



ORIGINAL ARTICLE

## Patient experience in emergency departments: What do children and adolescents think? ☆,☆☆



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### Abstract

**Introduction:** Improving patient experience must become a priority in paediatric emergency departments. This experience is often studied by surveying parents, and not children directly. The aim of this study was to assess the patient experience of children attended in a Paediatric Emergency Department (PED).

**Patients and methods:** A prospective descriptive study was conducted using a survey based on the Picker questionnaire on the patient experience. From January to May 2014, children 8–17 years seen in the Paediatric Emergency Department and admitted to the hospital were asked to complete the questionnaires anonymously, within 24 h of admission.

**Results:** A total of 217 patients completed the survey. The responses showed that 19.4% had to wait longer than expected, with 46.2% saying that there was not enough for children of their age group to do while waiting to be seen. As regards care and treatment, 4.6% of participants said staff did not fully explain what they were doing, and 23% said that they were not given enough privacy when being examined. Overall, 99.1% of patients said that they were well treated.

**Conclusions:** Overall patient experience in the PED was positive. Some aspects have to be improved (activities in the waiting room, and privacy during the examination).

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**Experiencia del paciente en Urgencias: ¿qué opinan los niños y los adolescentes?****Resumen**

*Introducción:* Mejorar la experiencia del paciente debe convertirse en una prioridad en los Servicios de Urgencias. En Pediatría, a menudo, se estudia la opinión de padres/cuidadores y no la de los niños directamente. El objetivo de este estudio es conocer la experiencia como paciente del pediátrico ingresado desde el Servicio de Urgencias pediátricas.

*Pacientes y métodos:* Estudio descriptivo prospectivo. Se diseña una encuesta basada en el cuestionario Picker sobre la experiencia del paciente que estudia la proporción de insatisfacción. Las encuestas son contestadas directamente por niños de 8-17 años que son visitados e ingresados desde Urgencias de un hospital terciario pediátrico. Se entregan las encuestas durante las primeras 24 h de ingreso de enero a mayo del 2014.

*Resultados:* Se obtienen 217 encuestas. La mediana edad es de 12 años. Los niños piensan que la espera fue más larga de lo esperado (19,4%) y que las actividades de entretenimiento fueron inadecuadas (46,2%). Sobre la visita médica, el 4,6% piensa que el personal no explicó correctamente los procedimientos y para el 23% no tuvieron la suficiente privacidad. Sobre el conjunto de la visita, el 99,1% de los pacientes se sintió bastante o muy bien tratado. No se han encontrado diferencias en el grado de satisfacción en función del sexo, la edad o el tiempo de espera.

*Conclusiones:* Globalmente, la experiencia del paciente pediátrico en nuestro Servicio de Urgencias fue positiva. Algunos aspectos son susceptibles de mejora, como las actividades durante la espera y la privacidad durante la visita.

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**Introduction**

Patients' experience with respect to their health and the medical attention they receive must be regarded as the crux of any medical act.<sup>1-3</sup> This experience can be defined as the sum of all the interactions produced by the culture of an organisation that influence the patient's perceptions throughout the health care process. Any such process should therefore be seen as a continuum from the patient's arrival at the healthcare centre to their departure. This experience will be determined by various factors, including scientific quality, safety and patient satisfaction.<sup>4</sup>

Satisfaction in relation to healthcare acts is a situation in which patients' expectations regarding their treatment and care have been met (or even exceeded).<sup>5</sup> It is an indicator of perceived quality of care, not always associated with scientific quality. In the field of emergency care, satisfied patients will probably revisit the healthcare centre and recommend it to their family and friends, and will also adhere more faithfully to doctors' orders.<sup>5-8</sup> For healthcare staff, patient satisfaction makes professionals feel better about offering their services.<sup>7-9</sup>

The last 20 years have seen growing interest in the subject among the medical community, reflecting the change towards medicine centred on patients and their families.<sup>1</sup> There has been a proliferation of studies based on satisfaction surveys, most of them carried out on adult patients. In the paediatric area the majority of studies address children's satisfaction through that of their parents/caregivers; there are very few that question the children directly.<sup>8,10</sup> This is mainly due to two reasons: on the one hand, it

tends to be more difficult to obtain informed consent in the paediatric field, and on the other, children's cognitive abilities vary according to age, and this determines how they are interviewed and how information on their opinions is obtained.<sup>2,5,7-10</sup>

The purpose of this study is to examine the experience of paediatric patients in a Paediatric Emergency Department (PED) using satisfaction surveys addressed directly to children.

**Patients and methods**

This is a prospective descriptive study using surveys, carried out between January and May 2014 in a high-complexity tertiary referral children's hospital. The PED handles some 100 000 visits per year, in the specialities of Paediatrics, Surgery, Orthopaedic Surgery and Traumatology, and Psychiatry. The study was approved by the hospital's ethics committee.

The PED treats patients aged between 0 and 18 years. The pathway of patients in the PED is as follows: on their arrival, the administrative staff record their demographic data. The children are then assessed by a nurse, who performs the triage; the patients are thereby stratified according to a level of priority between I (immediate attention) and V (lower-priority attention) and they go to the waiting room. In the waiting room there are information screens showing the waiting time and screens broadcasting children's programmes; there are machines dispensing food, drinks, diapers and other childcare products, and finally there are

various entertainment options aimed at small children, such as a tank of tropical fish or games of skill.

The patients included in the study are children and adolescents aged between 8 and 18 years who attended the PED and were hospitalised. Patients requiring immediate medical attention (triage level I), those unable to answer the survey (language barrier, mental disturbance) and those who did not wish to participate in the study were excluded.

The survey used is based on the Picker Patient Experience Questionnaire, produced by the Royal College of Paediatrics and Child Health (England) and the Picker Institute Europe.<sup>1,10,11</sup> This survey was designed by and for children, who are directly asked their opinion on their experience as patients in the context of emergency care. The ‘‘problem scores’’, which are the percentages of patients who give a negative answer to each question, are analysed, enabling us to examine the features that need to be improved in order to enhance the patient experience. The Picker questionnaire has been validated for children over the age of 8 years, who answer the survey with or without the help of their parents/caregivers.<sup>1,10,11</sup> In the survey used in this study we omitted some questions from the Picker questionnaire on possible transfer by ambulance and on events after discharge from the emergency department; the illustrations (drawings) that appear in the original survey have not been included. A copy of the survey is included in [Appendix A](#).

During the first 24 h after admission, the children were asked to complete the questionnaires themselves, with or without help from their parents/caregivers. The children’s oral consent and that of their parents/caregivers

was obtained and no kind of remuneration was offered for participating in the study. The investigators collected the questionnaires once they had been completed.

The responses to the questionnaires were stored and processed in a specific Microsoft Access relational database. Quantitative and categorical variables were tabulated and analysed with the SPSS 17.0 statistical program.

## Results

In all, 217 surveys were obtained. The median age of the patients was 12 years (interquartile range [IQR], 10–15) and 56.7% of them were male. The patients were classified according to the triage scale as level II (19.1%), level III (53.5%), level IV (21.9%) and level V (5.5%). The median waiting time was 29 min (IQR, 17–54). As regards specialities, 63.1% of the patients were seen and admitted by the Paediatric Service, 22.6% by Surgery, 12.0% by Orthopaedic Surgery and Traumatology, and 2.3% by Psychiatry.

The responses from participants are set out in percentage form in [Table 1](#) (questions on waiting) and [Table 2](#) (questions on care and diagnosis in the emergency department). [Table 3](#) shows the responses to the questions on the visit as a whole. Following the survey methodology, the responses that show the proportion of dissatisfaction (‘‘problem score’’) are highlighted in bold type.

On analysing the responses to the last question on overall satisfaction, no significant differences were found by sex, age, waiting time or triage level.

**Table 1** Responses to the questions on waiting in the emergency department (n = 217).

Question	Response	Proportion of responses (%)
1. How did you feel about the time you had to wait from when you arrived at the hospital to when you were seen?	I didn’t have to wait at all	21.4
	I didn’t have to wait as long as I expected	40.5
	The wait was what I expected	18.6
	<b>I had to wait longer than I expected</b>	<b>19.5</b>
2. While you were waiting, did anyone tell you what was going on?	Yes	44.5
	No, but I didn’t need them to	28.9
	<b>No, I would have liked someone to tell me</b>	<b>7.6</b>
	I don’t know/I can’t remember	19.0
3. Did you have enough to do while you were waiting (toys, games, books)?	Yes, there was a lot to do	12.0
	<b>Yes, there were things to do but not enough</b>	<b>6.7</b>
	<b>No, there were things to do but not for children of my age</b>	<b>23.6</b>
	<b>No</b>	<b>11.9</b>
	I don’t know/I can’t remember	4.0
4. Did you have everything you needed while you were waiting (food, drink, toilets)?	I had things of my own to keep me occupied	41.8
	Yes	73.8
	<b>No</b>	<b>7.1</b>
	I didn’t need anything	15.7
	I don’t know/I can’t remember	3.3
5. How clean was the waiting room?	Very clean	61.4
	Fairly clean	29.0
	<b>Not very clean</b>	<b>2.9</b>
	<b>Dirty</b>	<b>0.5</b>
	I don’t know/I can’t remember	6.2

‘‘Problem scores’’ are in bold type.

**Table 2** Responses to the questions on care and treatment in the emergency department ( $n = 217$ ).

Question	Response	Proportion of responses (%)
6. Did the doctors and nurses explain what they were doing in a way you could understand?	Yes	89.8
	<b>No</b>	<b>4.6</b>
	I didn't need any explanation	3.2
	I don't know/I can't remember	2.3
7. Did the doctors and nurses explain clearly what was happening?	Yes	82.5
	<b>No</b>	<b>6.0</b>
	I didn't need any explanations	3.7
	I don't know/I can't remember	1.4
8. Do you think the doctors and nurses did everything they could to calm you down and put you at ease?	Yes	85.3
	<b>No</b>	<b>3.2</b>
	There was no need	11.5
9. Do you think the doctors and nurses did everything they could to help you with your pain?	Yes	88.5
	<b>No</b>	<b>1.4</b>
	I didn't have any pain	10.1
10. Were you seen and treated in private?	Yes	69.4
	<b>No, but I don't mind</b>	<b>19.0</b>
	<b>No, but I would like to have been</b>	<b>4.2</b>
	I don't know/I can't remember	7.4
11. Did anyone explain what being admitted would involve (how many days you would be in the hospital, what the room would be like, the hospital rules?)	Yes	56.5
	<b>No</b>	<b>33.3</b>
	There was no need	10.2

"Problem scores" are in bold type.

**Table 3** Responses to the questions on the visit to the emergency department as a whole.

Question	Response	Proportion of responses (%)
12. While you were at the hospital, did you or your parents receive enough information about your illness and about what had to be done to make you better?	Yes, there was enough information	79.6
	<b>Yes, but there wasn't enough information</b>	<b>11.1</b>
	<b>No, I would like to have received some information</b>	<b>3.2</b>
	No, but I didn't need any information	2.8
	I don't know/I can't remember	3.2
13. Overall, how do you think you were treated during the visit?	Very well	74.5
	Fairly well	25.0
	<b>Not very well</b>	<b>0.5</b>
	<b>Not at all well</b>	<b>0.0</b>

"Problem scores" are in bold type.

## Discussion

Overall, the patients aged between 8 and 17 years seen in our PED are fairly satisfied or very satisfied with their experience there, taking patient experience to mean everything undergone in our PED (from arrival to departure) and not just satisfaction with the healthcare act in itself. Other studies carried out with adolescent patients in the context of emergency care show similar results, with a high degree of patient satisfaction with respect to the visit.<sup>6,12</sup> There are very few studies on the opinions of children at prepubescent ages, and the results of this work therefore provide new and valuable information. We must remember that children's concerns and fears may be different from those of their parents; they may have a different understanding of health

problems and personal interaction and may not want to obey authority figures outside the family.<sup>5,8</sup>

This information is therefore particularly valuable, since it does not come from parents or caregivers but from directly asking the opinion of children and adolescents who have received attention in the PED. Regarding the waiting period, 46.2% felt that there were not enough activities or that the activities were not suitable for their age group. This is an important point for improvement: the PED's waiting room has many activities aimed at small children (games, cartoons on television, fish) but does not offer sufficient entertainment alternatives for older children and adolescents. For this reason, we are investigating the possibility of installing multitouch tables with games related to health issues designed for older children. Shefrin et al.<sup>6</sup> have

already highlighted this point in their study on satisfaction of adolescents in an emergency department: adolescents say that they prefer to have a space of their own in the waiting room with material suitable for their age group, such as films, video games, magazines, electronic tablets, etc.

Another prominent issue is the question of privacy, as almost a quarter of those surveyed stated that they were not treated with sufficient privacy. We do not believe this is due to the infrastructure of our PED, since the triage and treatment cubicles are individual; rather, it could be because patients are always seen accompanied by a caregiver, without asking the patient (the adolescent) whether he or she wants the caregiver to be present. We must remember that adolescents have special needs, as they often feel independent of their caregivers and want to be actively involved in the medical decisions that affect them; health professionals therefore need to let them make their own decisions and treat them with respect and with an adequate degree of privacy.<sup>6</sup> Rutherford et al<sup>12</sup> found a similar result in their study on satisfaction in an emergency department: when a sample of 100 adolescents were asked whether they had been given enough privacy while being seen by healthcare staff, 19% replied in the negative. We must take account of this issue in order to improve the care offered to this kind of patient.

This study has several limitations which must be taken into consideration when interpreting the results. Apart from the inherent limitations of any survey-based investigation, this study was carried out in a single PED; it therefore reflects the situation in a single hospital and the results cannot be extrapolated to other PEDs in Spain. In addition, the selection of the sample may have biased the results, since the patients questioned were those that were hospitalised: patients who are admitted generally have a more severe triage level than those who are not, and therefore tend to wait less time to be seen; moreover, being admitted may influence patients' perception of how healthcare acts are conducted in the emergency department. Finally, despite the fact that the survey was addressed directly to children and adolescents, parents were able to help their children complete it, thereby influencing the responses.

In conclusion, children over 8 years of age were satisfied with the experience they had in our PED. Studying the points for improvement that were put forward (entertainment activities while waiting and privacy) has enabled us to institute a series of measures to improve our patients' experience. To sum up, beyond analysing satisfaction in relation to the healthcare act, we must try to examine the whole experience undergone by patients when interacting with healthcare institutions, so as to be able to take appropriate measures to improve that experience.

## Conflicts of interest

The authors have no conflicts of interest to declare.

## Appendix A. Copy of the survey

Survey of satisfaction in the emergency department

Our patients' *satisfaction* is very important to us. So we are asking you to fill in this anonymous questionnaire. Your opinions will give us very valuable information to help us

improve the care we offer you. You should only mark the *most suitable option* for each question.

Thank you!

Questions on waiting in the emergency department

1. How did you feel about the time you had to wait from when you arrived at the hospital to when you were seen?
    - I didn't have to wait at all
    - I didn't have to wait as long as I expected
    - The wait was what I expected
    - I had to wait longer than I expected
  2. While you were waiting, did anyone tell you what was going on?
    - Yes
    - No, but I didn't need them to
    - No, I would have liked someone to tell me
    - I don't know/I can't remember
  3. Did you have enough to do while you were waiting (toys, games, books)?
    - Yes, there was a lot to do
    - Yes, there were things to do but not enough
    - No, there were things to do but not for children of my age
    - No
    - I don't know/I can't remember
    - I had things of my own to keep me occupied
  4. Did you have everything you needed while you were waiting (food, drink, toilets)?
    - Yes
    - No
    - I didn't need anything
    - I don't know/I can't remember
  5. How clean was the waiting room?
    - Very clean
    - Fairly clean
    - Not very clean
    - Dirty
    - I don't know/I can't remember
- Questions on care and treatment
6. Did the doctors and nurses explain what they were doing in a way you could understand?
    - Yes
    - No
    - I didn't need any explanation
    - I don't know/I can't remember
  7. Did the doctors and nurses explain clearly what was happening?
    - Yes
    - No
    - I didn't need any explanations
    - I don't know/I can't remember
    - They don't know what's wrong with me
  8. Do you think the doctors and nurses did everything they could to calm you down and put you at ease?
    - Yes
    - No
    - There was no need
  9. Do you think the doctors and nurses did everything they could to help you with your pain?
    - Yes
    - No
    - I didn't have any pain

10. Were you seen and treated in private?
  - Yes
  - No, but I don't mind
  - No, but I would like to have been
  - I don't know/I can't remember
11. Did anyone explain what being admitted would involve (how many days you would be in the hospital, what the room would be like, the hospital rules?)
  - Yes
  - No
  - There was no need

Questions on the whole experience
12. While you were at the hospital, did you or your parents receive enough information about your illness and about what had to be done to make you better?
  - Yes, there was enough information
  - Yes, but there wasn't enough information
  - No, I would like to have received some information
  - No, but I didn't need any information
  - I don't know/I can't remember
13. Overall, how do you think you were treated while you were at the hospital?
  - Very well
  - Fairly well
  - Not very well
  - Not at all well
14. Who answered this questionnaire?
  - The patient
  - The parent or caregiver
  - The parent and the patient together

Would you like to add any comments?

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