



Satisfaction of Patients Undergoing Hand Surgery

Satisfação dos pacientes submetidos à cirurgia de mão

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Abstract

Objective To assess the satisfaction of patients undergoing hand surgery in relation to their hospitalization, their feelings, and the consequences resulting from the surgical procedure as well as to evaluate their opinion and feelings in relation to the surgical procedure and to detect possible weaknesses in the health care of patients undergoing hand surgery.

Method Cross-sectional observational clinical study, with a quali-quantitative focus, carried out in an outpatient clinic of a teaching hospital specialized in hand care, with patients of both genders, aged 18 to 75 years, who have undergone corrective surgical procedures of hand pathologies in the last 5 years.

Results We obtained a total of 54 participants, 26 females and 28 males, with a minimum age of 18 years and a maximum of 73 years. Patient satisfaction for the 11 moments evaluated had means between 8 and 10, showing great satisfaction. For the other five moments evaluated, the means were between five and eight. We did not get any satisfaction average below five.

Conclusion The absolute satisfaction of patients undergoing hand surgery is dependent on the humanization of health care, especially in relation to surgical consequences, which require further follow-up. The surgical consequences that require greater follow-up and hinder the routine activities of patients are pain on hand mobilization, limitation of the range of motion, and paresthesia; thus, proper management of these complaints leads to greater satisfaction.

Keywords

- ▶ humanization of assistance
- ▶ delivery of health care
- ▶ patient satisfaction
- ▶ orthopedic procedures
- ▶ hand

Resumo

Palavras-chave

- ▶ atenção à saúde
- ▶ humanização da assistência
- ▶ satisfação do paciente
- ▶ procedimentos ortopédicos
- ▶ mão

Objetivo Determinar a satisfação dos pacientes submetidos a cirurgia de mão em relação a sua internação, seus sentimentos, e as consequências decorrentes do procedimento cirúrgico bem como avaliar sua opinião e seus sentimentos em relação ao procedimento cirúrgico e detectar possíveis fragilidades na atenção à saúde do paciente submetido a cirurgia de mão.

Método Estudo clínico observacional de corte transversal, com enfoque quali-quantitativo, realizado em um ambulatório especializado em cuidado da mão de um hospital de ensino, com os pacientes de ambos os gêneros, com idade de 18 a 75 anos,

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que tenham sido submetidos a procedimentos cirúrgicos corretivos de patologias da mão nos últimos 5 anos.

Resultados Obtivemos o total de 54 participantes, sendo 26 do sexo feminino e 28 do sexo masculino, com idade mínima de 18 anos e máxima de 73 anos. Em relação à satisfação dos pacientes em 11 momentos avaliados, as médias foram entre 8 e 10, mostrando grande satisfação. Para os outros cinco momentos avaliados, as médias ficaram entre cinco e oito. Não obtivemos nenhuma média de satisfação abaixo de cinco.

Conclusão A satisfação absoluta dos pacientes submetidos à cirurgia de mão é dependente da humanização da assistência à saúde, principalmente em relação às consequências cirúrgicas, que demandam maior acompanhamento. As consequências cirúrgicas que demandam maior acompanhamento e que dificultam as atividades rotineiras dos pacientes são dor à mobilização da mão, limitação do arco de movimento, e parestesia; assim, o manejo adequado dessas queixas leva à maior satisfação.

Introduction

The upper limb has as some of its functions the abilities to handle, to strike, and to perform the manipulation of objects. These characteristics are even more pronounced in the hands, since they aid in fine movements, besides characterizing the human species, by allowing the movement of tweezers, used in most daily activities, such as buttoning a shirt.¹ Thus, the hand is a structure of paramount importance for the functionality of the individual.

Due to the operational value of the hand, the diseases and traumas that affect it can lead to symptoms that result in physical, psychological, and financial injuries to patients. Physical damage is related to changes in the quality of life, since injuries and complications of surgery can lead to loss of mobility, strength, sensitivity, anatomical deformities, and dependence on care. These diseases lead to psychological damage, such as anxiety, and can be aggravated by financial losses, such as absence from work and the need for postoperative care such as physiotherapy.^{2,3}

The medical approach, when surgical treatment is needed, should be performed even more carefully, discussing with the patient about the procedure he will have to face. A dialogue should be established with the patient to reduce anxiety, both in relation to the technique and the possible complications of the surgery.^{2,4} Thus, with the patient better informed, their satisfaction tends to be higher.

According to the Michaelis⁵ dictionary (2004), satisfaction is a *pleasant feeling that we feel when things happen as we wish*." According to the Ministry of Health, satisfaction with the health service is considered the opinion of the beneficiary, revealing the right measure of the quality of its products and services. Generally, this satisfaction is measured through data collection, which can be performed through forms, telephone interviews, structured or semi-structured questionnaires, with open and closed questions, and all of those allow us to discuss the medical approach

performed during the evolution of the patient's main complaints.^{6,7}

Medical performance should be done individually, since a given disease can be viewed differently by patients. Several factors influence the understanding of the disease, such as interpersonal relationships, beliefs, social identity, and quality of health care.³ in Brazil

Thus, to better conceptualize this subject, in 1999, the National Program for the Humanization of Hospital Care in Brazil was implemented, with the fundamental objective of reviewing the relations between health professionals and users through an ethical posture that respects their individualities, the relationships of professionals among themselves, the institution with professionals, and the hospital with the community.^{8,9}

From this program, humanization in the health area was theoretically implemented, conceptualized as the ethical commitment to understand the patient in its entirety, considering that each person is unique and responds differently to the same situation. Thus, for a satisfactory medical approach, one must follow the principle of humanization, which encompasses a dialogue of respect and enlightenment of users regarding health care services.^{8,10}

It is questionable whether health professionals are aware of how patients feel before, during, and after any approach to health, especially in hand surgical procedures. Thus, knowing the satisfaction of these patients is essential for professionals to improve their comprehensive health care.

Due to the scarcity of studies that portray the patient's experience in relation to hand surgery, the present study seeks to guide health professionals in relation to patients' satisfaction with the surgical procedure and its consequences.²

The objectives of this study were to identify the satisfaction of patients undergoing hand surgery in relation to their hospitalization, their feelings and consequences resulting from the surgical procedure; evaluate the opinion and

feelings of patients in relation to the surgical procedure and detect possible weaknesses in the health care of patients undergoing hand surgery, to propose improvements.

Method

This is a cross-sectional observational clinical study, with a quali-quantitative focus, which was conducted between January 2020 and April 2021 in an outpatient clinic, of a teaching hospital, specialized in the hand.

Inclusion criteria are patients of both genders, aged 18 to 75 years, who have undergone corrective surgical procedures on their hands in the last five years, including fractures, neurotendinous lesions and chronic degenerative diseases and who have signed the informed consent form (TCLE).

Exclusion criteria were patients who did not sign the Informed Consent, who do not have cognitive conditions to fill out the form, quadriplegic patients, patients with neurological deficits that interfere with the function of the upper limbs.

To obtain the data, a semi-structured interview was conducted with the patients in the waiting room of the specialty outpatient clinic in the postoperative follow-up in a pre-scheduled consultation. A form containing questions that include the following analytical variables was used: factors related to comorbidities, a predicted history of diseases such as acute myocardial infarction, stroke, oral diseases, neoplasms, fractures, reason for current surgery, previous pain, during and after surgery, how they feel in relation to information and guidance throughout the surgical process (from hospitalization to postoperative). All interviews were conducted by the main researcher (VMC) and supervised (LCL).

Pain was adequately controlled by physicians, with prescribed medications and guidance.

The satisfaction of the patients in relation to the whole process around the hand surgery was evaluated in a qualitative-quantitative manner, with responses from 0 to 10, being 0 very dissatisfied and 10 very satisfied, besides evaluating the reasons why this score was being given. The moments in which satisfaction was evaluated were:

1. Information of your illness prior to surgery.
2. Surgery guidelines.
3. Guidance during hospitalization prior to surgery;.
4. Orientations in the room before entering the operating room.
5. Guidelines in the operating room.
6. Care during hospitalization.
7. Discharge guidelines.
8. First post-surgery consultation.
9. The entire hospitalization process.
10. General procedure.
11. Pain throughout treatment.
12. Return to functions prior to surgery.
13. Performing routine activities.
14. Ability to return to work.
15. Treatment as a whole.

16. Impact on your quality of life.

The study was approved by the Research Ethics Committee (CEP) and the Research Guidance Committee (COPE), and data collection was initiated after approval. The work had no external funding.

Results

Fifty-four participants were included, 26 women and 28 men, with a minimum age of 18 and a maximum age of 73 years (mean of 43.5 years). Their level of education was mostly primary education (46%), followed by complete high school (40%).

Regarding anthropometric measurements, the mean body mass index (BMI) was 28.21kg/m², falling into the overweight category.

Regarding comorbidities, we found systemic arterial hypertension (16.7%), pulmonary diseases (11.1%), diabetes mellitus (11.1%), oral diseases (5.6%), neoplastic diseases (1.9%), stroke (1.9%) and gastric ulcer (1.9%).

Regarding the causes of hand surgery, we found that fractures (51.9%) were the most prevalent, with the wrist are being the most frequently affected area (radius and ulna distals, 46.4%), followed by the phalanges (21.4%) and metacarpals (14.3%). There were also cases of associated lesions in more than one topography, such as the phalanx and metacarpal (3.6%), phalanx and wrist (3.6%), metacarpal and wrist (3.6%), and carpal and wrist bones (3.6%).

The main events that led to hand surgery were acute trauma (77.8%), sequelae of trauma (18.5%), and association of acute trauma followed by sequelae of this short-term trauma (3.7%).

In relation to pain, several periods were evaluated, with evaluation by means of a numerical pain scale (EDT) from 0 to 10, with 0 being without any pain and 10 being the worst pain experienced in life. The pain results are shown in ► **Figure 1**.

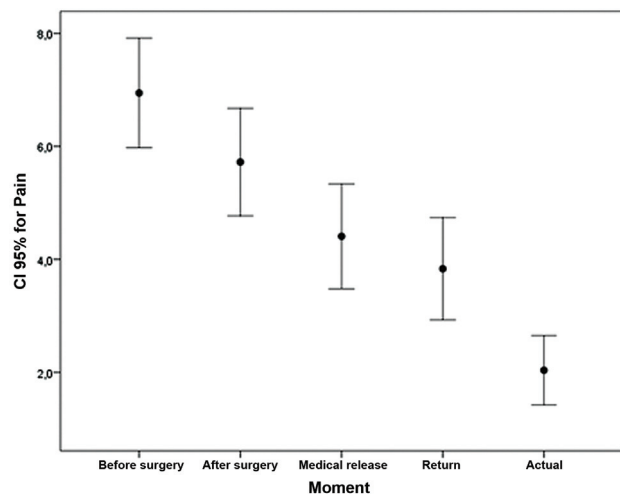


Fig. 1 Pain of patients in various moments associated with hand surgery.

Table 1 Average satisfaction at the different moments evaluated

Moments	Average satisfaction	Minimum Value	Maximum Value
Information about your illness before surgery	8.9	2.5	10
Surgery Guidelines	9.1	2.5	10
Guidance during hospitalization before surgery	8.8	2.5	10
Directions in the room before entering the operating room	9.3	2.5	10
Guidelines in the operating room	9.5	5.0	10
Care during hospitalization	9.2	2.5	10
Discharge guidelines	9.1	2.5	10
First postsurgery consultation	9.4	5.0	10
The whole hospitalization process	9.1	2.5	10
General process	9.3	2.5	10
Pain throughout treatment	7.7	2.5	10
Return to functions prior to surgery	7.5	2.5	10
Performing routine activities	7.7	2.5	10
Ability to return to work	5.8	0	10
Treatment as a whole	9.3	2.5	10
Impact on your quality of life	6.6	0	10

► **Table 1** shows the averages of satisfaction scores for the various moments evaluated. For the moments orientations of the surgery; orientations in the room before entering the operating room; orientations in the operating room; care during hospitalization; orientations at discharge; first consultation after surgery; the whole hospitalization process; regarding the treatment as a whole and the general process, the means obtained were between 9 and 10. For the moments information about the disease before surgery and guidelines during hospitalization before surgery, the means obtained were between 8 and 9. For the moments pain throughout the treatment, return to regular functions, and performance of everyday activities, the means were between 7 and 8. When asked about the impact on their quality of life and pain throughout the treatment, we found an average between 6 and 7. For the time and ability to return to work, the average was between 5 and 6.

► **Table 2** shows the positive and negative reasons pointed out by the patients when treatment-related satisfaction was evaluated, and ► **Table 3** shows the reasons pointed out for satisfaction related to return-to-work capacity, impact on quality of life, and everyday activities.

Discussion

In view of the scarcity of research on the satisfaction of patients undergoing hand surgery, this study so that health professionals can evaluate the factors of discontent of users, considering improvements.

In their study, Tahara et al.⁷ addressed the significant factors for an individual's satisfaction with the health service. The character and technique of care, the environment in which the patient is treated, the availability of health pro-

fessionals, the continuity of care, and the effectiveness of the treatment stood out. Improvements in the quality of health care can be elaborated based on these aspects in order to individualize the care to each patient.

To properly perform the factors mentioned above, a humanized interaction between health professionals and patients is necessary. This depends on the dialogue between both, in order to understand the needs of the user and, thus, explain about their health situation clearly and establish, together, a therapeutic plan to ensure the wellbeing of both parties.⁹

The dialogue between the doctor and the patient, at the initial moment of the relationship, should be thorough, with a detailed explanation of the injury and the follow-up that will be given for its correction.⁹ Among the results of the study, we obtained as a negative point the lack of information about the fracture or injury in hand topography. Thus, one way to improve the quality of service would be to increase the duration of the consultation, so that physicians can be more didactic, providing information that the patient can understand in order to feel safer in relation to medical conduct.

Medical follow-up is not the only demand of individuals since other health professionals are also essential for the wellbeing of patients throughout the process that guides hand surgery.⁹ For complete satisfaction, the support of the team should be careful and individualized, since hospitalization is a period in which the patient feels anxious about his pathology, procedures, and recovery.² In the results of this study, the relevance of the care of physicians and nurses who accompany patients throughout hospitalization was pointed out, with the physical and psychological care being considered important since patients are entitled to only 1 hour of

Table 2 Reasons related to satisfaction at different moments evaluated

Moments	Negative reasons cited	Positive reasons cited
Information about your illness before surgery	"rude care"; "lack of information"; "lack of communication" and "not agreeing with the information provided"	"clear information" and "transmission of tranquility on the part of doctors"
Surgery guidelines	"lack of information"; "information that is not clear"; "not fully agree with the conduct" and "not guide about the surgery"	"clear information," and "very well instructed by doctors"
Guidance during hospitalization before surgery	"high demand from the team, therefore less attention"; "have left me outdated"; "delay in the day scheduled for surgery"; "lack of care on the part of nursing"; "lack of information" and "quick visit without explanations"	"clear information," and "very enlightening information"
Directions in the room before entering the operating room	"little information provided"	"clear information on the procedure"
Guidelines in the operating room	"lack of information"	"well advisory about surgery" and "clear information"
Care during hospitalization	"nursing team with a lot of demand"; "lack of attention on the part of nursing"; "lack of information in detail" and "did not explain how the surgery was"	"good medical and nursing care," and "attentive doctors"
Discharge guidelines	"lack of guidance on what to do and what not to do," and "did not guide, just gave the prescription of medicines"	"well-oriented," "enlightening information," and "guided on revenue, return, and exams".
First postsurgery consultation	"crowded outpatient clinic; therefore, less didactic doctors" and "delay in performing radiography"	"clear information," "considerate surgeons," "great care," and "explained all the processes that occurred in the surgery and the next ones that would be performed"
The whole hospitalization process	"lack of attention on the part of nursing," "little medical attention," "lack of information, and "emotional stress"	"clear information" and "good reception by professionals"
General process	"problems related to care attention," and "slow process"	"speed of consultations, with good service," "rapidly performed examinations," and "health problem solving"
Pain throughout treatment	"presents dystrophic condition leading to pain," "pain during physiotherapy," "pain throughout the treatment process," "still feels pain at home," "severe pain in the first postoperative week," "continuous but mild residual pain," "medications did not control pain," and "lot of pain after anesthesia"	"pain controlled with medications"
Return to functions prior to surgery	"pain and difficulty in mobilizing,"; "difficulty in establishing movements," "tingling," "decrease of the arc of motion," and "loss of strength"	"managing to progress over time," "adaptation phase," "gradual return," and some claimed to be awaiting evolution, showing themselves to be indifferent at the time of evaluation
Treatment as a whole	"lack of attention on the part of nursing"	"information has been clear" and "attentive and resolute medical staff"

daily visit, spending most of their time with health professionals.

After the hospitalization period, patients face the rehabilitation process, with several challenges in the domestic, professional, and leisure areas. In this postsurgical moment, patients begin to doubt their autonomy, since they may have complications resulting from surgery, such as loss of range of motion and/or strength, paraesthesia, which hinder several activities, with the possibility of becoming partially dependent.³

Fifteen patients were dissatisfied with being dependent for routine practices, such as bathing, eating, writing, combing their hair, and performing sports and home services such as cooking, which decreased their overall contentment regarding the surgical procedure of the hand.

The difficulty in returning to work was another component that altered the quality of life of the patients, being the component that obtained an average satisfaction of 5.8, according to the evaluation of the results of the research,

Table 3 Justifications pointed out for satisfaction related to return-to-work capacity, impact on quality of life, and everyday activities

Ability to return to work	“job loss/work break due to the impossibility of making necessary movements,” “pain to perform some movements,” and “loss of strength” as well as “not being able to pick up weight necessary for your work”
Impact on your quality of life	“relying on help for household activities,” “financial difficulty for not being able to return to work,” “feeling insecure to return to work,” “impossibility to perform sports,” “difficulty taking care of children,” “slowed routine”
Performing routine activities	need for help bathing/eating/home/cooking/writing/combing hair as well as difficulty in grip and loss of strength which impair the functionality of the individual. Some participants reported being in an adaptation period, with gradual improvement of functionality and, thus, gradually returning to their daily activities.

which was the worst, compared to the other components. The following were pointed out as factors of limitation to the return of work: impossibility of performing the necessary movements; pain when moving the hand; loss of strength, and insecurity to return to activities when the mechanism of trauma occurred during work activity.

Pain when moving the hand or, in more pronounced cases, during rest, is considered an important restrictive factor for performing all patients' daily tasks. The stress and anxiety faced by the patient due to hospitalization, surgical procedure, and rehabilitation lead to a decrease in the pain threshold, causing it to increase the perception of pain experienced by the individual. The increase in pain aggravates anxiety, leading to the release of vasopressin and glucocorticoids, hindering the arrival of oxygen and nutrients at the surgical site, in addition to increased cortisol, which causes impairment in the inflammatory response. All these factors cause difficulty in healing, interfering in the patient's recovery.^{2,4}

During the outpatient follow-up, it is essential to inquire about the patient's level of pain for the best management of this complaint. Ineffective pain management means that the patient no longer trusts in medical management, which decreases their adherence to treatment.¹⁰ Adequate management of pain is part of a humanized approach, since humanizing care is giving voice to patients in order to promote the resolution of their complaints in the best possible way, always making decisions together.⁹

The exhaustive routine of health professionals, in view of the high demand of patients to be cared for, the lack of materials, the tensions in the face of human suffering, the apprehension of making a mistake, makes them place technical tasks above the humanized approach, when they should be of equal level.⁹ Health services have the function of training professionals to provide this care, putting into practice the foundations of the National Program for The Humanization of Hospital Care in Brazil, which aims at the ethical commitment to consider the individualities of each patient in the face of the same situation.⁸⁻¹⁰

For a humanized approach, it is necessary to value the work of all professionals involved in the health system, such as doctors, nurses, and managers. Because only those who are professionally satisfied can perform their activities in a

technically correct manner and with actions in favor of humanization.

Conclusion

We conclude that the absolute satisfaction of patients submitted to hand surgery depends on the humanized approach on the part of professionals, considering clarity of communication, from the first consultation in the emergency room to the follow-up consultations in the specialized outpatient clinic, the care on the part of doctors and nurses during hospitalization, and the management of complaints postsurgery. The surgical consequences that require greater follow-up and hinder the routine activities of patients are pain when moving the hand, limitation of the range of motion, and parathesthesia; thus, proper management of these complaints leads to greater satisfaction.

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The present study received no financial support from public, commercial, or non-profit sources.

Conflict of Interests

The authors declare that there is no conflict of interests.

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