto privado, fueron verificadas tanto percepciones positivas, como negativas; y (3) estigma relacionado a la condición de aislamiento, en la cual se identificó constreñimiento por estar en una unidad de enfermedades infecciosas y miedo por estar separados de los demás. **Consideraciones finales:** Las situaciones de vulnerabilidad fueron evidenciadas, relacionadas tanto a la internación ofrecida, en cuanto a los sentimientos despertados. El estudio puede contribuir con los servicios de salud, ampliando su visión más allá del control de infecciones.

**Descriptores:** Aislamiento de Pacientes; Precauciones Universales; Emociones; Infección Hospitalaria; Investigación Cualitativa.

#### **INTRODUCTION**

Transmission-based precautions or specific precaution (TBP) are additional measures used when the way of transmission of the microorganisms cannot be completely disrupted using only standard precautions (SP)<sup>(1)</sup>. Specific precautions, together with standard precautions, are essential measures to prevent the spread of microorganisms and, consequently, cross-infection<sup>(2)</sup>, which is a major problem for health institutions<sup>(3)</sup>. The TBP measures involve the use of aprons, masks and/or private rooms, according to the way of transmission of the microorganism at hand, besides limiting patients to their rooms or beds. TBPs are classified as droplet isolation precautions, airborne precautions and contact isolation precautions<sup>(4)</sup>.

Currently, with the increasing number of patients with infections or colonized with multi-resistant microorganisms and their relation with healthcare-associated infections (HAI), there is an increase in hospitalizations of TBP, particularly contact isolation precautions<sup>(5)</sup>.

The length of stay of patients under TBP in a private room and with restriction of visits creates ambiguous feelings. They may fear a worsening of their health condition, feel a threat to other patients or family members or even feel vulnerable to adverse events, because by being under precautions they can imagine receiving less health care than needed<sup>(6-7)</sup>.

Review studies identified negative psychological repercussions in hospitalized patients, such as symptoms of depression, anxiety, fear and loneliness, and fear of receiving less care from health professionals (Health Care Plan - PAS)<sup>(8-9)</sup>. Other studies carried out with mothers and children who have been hospitalized for precautions reinforce the presence of suffering<sup>(10-11)</sup>.

On the other hand, some studies identified positive aspects, such as feeling better assisted by health professionals, besides enjoying greater comfort and privacy considering the fact that patients are in private rooms<sup>(9,12-13)</sup>.

Hospitalization under specific precaution has broad and interrelated components that must be evaluated and treated together, and new reflections on health interventions are needed<sup>(6)</sup>.

The concept of vulnerability is considered a relevant determinant to support effective actions related to TBP, considering an approach with an extended theoretical support focused on the general needs of individuals<sup>(7)</sup>. It was with the advent of AIDS in the 1980s that the concept of vulnerability to support the management of health problems, aiming at more effective health outcomes and minimizing the effects of disease-related stigma<sup>(14)</sup>. The concept of vulnerability brings together abstract elements associated with illness issues for concrete and individualized theoretical plans, in which the logic and intervention among these processes are objects of knowledge<sup>(14)</sup>.

Vulnerability has three interdependent but inseparable dimensions: the individual, the programmatic and the social. The individual dimension corresponds to the perception that individuals have about the aggravation and the behavior that favors its occurrence, favoring the empowerment for its transformation; the programmatic considers the accessibility of individuals to what is produced and organized by health institutions, considering the issues of disease control and prevention<sup>(11,14)</sup>. The social dimension, on the other hand, provides access to information in an

expanded way, focusing its actions on reducing social injustices, considered one of the most used concepts for coping with the vulnerabilities of a population<sup>(15)</sup>. The individual dimension has important characteristics to describe the condition of patients under specific precautions considering behavior, knowledge and perception of individuals as for the risk of infection<sup>(6)</sup>.

This study becomes relevant when the increasing number of hospitalizations under TBP, specially of contact precautions due to multi-resistant germs<sup>(5)</sup>, is considered. The vulnerability produced by this type of hospitalization, and the few studies that address the repercussions of these measures on hospitalized patients are also decisive for the relevance of research<sup>(6,10-13)</sup>.

#### **OBJECTIVE**

To know the perception, meanings and repercussions of being under specific precautions for hospitalized patients.

#### **METHODS**

#### **Ethical aspects**

This study was approved by the Human Research Ethics Committee of the *Universidade Federal de São Carlos* (UFSCAR), respecting in full all the ethical precepts of Resolution 466/12 of the National Health Council<sup>(16)</sup>.

To ensure anonymity, the interviewees were identified by the letter "E" followed by Arabic numerals.

## Type of study

Qualitative study, using the clinical-qualitative methodology and the theoretical framework of vulnerability. The clinical-qualitative study aims to interpret the meanings of conscious and unconscious experiences attributed by the subjects to certain problems in the health-disease process<sup>(17)</sup>.

## **Methodological procedures**

## Research setting

Research was performed in a large hospital in the countryside of São Paulo State, in two hospitalization units, called Isolation wards, containing eight private rooms, exclusively for patients under specific precautions.

## **Data sources**

Population was made of hospitalized patients requiring specific precautions. The criteria for including the patients were: to be hospitalized in the units set to patients under precautions; to have the type of TBP specified in their medical records or at the door of their rooms with nameplates; patients had to be lucid and able to communicate verbally to respond to the interview. The criteria for exclusion of patients were: to be under precautions in other departments of the institution or to be hospitalized in the isolation wards, but without specifying the type of specific precaution.

#### Data collection and organization

Data collection took place in November 2016, and from February to April 2017. Individual interviews were conducted with semi-directed open questions that, from the trigger question "You are hospitalized for precautions (of contact, airborne). Tell me how you feel about it." It aimed to know the perception, meanings and repercussions of the stay under TBP for hospitalized patients. These interviews were recorded in audio on a digital media and later transcribed for analysis.

The collection followed the concept of saturation<sup>(18)</sup>, that is, interviews were interrupted when new and relevant data were no longer found to subsidize the theorization of this study, in addition to understanding that the collected material already responded to the defined objectives.

Patients admitted to specific precautions, who met the inclusion criteria, were sought by the researcher and after the study presentation and signature of the consent term, the interview was performed. Each patient was interviewed only once and if they had someone with them, this person was invited to listen to the interview. The transcription was not presented to study participants.

#### Data analysis

For data analysis, content analysis was used, a modality<sup>(19)</sup> that managed to organize the speeches of those interviewed and unveil the nuclei of meaning, for later codification of speeches. This technique is made of three stages, organized in: 1st Pre-analysis – Elaborating the *corpus*, floating reading and formulating hypotheses and objectives; 2<sup>nd</sup> Investigating the material – Coding data; and 3<sup>rd</sup> Treating results – Constructing categories and performing analysis<sup>(19)</sup>. At the end, three thematic categories were defined: (1) Guidelines received; (2) Perceptions about private rooms; and (3) Stigma related to the Isolation condition.

#### **RESULTS**

19 patients were interviewed, with prevalence of men (58%), median age of 44, ranging from 17 to 78 years old. Eight interviewees (42%) reported were married and seven (37%) were with a companion during the interview. In relation to schooling, 11 people (58%) had 8 years of schooling. As for occupation, seven (37%) had paid activities, four (21%) were retired, three worked from home, one was a student and the other four (21%) did not define it.

The average period of implementing precautions at the time of the interview was seven days. The reason for hospitalization was a bloodstream infection for two patients; a respiratory infection for three; tuberculosis for four; surgical infection for six; urinary infection for two; and meningitis and varicella for one patient, respectively. The contact isolation precaution was indicated for twelve (63.15%) of the interviewees, followed by airborne precautions for four (21.05%), droplet isolation precaution for two (10.52%), contact and airborne precautions for only one, simultaneously.

#### **Guidelines received**

In this category, statements were grouped according to the reasons why interviewees were hospitalized under

transmission-based precautions or specific precautions. The interviewees said they did not know the real reasons for the institution to implement these precautions and that justifications were imprecise, incomplete and had mistaken concepts.

[...] no one explained this situation to me, or why I should stay here in this room. (E4)

They told my sister, by the time I was discharged from the ICU [Intensive Care Unit], that I had low resistance and so I had to stay here not to be infected by others. (E1)

The doctor said he would isolate me because I needed more care! They told me this was a calmer place for them to take care of me. (E15)

I was guided by the doctor and by the nurses to stay here so I would not pass my illness on to other people. They said it was contagious and anyone who came to visit me needed to wear a mask and that I would stay in an isolation room, protected from possible infections and from passing anything to other patients. (E12)

It is observed that the same patient (E12) who demonstrates knowledge about the precaution instituted, has misconceptions in some passages of his speech. Arguments that precaution was instituted to protect the patient from infections and provide better care were present among the interviewees. However, there was one interviewee who knew the real reasons that led him to be under specific precautions.

I had a surgery in December, because my patella was broken, and I ended up getting a bacterial infection that can contaminate other patients. I also cannot be in contact with other sick people because I could get worse than I already am [...] You must wear new gloves; must not use the same device used on other patients and vice versa because I can contaminate them and also be contaminated [...]. (E19)

## Perceptions on private rooms

In this thematic category, it was possible to identify favorable and unfavorable perceptions about the use of privative rooms. Positive perceptions were because individual rooms provide more privacy and comfort for these interviewees. The possibility of being in a private room and with companion was pointed out as a bonus of being hospitalized under precautions.

I believe you have a little privacy, my daughter can stay with me, the employees attend you faster, get closer to patients. (E15)

I like being alone, so I think it's better because in the collective room I'm afraid of getting an infection. (E17)

There was also the sense of protection offered by the precaution implemented. Patients understand that because they are in a precautionary unit they will be protected from other diseases. Many feel important and privileged for the care received in the place, when compared to other units of the Institution.

There are only advantages here when compared to other units; after I came here my recovery was much better, I recovered, started

to eat, to walk... in other units there are many people in the same place, a lot of visits. There was a day I counted 18 people in the same room. (E10)

I believe I'm more protected here because I'm alone and everyone who enters the room must wear a mask. I have no contact with other patients who have other diseases. (E12)

The unfavorable perceptions emerged were feelings of loneliness, anguish, sadness, and despair for being in a small room, with restraint of exits. The feeling of loneliness, due to the lack of seeing other people, appears in the speeches of patients who did not have companions and activities that made distraction possible.

I feel lonely, very lonely, I do not have a companion so I feel lonely, we stay here all the time, we cannot breathe fresh air. (E13)

I just feel really isolated, because we cannot open the door, cannot leave the room! I miss people to talk, to walk, and there's not even a television to distract us. (E14)

All I wanted was to sit a little under a tree, even wearing the mask, it bothers me a lot. Staying in a 2x2m room without any television, with nothing, just looking at the wall, this is bad for the mind [...]. (E11)

Oh, I think it's bad staying here alone, because I feel like crying and I'm beginning to feel bad, so I'm feeling a bit depressed, anxious for the time to pass, at least for me to try to sleep. (E14)

# Stigma related to the condition of Isolation

In the latter category, the stigma in the individuals' speeches is observed as a result of being separated from other patients. In the study institution, these hospitalizations occur in specific units called Isolation, which generated suffering for the interviewees.

I think the most difficult is the situation itself, the isolation. You feel very inferior, it is bad to the psychological. (E13)

The word isolation causes certain strangeness, it was always like that for me. I really want to know more about it, because we sometimes heard someone saying: Look, so-and-so is in the Isolation ward! This thing [pause], isolation, causes fright! (E3)

Aiming at reducing the stigma that the name of the unit brings to the population, a family member explains the reason that led to wrongly instituted specific precautionary measures.

> My sister clarified to the people who come in here that I can get something that comes from outside, but that I am not infectious, so from the inside out no one gets anything. (E1)

# DISCUSSION

Inadequate guidance or even lack of information about the reasons that led to the institution of specific precautionary measures are impeding the actions of prevention and control of HAI. Therefore, effective guidelines to prevent the transmission of microorganisms need to be encouraged.

Interventions involving patients, relatives and caregivers should be included in the care. When these people take on responsibilities related to preventive measures, they help the health care plan and make actions safer<sup>(20)</sup>, thus increasing their health literacy<sup>(21)</sup>.

A study<sup>(22)</sup> performed suggests that guidelines for patients and caregivers on the need for precautionary measures and encouragement to question health care plans in relation to preventive measures are effective in minimizing possible care failures. In addition, educational actions with active methodology allow better participation of those involved in their health process<sup>(22)</sup> because they allow them to own the issues related to the aggravation<sup>(14)</sup>.

Although there is concern about the participation of family members and companions in the transmission of microorganisms, it is the PAS that circulate among patients and, therefore, the main carriers of microorganisms. Nonetheless, health institutions do not always adopt the recommended precautionary measures<sup>(13,23)</sup>. It is worth mentioning the fact that, although not questioned, 63.15% of respondents said that the reason for hospitalization under TBP is related to multi-resistant microorganisms acquired in the institution and possibly due to non-compliance with the HAI prevention measures.

For the interviewees, precautionary measures solely reduced the risk of acquiring new diseases. They were not seen as a source of infection for the other hospitalized patients<sup>(4)</sup>, demonstrating their vulnerability in the individual dimension, with a deficient perception about their aggravation. Thus, educational actions need, besides involving the PAS, to include patients, relatives and companions, that is, to approach the epidemiological chain of transmission.

Regarding the positive perceptions, the findings are corroborated by other studies in which increased privacy and safety were mentioned<sup>(13)</sup>, besides calmness, lower risk of infection, better care and quality of cleanliness, due to hospitalization under specific precautions<sup>(9)</sup> These perceptions may be due to the situation of vulnerability in which patients are, that is, in addition to the disease itself, the precariousness of resources previously offered during hospitalization is added. The possibility of more adequate accommodation in private rooms with accompanying rights becomes so significant that it minimizes the possible confinement sensation generated by the hospitalization under TBP.

However, a systematic review<sup>(24)</sup> on the experience of patients under specific precautions identified that being in this condition reduces the autonomy of individuals to participate in therapeutic decisions. To reduce their vulnerability, they must be encouraged to develop a certain ability to deal with health problems<sup>(14)</sup>.

The negative perceptions evidenced in the present study corroborate with the literature<sup>(8-11)</sup> with the manifestation of anxiety, depression, feeling of confinement, anger, loneliness, besides the stigma that favors the distancing of PAS and the family. In an international study<sup>(3)</sup>, an alternative method of virtual communication between visitors and patients was made available to reduce this distance and the risk of transmission of microorganisms.

Hospitalization in isolation wards is harder for patients, which increases the negative aspects<sup>(10)</sup>. It should be noted that depression and anxiety are recurrent manifestations during any hospitalization and that they worsen in hospitalizations under specific precautions<sup>(9)</sup>. These effects may be greater when transferring individuals from a collective sector to isolation ward during hospitalization<sup>(25)</sup>, since it breaks the bonds established

in the collective rooms<sup>(9)</sup>. In this study, negative perceptions emerged from patients who were unaccompanied or had no type of distraction, such as a television.

Although no patient reported dissatisfaction with the care provided when interviewed, a cohort study<sup>(6)</sup> on the effect of contact isolation precautions on PAS activities carried out in four health institutions identified that these professionals had 36.4% less contact with patients under TBP when compared to the others. The results also indicate that patients had restricted visits and stayed even longer alone. Therefore, the restriction of visits, the absence of a companion and less contact of the PAS may have favored the feeling of solitude reported by the interviewees.

Stigma and prejudice are conditions that go hand in hand with socially resigned illnesses, either those considered socially worse, or those that the way of infection or detestable symptoms are not seen with good eyes<sup>(26)</sup>. The issue emerged as a concern of patients and their families, considering that they would be hospitalized in a situation of isolation and could be considered a threat to other patients, which also caused suffering.

The stigma of diseases requiring specific precautionary measures is present at all levels of care. In Primary Health Care, a study on the psychosocial experiences of patients who completed tuberculosis treatment identified that stigma and prejudice contributed to their suffering as for the disease<sup>(27)</sup>. Measures to reduce the stigma of isolation, how to maintain confidentiality and the use of codes related to infection control measures, and to plan the PAS and family for the patients who receive constant visits are indicated to minimize the negative effects of isolation<sup>(9)</sup>.

Although the importance of educational activities has already been mentioned, health education measures through PAS can also help reduce the vulnerability of these patients. It is a powerful tool to foster protective behaviors<sup>(7)</sup>, minimize stigma, enable a balance between HAI prevention and control measures and the emotional conditions of hospitalized patients in this situation.

#### **Study limitations**

As study limitations, research is restricted to individuals chosen individually from a single health service in a city from

the countryside of São Paulo State. Results cannot be generalized due to the subjectivity of research. Nonetheless, these limitations do not impair data validity.

#### Contributions to the Nursing, Health or Public Policy fields

The study contributes to broaden the view of infection control services regarding the psychosocial and emotional factors that involve patients experiencing hospitalization with the applicability of specific precautionary measures.

Knowing this dimension contributes to plan initiatives that meet the individuals according to their human needs. These initiatives shall guarantee the reduction of the risk of transmission of microorganisms without compromising the psychosocial dimension of hospitalized patients.

#### **FINAL CONSIDERATIONS**

According to the reports given by the interviewees, the reasons that led them to be hospitalized under TBP and the implications of that are deficient. This probably did not allow them to identify, in many cases, that the contact isolation precaution implemented derived from HAI, showing a vulnerability in the individual dimension, with weaknesses in the perception about their injury.

Private rooms ensured privacy and comfort for patients who had companions. On the other hand, for those who remained alone, with no distraction and with visit restrictions, the situation favored loneliness and anguish.

These findings show that it is of utmost importance to consider the measures needed to guarantee a satisfactory outcome of the established precautions, considering both psychosocial and emotional factors, which involve patients experiencing hospitalization under specific precautionary measures.

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