

# Healthcare-Associated Infections: Experiences and Perceptions of Nurses at the Ziniaré District Hospital in Burkina Faso

Marc Souli<sup>1\*</sup>, Noufou Gustave Nana<sup>1</sup>, Soutongnoma Safiata Kaboré<sup>1,2</sup>, Dieudonné Soubeiga<sup>1</sup>, Hervé Hien<sup>2</sup>

<sup>1</sup>Institute for Interdisciplinary Training and Research in Health and Education Sciences, Ouagadougou, Burkina Faso

<sup>2</sup>National Institute of Public Health, Ouagadougou, Burkina Faso

Email: \*macsoul7@gmail.com

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## Abstract

**Introduction:** Healthcare-associated infections (HAIs) are a worldwide concern because of their magnitude and their human and financial cost. While nurses' non-compliance of hygiene and asepsis measures is questioned, the rationale behind it is not fully understood. We hypothesized that nurses' experiences and perceptions are one of the reasons for their non-compliance with prevention recommendations. Also, nurses' caring approach would play an important role in patient safety. The objective of this study was to describe nurses' experiences and perceptions of HAIs in a district hospital in Burkina Faso with the aim of developing a culture of safety in health care practices. **Methods:** Qualitative data were collected through unstructured interviews with twenty nurses from the Ziniaré district hospital. Data analysis followed the qualitative phenomenological method according to Giorgi. **Results:** Phenomenological analysis yielded the following themes: "an ignored reality"; "a denied responsibility"; and "a vulnerable problem". These results show that nurses' perception of the extent and seriousness of HAIs is low, and that they deny responsibility for their occurrence. As a result, HAIs are not always perceived as a concern. However, nurses deplore the situation, but remain optimistic about resolving the problem. **Conclusion:** These nurses' perceptions of HAIs could explain their non-compliance with prevention recommendations. Corrective action could be redirected by raising awareness, continuing training, improving working conditions and involving all players, including patients and their families, in the fight against HAIs.

## Keywords

Perceptions, Nurses, Healthcare-Associated Infections, Phenomenology

## 1. Introduction

Patient safety is a concern for health professionals and populations in light of care that is not risk-free [1] [2] [3]. Many patients acquire infections during their care, and this represents an additional burden of morbidity and mortality. In Burkina Faso, a study conducted in a health district in 2012 revealed a prevalence of isolated germs of 71.8% among samples collected [1]. In addition to the human burden, healthcare-associated infections have a considerable socio-economic cost [4]. Faced with this situation, a desire to make healthcare safer has emerged through a set of prevention recommendations [1] [5]. Despite multiple interventions, these infections remain and claim many victims each year [6]. Although several factors are associated with the occurrence of HAIs [1] [2] [3] [7], the attitudes and practices of healthcare professionals are particularly implicated [7] [8] [9]. Indeed, the neglect of hygiene and asepsis measures by caregivers is one of the factors most reported in quality of care assessments [7] [8] [9]. It is therefore very relevant to question the logic underlying these behaviors of health professionals. This leads us to focus on the subjective dimensions of nurses, particularly their experiences and perceptions of hygiene and asepsis measures. A probable influence of nurses' experiences and perceptions on their attitudes and practices regarding hygiene and asepsis measures, determining the occurrence of healthcare-associated infections, is to be considered. Several theoretical models integrating perceptions as determinants of human behavior are used in the health field to explain the phenomenon of adoption and maintenance of good practices [7]. Also, the caring approach places particular importance on safety in care and suggests that efforts should be made at the level of the caregiver to cultivate a caring relationship with the patient [10]. Through this study, we want to contribute to elucidate the phenomenon of non-compliance to HAIs prevention recommendations. The objective is to describe the perceptions of nurses that are associated with the occurrence of HAIs, in order to induce a culture of safety in care practices.

## 2. Materials and Methods

### 2.1. Type of Study

To describe nurses' experiences and perceptions of healthcare-associated infections, we used a qualitative phenomenological approach [11].

### 2.2. Setting of the Study

The survey took place in the care units of Ziniaré District Hospital. This hospital, which has 35 hospital beds, is the highest health level in the District.

### 2.3. Sample and Sampling

Theme redundancy [12] was obtained from the tenth participant out of the twenty (20) nurses who took part in the study. To obtain a diversity of participants, we used key informants: unit coordinator and supervisors who helped

identify participants. The inclusion criteria were as follows:

- Be a nurse at the Ziniaré District Hospital;
- Have been in service for at least one year in a care service;
- Agree to participate in the study by signing the participant consent form.

## **2.4. Data Collection**

After testing our collection tools at another district hospital, we conducted in-depth interviews with participants from September 2017 to February 2018. The interviews were carried out on dates agreed upon with the participants and repeated until the data were redundant. As multiple sources of information are recommended in phenomenological studies [11] [12], we supplemented the interview data with observations of care practices.

## **2.5. Data Analysis**

We followed the five (05) steps of phenomenological analysis according to Giorgi [11]. The interview data were first transcribed. This was followed by a meticulous and repeated reading of the verbatim in order to allow units of meaning emerging. Using a matrix, we confronted and grouped the similarities and contradictions of the units of meaning to reveal global meanings to which we subjected the method of free and imaginary variation [11]. This allowed us to identify sub-themes and themes relating to nurses' experiences and perceptions of HAIs. We also submitted our results to the judgment of the participants.

## **2.6. Ethical Aspects**

Participant data were used in accordance with the Declaration of Helsinki. Our study protocol received ethical approval from the Ethics Committee for Health Research (CERS) of Burkina Faso by deliberation No. 2017-9-147. Authorization for the survey was obtained from the Regional Director of Health, the authority that covers the Ziniaré district. Free and informed written consent was obtained from each participant. Confidentiality was ensured by the anonymity of the respondents. We use the word "nurse" followed by a number to designate the corresponding participant.

## **3. Results**

The first part of this section describes the socio-demographic and professional profile of the participants and the second part presents the phenomenological analysis in themes and sub-themes.

### **3.1. Socio-Demographic and Professional Profile of Participants**

Ten participants including one advanced practice nurse and nine registered nurses (RNs), participated in the survey. Five participants were male and five were female. The oldest participant was 53 years old and the youngest 31 years old. Most of the nurses had more than four years of professional experience and

also more than four years of service in the current position. The professional seniority varies between 04 and 30 years. Among the ten nurses only one had a higher education level. All of them declared receiving infection prevention and control course during their initial training and also during their practice. Participants practiced in general medicine, emergency, pediatrics and post-surgery care units.

## 3.2. Results of the Phenomenological Analysis

The phenomenological analysis [11] that we carried out first brought out sub-themes and then the following themes: “an ignored reality”; “Responsibility Denied” and “a vulnerable problem”.

### 3.2.1. “An Ignored Reality”

In their statements, participants talk about HAIs that occur in their care unit. For them, it is a reality for both patients and caregivers. Nurse 6 said: “HAIs! There are some here! It may go unnoticed, but it’s there”. Nurse 3: “In practice we see a lot of cases”. Although HAIs are mentioned as a sensitive issue in health care practice, the risk of their occurrence, their magnitude and severity is not the subject of attention.

#### HAI as a threat

Nurses have a negative perception of HAIs. Most participants deplore the cases of HAI they have experienced. The patient is presented as a victim of the care they receive. This often-dramatic situation makes caregivers feel uncomfortable, with guilt and regret. Nurse 1 said: “The case that really struck me was the malnourished child who was pricked a lot [...] the child had wounds all over, [...] a few days later the child had died...”. Nurse 3 “...it got infected and here’s a problem. You see the suffering of the person [...] when you look at ... you are not happy”. Also, nurses talk about their own vulnerability to HAI. They are just as exposed as the patient. Experiences of blood exposure accidents (BEA) in the care unit reinforce this feeling of vulnerability. Nurse 2 said: “We are exposed every time”. Nurse “10 ... you can be pricked, [...] there can be hepatitis B or HIV [...] we have seen colleagues who, while trying to treat patients, have been bitten”. This vulnerability poses a threat to patients and caregivers and raises the issue of safety of care.

#### A sensitive topic

Participants are reluctant to talk about their own experiences of HAI. HAIs appear to be a veiled, taboo issue. Most participants say, some defensively, that they have not personally experienced it. Nurse 5 said: “... I didn’t see. [...] I’ve never experienced the situation, that’s!”. For others, they have only heard about it. Nurse 2: “Very little is said about it [...], an experience as such, No! [...] I have only heard about it”. In addition, some participants went back on their statements and admitted that they would have had an experience with HAIs. Nurse 4: “in my experience, it is only once that I have encountered a health-care-associated infection”. Also, reasons were given to explain why HAIs often

go unnoticed. Nurse 7: “I’ve never seen ... because here we don’t keep patients for long. When the emergency is lifted, the patient is then taken to the medical department”. Participants affirm that it is difficult to prove HAI. Nurse 4: “Often it’s stuff [HAIs] that can’t be verified on site”. Thus, on the one hand, nurses recognize the existence of the problem of HAIs, and on the other, ignore the cases that would come from their own practices.

### **An underestimated and less worrying problem**

Participants’ comments and observation of care practices reveal an underestimation of the risk, extent and seriousness of HAIs. Firstly, HAI is restricted to a localized manifestation essentially at the puncture site: inflammation, pain, abscess at the puncture site of the vein. Nurse 8 said: “it’s mainly, at the level of [...] the site where the venous line is inserted”. Also, the observation of care practices shows a trivialization of aseptic measures. Procedures are performed without being sure of their safety. Moreover, when it comes to emergencies, hygiene and asepsis measures take a back seat. Some participants thought that their colleagues were unaware of the risk of HAI. Nurse 1 said: “There’s a mentality [...] wiping [the intranulus,] with the cotton wool, ..., it’s not aseptic [...] when I want to free the child’s hand a little, I, disadapt, I put the white cap there, I don’t know if it’s right [...] in the emergency we don’t see too much of the... measures [asepsis]”. These comments show that nurses do not always consider the risk of HAI when providing care. Some participants argue that HAIs are not as frequent and would not be as serious. Their comments reveal a low perception of the extent of HAIs. Also, for the participants, it is often difficult to qualify an infection as a HAI since they cannot immediately attribute it to care. Nurse 8: “Actually it’s a thing [...] it will resolve itself”. Nurse 6: “I think that these infections are quite common [...]. Nurse 4: it’s stuff [HAI] that can’t be checked on the spot”. These comments from the nurses show a lack of concern for patient safety.

### **3.2.2. “Responsibility Denied”**

In their speeches, participants commented their views on what they think are the factors, reasons and responsibilities that explain the occurrence of HAIs.

#### **Care practices are blamed**

The participants identified care as the source of the problem. Failure to implement prevention recommendations underlying the occurrence of HAIs. Nurse 1 says: “take the intranulus, wipe it with the cotton wool, [...] put the intranulus on the observation table, [...] it’s not aseptic!” Nurse 4: “... more and more we notice that in the field, that it is routine”. The urgency of certain care is often mentioned by nurses as a reason to relegate hygiene measures to the background. Nurse 1: “when we really see the child who is going to leave, especially when it is anemia, ah! I’m not going to lie, but I don’t hesitate to place the venous line on the jugular. And in an emergency, we don’t really see the prevention measures”. Thus, for the participants, HAIs are the result of insufficient hygiene and asepsis precautions when performing care.

### **A collective responsibility**

Participants blame care practices as the cause of HAIs occurrence. Their comments testify to negligence, a lack of application of infection prevention measures, a routine of bad practices and even tasks that are not carried out. Thus, the participants' discourse reveals a lack of concern for patient safety. Rules, standards and protocols taught in training and refresher courses are ignored. In addition, there are fewer and fewer values in the practice of care. Nurses are less sensitive to patients' suffering. Nurse 3 said: "unfortunately, we don't pay attention ... it's neglect [...] it's like ... good riddance what". Nurse 1: "Everyone does what they want ... put the intranulus on the observation table, it's not aseptic"! Nurse 2: "We act like we had never been trained". Nurse 4: "It's routine! We forget everything that was taught in nursing school". However, participants rarely mention of their own responsibility. Individually, they do not admit to being responsible for the occurrence of an infection. Some express themselves defensively, saying that they have no personal experience of HAIs. Nurse 5 said: "Personally, I've never had that". Nurse 2: "... an experience as such, concerning me, I cannot say, no!". Instead, the participants have an accusatory discourse, a discourse that tends to exonerate them, a discourse that seems to whitewash them. First, colleagues are indexed as responsible for the occurrence of HAIs. This is evidenced by the recurrence of the expression: "There are some who..." to index colleagues. Nurse 1 said this: "everyone does what they want [...] some people (there are some who...) clean up but it's not enough ... some people (there are some who...) don't take care to do it". Nurse 5: "there are also some who have the will to do the work but are not competent". Second, some participants accused unit managers of lacking leadership and authority. These managers do not play their role in controlling and challenging unscrupulous nurses who do not perform care adequately. Nurse 9 said: "a leader who just 'make available' the necessary and then he disappears [...]. No! There is also a need to challenge indelicate colleagues". The entire care team is then indexed. Inf9 said: "I don't blame one person for this mistake ... it's the team". Patients and their families also have their share of responsibility. Their behavior regarding hygiene can be the cause of HAIs. Nurse 1 "the mother or the parent of the child, who is there, because of inattention, can soil the venous line". Also, the patients do not appeal to caregivers when they notice inadequate care practices. Nurse 1: "If the accompanying person challenges him [...] the health worker has to be up to the task". Thus, some participants do not condemn the individual nurse. Beyond the nurse, it is the whole care team as well as the patients who bear the responsibility for the occurrence of HAIs.

### **A management problem**

Beyond the nurses and the care team, HAIs are attributed to the care system. Working conditions that do not allow for the application of hygiene and asepsis measures during care. Nurse 8 said: "Often this is also beyond our control". Nurse 6: "there are also the accompanying measures that the services must have. [...] I think the whole system is involved". Thus, several elements of the health

care system are mentioned as factors in the occurrence of HAIs. There is the problem of the availability of adequate resources. Nurse 4: “We work with the means at hand”. Nurse 3: “We try to do our best, [...] but we lack everything”. Nurse 5: “often there is not even any alcohol”. Work overload handicaps the prevention of HAIs. Nurses have to carry out a lot of care while respecting the requirements of prevention. Nurse 2 said: “there is too much work to do and you always have to wash your hands”.

#### **Insufficient updating of knowledge and communication problem**

There is also the problem of training nurses. The issue of HAI is not sufficiently addressed, a situation that does not allow for the adoption of good attitudes and HAI prevention practices. Nurse 2: “training and awareness rising, especially on infection prevention and hygiene, is a bit rare”. For some participants, communication on the issue of HAI could have made up for the lack of training, especially since there is no shortage of opportunities to talk about it. Nurse 6: “there was not enough awareness or even information. Otherwise, these are things that normally can and should be avoided”. Nurse 4 said: “during medical check-up, these are subjects (HAI) that we can develop ... supervisions, service meetings, monitoring, challenging you”. In short, these nurses’ perceptions of the occurrence of the problem show that they find the origin of HAIs outside themselves.

#### **3.2.3. “A Vulnerable Problem”**

The nurses’ speeches highlight a perception that HAIs are not an insurmountable problem. On the contrary, it can be solved. The need to combat HAIs is mentioned, as well as the commitment to a change of attitude towards hygiene and asepsis measures. However, improvement of the safety of care is conditioned by a set of measures. Thus, the participants made several suggestions.

#### **HAIs are avoidable**

Most participants argue that HAIs can and should be avoided or at least minimized. Nurse 2: “I think these are things that we can really..., avoid that”. Nurse 10: “it’s unfortunate situations that happen, [...] when it could be avoided”. Nurse 4: “if at least there was a minimum of vigilance, attention to patients [...] infections would decrease”. So, the participants say that they are willing to change their attitudes and practices regarding HAI’s prevention recommendations. Nurse 1 says: “We will try to avoid as much as possible by respecting hygiene measure”. In addition, participants made several suggestions for improvement at the level of caregivers, the health care system, and patients and their families.

#### **Need for change in attitudes and practices**

As far as nurses are concerned, various proposals were made concerning their attitudes and practices in relation to the implementation of the prevention recommendations.

First, attitudes and practices must be challenged. This requires the development of a professional conscience. For the participants, the fight against HAIs

requires a break with routine, a questioning of care practices and a commitment to a change of attitude towards hygiene and asepsis measures. Nurse 4 says this: “If everyone manages to question themselves, [...] these are situations that can be avoided”. To avoid HAIs, participants felt that nurses must make the effort to perform the various tasks and especially comply with care protocols and perform care as it should. Nurse 9 said: “you have to ... get serious about doing the job!”. Nurse 5: “We must not rush the work. I think each of us has a professional conscience.” Nurse 9: “To take the venous tract, you need the correct way”. Close monitoring and attention to patients was also mentioned by the participants. This allows for early detection of HAIs. Nurse 8: “It’s surveillance especially, [...] at the moment it also avoids a lot of problems.”

Secondly, empathy for patients is needed. The participants suggest that nurses develop human and relational qualities, a climate of empathy in their care practices. Nurse 6 said: “I do the care as it is for me [...] today it is someone else, but tomorrow it could be me”.

In addition, to mobilize staff in the implementation of prevention measures, leadership is needed, particularly from the unit manager. However, the implementation of the recommendations must be audited and unscrupulous caregivers must be challenged. Nurse 9 said: “it is also necessary that the person in charge ... watches [...]. He should ... challenge”. Nurse 2: “you have to ... encourage them to maintain good attitudes and practices”.

#### **Measures to be taken**

##### **Communication and awareness**

For the participants, the importance of infection control measures should be constantly emphasized. Raising awareness about HAIs at all times is a preferred approach. Any opportunity to address the issue of HAIs should be taken. This will keep nurses aware of the issue to enable the adoption of good prevention practices. Nurse 2: “we need to... really allow people to remember these rules and to put them into practice”. Nurse 4: “These are topics [HAIs] that can be developed during visits, supervisions, service meetings, monitoring”.

##### **Training and knowledge upgrading**

The participants suggest that infection prevention should be emphasized in the initial training of nurses, and that training methods should be reviewed so that the nurses are competent, dedicated to their work and have empathy for the patients. Nurse 10: “we need staff training, on this aspect too”.

##### **Working conditions**

In addition to changing attitudes and practices, the participants mentioned aspects that they felt were necessary for the effective application of prevention recommendations. Proposals for improvement were made for caregivers, care services, and patients. These include reducing the workload by providing the care units with adequate staff and making sufficient equipment and consumables available to the staff for the proper implementation of care. Nurse 6: “that there are no stock-outs and you must be given quality equipment [...] we need adequate equipment to protect us”.



### Role of patients and their families

For nurses, patients and their families must be involved in the prevention of HAIs. To do this, they need to be made aware of hygiene promotion. Also, patients should be able to challenge caregivers and even refuse some of their practices that they consider inappropriate. Nurse 2 says: “We can also advise parents, [...] how to go about it so that the child doesn’t pick up other germs”. Nurse 1 says: “If the parent calls out. Ah, that’s no good. He [carer] has to change. [...] The caregiver is obliged to be up to the task”.

These nurses’ perceptions show that HAIs are a vulnerable problem and can be resolved.

## 4. Discussion of the Results

The interest of the study lies in the fact that it approaches the problem of HAI from the angle of the behavioral determinants of health care actors such as nurses. Nurses’ perceptions determine their decisions about the choices and actions to be taken when providing care [13]. Phenomenological analysis [11] highlights three major aspects of nurses’ perceptions of healthcare-associated infections: “an ignored reality”; “a denied responsibility” and “a solvable problem”. These perceptions of nurses are of concern as they fall within their phenomenological realm and therefore may influence their attitudes and care practices [14]. Thus, we will discuss the results of our study according to three points: the perception of the reality of the HAI problem, the determinants of the occurrence of HAI and the perspectives for solving the HAI problem.

### 4.1. An Ignored Reality

There is ambivalence in nurses’ perception of the reality of the HAI problem. HAIs are perceived as a real and sensitive problem. However, the risk of their occurrence, their extent and their seriousness are not always considered in care practice.

#### 4.1.1. A Threat

Nurses have a negative perception of HAIs. They are perceived as harmful events for both patients and caregivers. Phaneuf and Gadbois [15] emphasized this perception among nurses. This shows that nurses perceive their own vulnerability as well as that of patients. Lucet and Birgand [7] consider this perception as a favorable element for the application of prevention recommendations, as nurses question them and would be more receptive to awareness messages [7].

#### 4.1.2. A Sensitive Subject

HAIs are a taboo subject on which nurses find it difficult to express themselves. Some talk about them with a defensive attitude. Authors such as Carricaburu *et al.* [16] and Amiel [8] have highlighted this attitude among nurses when the issue of hospital hygiene is raised. This reveals an avoidance of the subject of HAI by nurses and could be explained by the fact that they feel implicated.

### **4.1.3. An Underestimated and Less Worrying Problem**

The risk, extent and seriousness of HAIs are underestimated by the nurses at Ziniaré district hospital. Indeed, the risk of HAI is not always perceived by nurses when they provide care. Phaneuf and Gadbois [15] made the same observation and state that this is one of the main reasons for poor compliance with infection prevention measures. Amiel [8], on the other hand, revealed that caregivers are not unaware of the risks of HAI, but rather obey the logic of adaptation to the constraints of the environment. The low perception of the extent of HAIs by nurses could be explained by the fact that they have difficulty recognizing them. Laurence [17] stressed that nurses had a strong perception of the extent of HAIs and were concerned about limiting their recrudescence. HAIs, which are trivialized, do not give rise to preventive attitudes and behavior. Alessandro [9] highlighted the same observations. This can be explained by the fact that asepsis is not always perceived by nurses as a requirement when performing care acts.

## **4.2. Denial of Responsibility**

The nurses' comments reveal a perception according to which the responsibility for HAIs lies outside them. Thus, the care provided by others, care management and collective responsibility are indexed.

### **4.2.1. Care Practices Called into Question**

In their comments, nurses attribute the occurrence of HAIs to failures in the application of prevention recommendations. Alessandro [9] made the same observations and stated that these negligence's favored the emergence of HAIs. The urgency of certain care is often cited by nurses as a reason for relegating hygiene measures to second place. Phaneuf and Gadbois [15] mentioned a lack of application of professional judgment on the part of the nurse, who should be able to choose the preventive measures appropriate to each situation.

### **4.2.2. Individual Responsibility Denied**

If care is blamed for the occurrence of HAIs, nurses do not recognize that they are individually responsible. They blame others, such as colleagues, patients and their families, or evoke a collective responsibility. Laurence [17] also found the same attitudes among nurses who rejected responsibility for the occurrence of HAIs.

### **4.2.3. A Management Problem**

Of the reasons mentioned, the participants raised a management problem. Indeed, insufficient resources, high workload, insufficient training and communication, and lack of authority in the application of recommendations are perceived by the nurses as factors favoring the occurrence of HAIs. Authors such as Amiel [8], Laurence [17], Carricaburu *et al.*, [16] found a similar discourse from nurses who denounced these management problems which would not allow the application of recommendations for the prevention of HAI.

In sum, these perceptions of nurses on the occurrence of the problem show that they find the origin of HAIs outside themselves. In his critical analysis of the

safety culture, Laurence [17] revealed the same perceptions. At no point was there any direct reference to the nurses themselves.

### **4.3. A Vulnerable Problem**

#### **4.3.1. HAIs Are Preventable**

Among nurses, there is a perception that HAIs are not inevitable, but on the contrary, they are preventable if nurses are aware of the problem and adopt appropriate attitudes and practices. Therefore, corrective actions are to be envisaged. These perceptions of nurses show a perception of the need for change. Laurence [17] found this perception among nurses who, in order to deal with the resurgence of HAIs, carried out firm prevention instructions.

#### **4.3.2. Need for Professional Awareness and Attitudes**

For nurses, the fight against HAI requires the provision of safe and humanized care. This requires a rethinking of attitudes and practices, professional awareness, and empathy for patients. Nurses must make moral and professional obligations their own and comply with prevention recommendations. Also, controls of the application of the recommendations must be made and indelicate caregivers challenged. Phaneuf and Gadbois [15] call for the application of the nurse's professional judgment in order to adopt measures appropriate to each situation. Nurses also suggest that nursing leadership should mobilize the entire care team in the fight against HAIs. This leadership role has been emphasized by Birgand and Lucet [7], for whom the leader inspires, motivates and cultivates clinical excellence in his team.

#### **4.3.3. Actions to Be Taken**

For nurses, the implementation of prevention recommendations requires continuous awareness-raising. Concerted action is needed to discuss and question practices that cause HAIs. Raude [18], emphasized that talking about the risk of HAI can raise the awareness of caregivers. According to the nurses, in order for the prevention recommendations to be respected, it is necessary to train the caregivers, which forges a professional conscience and empathy for the patients. This was mentioned by Lucet and Birgand [7], for whom perceptions of prevention recommendations are influenced by the training of caregivers. The nurses said that the implementation of the recommendations depends on the improvement of working conditions. There should be a good organization of work that reduces the workload of nurses and the allocation of substantial equipment that allows the effective application of prevention measures. Also, the nurses suggest that patients and their parent should be involved in prevention. Laurence [17] also found that nurses, in order to provide quality care, demanded working conditions as well as the involvement of patients and their families in the application of prevention measures.

## **5. Conclusion**

Despite prevention efforts, HAIs persist and continue to claim many victims.

One of the reasons for this situation is the insufficient application of prevention recommendations. Through this phenomenological approach, our study highlights the influence of nurses' experiences and perceptions in the occurrence of HAIs. Indeed, our results show that HAIs appear to be a less worrying issue for nurses. Also, nurses do not recognize their responsibility in their occurrence. This raises the issue of nurses' adherence or resistance to IP measures. However, the optimism regarding the improvement of attitudes and practices for the prevention of HAI is an aspect to be taken into consideration as long as perceptions are modeled and modified through corrective interventions [7]. This confirms our point of view according to which nurses' perceptions should be taken into consideration. In view of these results, awareness-raising, continuous training, improvement of working conditions and the involvement of all actors, including patients and their families, are essential in the fight against HAIs.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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