Clinical management: quality and safety of interdisciplinary obstetric gynaecological care in a health care institution

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Abstract

Safe surgery in public hospitals is a primary objective for the achievement of services-safety and quality provided in the health sector. Within this framework, the research aimed to establish how clinical management affects the quality and safety of interdisciplinary obstetric gynaecological care received by the user of a Lima public hospital. The population consisted of 150 health professionals: doctors, obstetricians, nurses and technicians. The instruments applied in the data collection were three questionnaires, the results of which indicate that clinical management is a tool of continuous process of quality improvement directly linked to the moral commitment of health institutions to safeguard the quality and safety of the care provided to the user from a right to health context. The statistical significance of the regression model proposed to express the analogy between clinical management and quality was 0.056, higher than the theoretical significance. However, the statistical significance of the regression model proposed to express the analogy between Clinical Management and Safety was 0.019, lower than the theoretical significance. It is concluded that hospital management is a complex process, which requires the intervention of all actors involved in the process of care to assume the commitment to control, monitor and improve the risks that may affect the quality and safe environment of the services provided to the patient.

Keywords: Clinical management, quality of care, safety of care.
1. Introduction

The World Health Organization reports alarming global figures on patient safety, stating that every ten patients are at high risk of suffering some kind of harm during their stay in hospital. This damage may be the result of different errors or adverse effects produced during the process of medical care received [1]. Likewise, there is a high risk of an adverse event in which out of every 100 patient notifications, seven occur in developed countries and this figure rises to ten in underdeveloped countries, the problem of greatest incidence generally being infections of an intrahospital nature related to health care. This makes it possible to recommend the adoption of biosecurity measures, and the figures can be reduced by more than 50% with handwashing adherence, as a measure of prevention and control of the safe environment, which is low-cost [2].

On the other hand, the health system must evaluate the various indicators associated with comprehensive patient care in order to establish the magnitude of the harm, the number and type of adverse events caused in practice, and evaluate the impact of the harm caused to the patient. Likewise, the analysis of the causes is with the purpose of seeking alternatives for improvement and applying control and follow-up measures, evaluating the impact of daily professional work, achieving its effectiveness [3]. The determining elements of these complications that are most frequently present in hospital institutions and reported as problems within the area of care are: the incorrect description of the patient or the wrong area of surgery, anesthetic complications and the large list of surgical wound infections [4,5].

Historically, since 2008, the need to promote safety actions in medical care has been emphasized, for which reason the Checklist for Safe Surgery is disseminated as a priority maneuver to reduce the rate of adverse events during surgical procedures; actions that have been evaluated and demonstrated to be effective in their application as a tool for improvement actions in medical practice [2]. Thus, the different countries have taken on the challenge of implementing strategies with minimum cost, but with great benefit and social impact [5].

At the international level, efforts are being made to guarantee the quality and safety of medical care in the hospital environment. The Joint Commission International has implemented actions to ensure the quality of the services provided to patients, in relation to their trust in health benefits, strengthening of preventive measures, identification and effective communication in the health team during the intervention of patients; all of this with the aim of performing the correct procedure and in the correct part. Likewise, the management and control of concentrated solutions of electrolytes; to assure the correct fulfillment of the medication in the assistential evolutions, to avoid faults in the connection of tubes and catheters, to improve the adherence of hygiene of the hands and the only use of injection units, to prevent infections linked to the health care [6].

In the health system, there is a need to strengthen strategies in hospital management to ensure quality and safety in the services provided to patients. Authors such as Ramírez and Rosales (2015) argue that the commitments of international institutions must be developed and strengthened in order to mitigate and impose adverse healthcare-related harm [7]. However, Mohebifar, Hasani, Barikani, and Rafiei (2016) indicate the need for managers and administrators of competent hospitals who can plan to optimize service quality and achieve short and long-term goals [8]. For Kalaja, Myshketa, and Scalera (2016), management should be client-focused and consider client needs through the implementation of more fluid mechanisms and feedback [9].

Therefore, clinical management is related to the use of human, organizational, intellectual and technological resources to certify patient safety and the quality of the services provided. Medical health benefits are elements that are valued by the patient and these results are due to the general management of a health organization, clinical activities and management that are provided in
each department or service separately [3]. It should be noted that the performance and quality of provision depends on the leadership of a qualified person. In Spain, the State has made efforts to change the health situation. To this end, clinical management provides quality tools implemented in improvement projects without direct costs for patients, with high levels of quality and excellence. It should be emphasized that the resources have not been able to cover the high healthcare demand of the institutions is becoming increasingly complex, as the ailments treated are mostly chronic degenerative diseases [10].

According to the Hospital Management Model established in Peru since 2009, in the Health Policy Guidelines 2007-2020, it is attached to the Technical Document of the Integrated Health Care Model, whose precise objective is to include people in the universalization of access to health care, to promote comprehensive care and the quality of health care, with effectiveness and efficiency to achieve decent health care as a result, as a basic right of every person and a primary requirement of social justice. However, many hospitals have shown the increase and the demand of users in the different services they provide, causing a situation of scarcity of resources, such as lack of medicines and medical supplies, leading to instability in order to provide an immediate response to health problems. The quality of services has shown a very low level of quality, as a consequence of the insufficient political and institutional will shown by the responsible authorities [11, 12, 13, 14].

In the hospital setting, patient safety is fundamental for this, and biosecurity measures such as the application of the "Safe Surgery Checklist" are required, the purpose of which is to embody the standards of quality and safety of health care [6]. These measures were crystallized into a platform of action objectives for the reduction of adverse events linked to surgical interventions and the execution of safe practices. Maternal and perinatal care requires a trained health team with a high level of technical and human skills and capable to act and apply the standards established by the MINSA, (have a degree of knowledge about management and quality to ensure safe environments) [11, 12]. However, in recent studies, there is not only a small horizon in the perception of quality, but also a predisposition to continue dissipating, both for MINSA hospitals and for ESSALUD hospitals [12, 13, 14].

Therefore, the clinical manager plays an important role in empowering actions with the health team to add work activities for the benefit of the patient and the organization, with the support of institutional policies, which is defined in the manual of organization and functions of the hospital and its portfolio of services. Complying with the standardization of Medical-Surgical Procedures: implemented through the guidelines of clinical procedures of each service and/or department of the institution, which details the standardization of the Attention and Interrelation Processes [15]. Complemented by the control of Clinical Management, it is a statistical base that integrates the information system and requires evaluation elements such as: audit of clinical records, monitoring of performance indicators, recording of adverse events and active surveillance, such as comprehensive patient safety rounds, since this externalizes that the hospital institution is organized and can assume the evaluation mechanisms that ensure the analysis of human errors that could be mitigated and reduced to a minimum level. The opportunities of this system of clinical management should be realized in the institutions with the participation of health professionals to show and socialize periodically in a joint way the decision making and the application of actions or improvement plans. It should be noted that the Office of Epidemiological Surveillance is responsible for the Hospital Epidemiology Unit and, with support from the staff of the Health Provider Units, carries out Adverse Events Surveillance and improvement plans in accordance with current regulations [13, 14].

Clinical management needs to be rethought in medical care, the purpose of which must be focused on the patient prioritizing the health needs of users and for this, it requires the application of good healthy clinical practices, directly linked to the health team and where the detailed
processes of medical care are integrated continuously, in integrated management of resources, inputs and results, to maximize the desired efficiency and effectiveness, the ultimate goal of all hospital quality management [10].

2. Materials and Methods

Quantitative approach study, basic type of explanatory level, design used is non-experimental and cross-sectional. The population of the present study was made up of 150 health workers from the multidisciplinary team, professionals and technicians from the Obstetrics-Gynecology (OB-GYN) Service Unit of the Hospital Nacional Arzobispo Loayza. The type of sampling to be used is probabilistic, given that all elements of the population have the same probability of being chosen to be part of the sample and the instrument has not been manipulated.

The research was conducted at the Maternal and Child Surgery Center of the Hospital Nacional Arzobispo Loayza, and for data collection three questionnaires were applied corresponding to the three study variables: Clinical management, quality and safety in the gynecological-obstetrics service of the Hospital Nacional Arzobispo Loayza. The questionnaire was of the Likert type, with five measurement scales and was applied to health professionals, doctors and nurses of the Maternal and Infant Surgical Center of the Hospital Nacional Arzobispo Loayza, with the purpose of knowing their appreciation in relation to clinical management and its influence on the quality and safety of care of users. The reliability through Cronbach's Alfa was: Clinical Management 0.944, Quality of the OB-GYN service was 0.934, and Safety of the OB-GYN service was 0.932, which corresponds to a high reliability. In this study, the multinomial logistic regression model was considered, which will explain the influence of clinical management on the variables Quality and Safety of the service.

3. Results

Clinical Management

After processing data from the independent clinical management variable, according to users at the Hospital Nacional Arzobispo Loayza, it could be stated that 6.5% of those surveyed stated that they had an adequate level; 41.7% had an inadequate level and 51.9% had an inadequate level.

![Figure 1. Levels of clinical management](image)

After processing data from the independent clinical management variable, according to users at the Hospital Nacional Arzobispo Loayza, it could be stated that in the planning dimension 7.4% of those surveyed stated that they had an adequate level; 35.2% of those surveyed stated that they had an inadequate level and 57.4% had an inadequate level. In the organizational dimension, 9.3% of those surveyed stated that they have an adequate level; 56.5% of those surveyed stated that they have an inadequate level and 34.3% stated that they have an inadequate level. In the
management dimension, 9.3% of those surveyed stated that they had an adequate level; 50.0% of those surveyed stated that they had an inadequate level and 41.7% said that they had an inadequate level. In the control dimension, 8.3% of those surveyed stated that they had an adequate level; 42.6% had an inadequate level and 49.1% had an inadequate level.

Figure 2. Levels of clinical management by dimension

Quality of care
After processing data on the dependent variable quality of care, according to users of the Hospital Nacional Arzobispo Loayza, it could be said that 1.9% of respondents have an adequate level, 61.1% of respondents have an inadequate level and 37.0% have an inadequate level.

Table 1. Levels of care quality

<table>
<thead>
<tr>
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<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Adequate</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Inadequate</td>
<td>66</td>
<td>61.1</td>
</tr>
<tr>
<td>Not adequate</td>
<td>40</td>
<td>37.0</td>
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<tr>
<td>Total</td>
<td>108</td>
<td>100.0</td>
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Figure 3. Levels of care quality
After processing data on the dependent variable quality of care, according to users of the Hospital Nacional Arzobispo Loayza, it could be stated that in the human dimension 49.1% of respondents have an adequate level and 50.9% of respondents have an inadequate level. In the technical dimension 35.2% of respondents say they have an adequate level and 64.8% of respondents say they have an inadequate level. In the environment dimension, 38.9% of those surveyed stated that they were at an adequate level and 61.1% of those surveyed stated that they were at an inadequate level.

Figure 4. Levels of attention quality by dimensions

4. Discussion and Conclusions

Clinical management, safety and quality, require to be integrated into the health system in the Quality Management, to reaffirm and control health actions in benefit of the patient the quality of services provided by the health institution. It should be noted that the particularity of attending to the mother-child binomial in the maternal-perinatal service requires trained and suitable professionals who apply the standards established by MINSA, as well as having a degree of knowledge of management and quality that guarantees a safe environment [11].

This study aimed to determine the preponderance of clinical management in the quality and safety of interdisciplinary obstetric gynaecological care, which is hosted by users at the Hospital Nacional Arzobispo Loayza, Cercado de Lima, 2018. The obtained result determined that the Clinical Management does not intervene directly on the quality, but on the safety of the patient in the service of gynecology-obstetrics. The statistical significance of the regression model proposed to express the analogy between Clinical Management and Quality was 0.056, higher than the theoretical significance. However, the statistical significance of the regression model proposed to expose the analogy between Clinical Management and Safety was 0.019, lower than the theoretical significance.

Mohebifar, Hasani, Barikani, and Rafiei (2016) argue that it is necessary to use measurement and diagnostic instruments, such as the importance-performance analysis matrix, managers and administrators of hospitals to plan the optimization of service quality [8]. On the other hand, Haynes et al. (2011), express that there is a need for the alignment of protective guards, where the implementation of a Checklist continues in order to obtain Safe Surgery and find the efficacy and significant decrease in the statistical report of complications and deaths, as a final result of the surgical programs [16].
Finally, clinical management is a way to empower multidisciplinary teamwork in a coordinated manner in order to meet international standards of quality and safety, to strengthen the quality and safety of services. In order to establish the influence of clinical management on the quality of the OB/GYN service, a second data collection must take place after the implementation period of new standards in order to re-estimate the relationship between clinical management and these variables.

With respect to determining that clinical management does not intervene directly in the dimensions of Quality of the OB/GYN service, statistical significance is obtained for the proposed regression models of 0.062, 0.069, and 0.067, to explain the influence on human quality, technical quality, and quality in the environment, respectively. Therefore, the specific hypothesis of this research, which asserted the influence of Clinical Management on Service Quality, is emphatically rejected. These results differ with Vergara and Sotelo (2015), who found that there is a significant relationship between study variables and dimensions, in accordance with institution management and biosafety [17].

It can be concluded that clinical management standards can increase and strengthen the quality of service. It is important to include current norms and regulations.

Likewise, it was determined that clinical management intervenes in the safety dimensions of the gynecological-obstetric service, obtaining statistical significance for the proposed regression models of 0.032, 0.009, 0.017, and 0.012, to explain the influence on the culture of risk management, compliance with regulations, infection control, and safe practice, respectively. Therefore, the specific hypothesis of this research that supports the influence of Clinical Management on Service Safety is confirmed. These results may be consistent with Diaz and Carnero, whose results obtained in their study were that 78%, 76% and 68% of professionals, technicians and users respectively, affirming that the administrative management in the institution is adequate for the practice of safety [14]. According to Vergara and Sotelo, the results obtained were 0.872 and biosecurity 0.881, respectively. This requires the support of institutional policies that will allow us to apply the direction of clinical management which directly influences the quality and safety of services provided to the user [17].

On the other hand, Facho and Palacios in their study concluded that there is a significant correlation (84.67%) at level 0.01 (bilateral) between management processes and the quality of care perceived by the external user, which is unsatisfactory and which was evaluated by establishing the strategic, operational, support processes and the dimensions of reliability, responsiveness, security, empathy, and tangible aspects [15].

The organization must integrate the management processes in its work of health professionals in order to ensure the quality of services provided to the user. For this reason, it is important to establish goals and objectives for health professionals to comply with quality standard criteria and ensure the safety of patient care. In the medical-surgical field, the application of management tools, clinical management control and biosecurity measures is essential to ensure the quality of the services provided to the patient. In addition, adequate clinical management within the organization ensures that management processes are complied with and the health team is integrated, ordered and learned and unlearned from errors to implement contingency plans to raise levels of satisfaction for the patient and the health team. Consolidate the implementation of clinical management standards in the area of safety, so that service collaborators work under hospital conditions that ensure their integrity, safety and occupational health.
References


