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RESEARCH

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CORRELATION BETWEEN THE HEALTHCARE GUIDANCE AND THORACIC AND UPPER ABDOMINAL POST-OPERATIVE CARE

Relação entre orientação em saúde e complicações no pós-operatório de cirurgias torácicas e abdominais altas

Relación entre orientación en salud y complicaciones en el postoperatorio de cirugías torácicas y abdominales alta

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ABSTRACT

Objective: to evaluate correlation between health guidelines and complications in the postoperative period after thoracic and upper abdominal surgeries. **Method:** a cross-sectional quantitative study with 266 individuals. Data were collected by a sociodemographic, clinical and care questionnaire. We included subjects of both sexes, with ages ranging from 18 to 80 years, who were in the postoperative ward after thoracic and/or upper abdominal surgeries. **Results:** 82 (30%) of the subjects received guidance in the postoperative period and 184 (70%) received no guidance. Four of the subjects who received guidelines developed some type of complication while 16 of those who did not receive guidance developed complications; therefore, the results were not statistically significant (p=0,4). **Conclusion:** in relation to the number of complications, when comparing individuals who received guidelines with those who did not receive, there was no statistically significant result. **Descriptors:** Health education; Surgery; Recovery; Health promotion; Nursing.

RESUMO

Objetivo: avaliar a influência das orientações em saúde nas complicações no pós-operatório de cirurgias torácicas e abdominais altas. **Metodo:** estudo quantitativo transversal realizado com 266 indivíduos. Os dados foram coletados por um questionário sociodemográfico, clínico e assistencial. Foram incluídos sujeitos de ambos os sexos, com faixa etária de 18 a 80 anos, que estivessem na enfermaria em

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pós-operatório de cirurgias torácicas e ou abdominais altas. **Resultados:** 82 (30%) dos indivíduos receberam orientações no período de pós-operatório e 184 (70%) não receberam nenhum tipo de orientação. Quatro dos sujeitos que receberam orientações, desenvolveram algum tipo de complicação e 16 dos que não receberam tiveram complicações; não apresentando resultados estatisticamente significativos quanto aos pesquisados que tiveram orientação e os que não tiveram orientações (p=0,4). **Conclusão:** em relação ao número de complicações, ao comparar os indivíduos que receberam orientações com os que não receberam não houve resultado estatisticamente significativo.
Descritores: Educação em saúde; Cirurgia; Recuperação; Promoção da saúde; Enfermagem.

RESUMÉN

Objetivo: evaluar la influencia de las orientaciones en salud en las complicaciones en el postoperatorio de cirugías torácicas y abdominales altas. **Metodo:** estudio cuantitativo transversal realizado con 266 individuos. Los datos fueron recolectados por un cuestionario sociodemográfico, clínico y asistencial. Se incluyeron sujetos de ambos sexos, con rango de edad de 18 a 80 años, que estuvieran en la enfermería en postoperatorio de cirugías torácicas y / o abdominales alta. **Resultados:** 82 (30%) de los individuos recibieron orientaciones en el período de postoperatorio y 184 (70%) no recibieron ningún tipo de orientación. Cuatro de los sujetos que recibieron orientaciones, desarrollaron algún tipo de complicación y 16 de los que no recibieron tuvieron complicaciones; no presentando resultados estadísticamente significativos en cuanto a los encuestados que tuvieron orientación y los que no tuvieron orientaciones (p=0,4). **Conclusión:** en relación al número de complicaciones, al comparar a los individuos que recibieron orientaciones con los que no recibieron no hubo resultado estadísticamente significativo.
Descriptores: Educación en salud; Cirugía; recuperación; Promoción de la salud; Enfermería.

INTRODUCTION

Healthcare guidance is a social process of building knowledge about health that contributes to the development of self-care. This process aims to modify the knowledge, attitudes and behavior of the individual, provided that the exchange of knowledge and the perception of creating and transforming reality is effective so that changes, improvement in quality of life and health promotion are achieved.[1] Healthcare guidance requires active participation of the individual, family and professional within a streamlined process. In this context, educational process is not limited to just the act of teaching, but includes construction of knowledge, once individuals assume their own care.[2]

The practice of healthcare guidance breaks the verticality of the relationship between the health professional and the patient. Therefore, it aims at enhancing the exchange of knowledge and experience, reducing communication barriers and dividing the responsibility of caring for the individual, turning him / her into the main actor of the teaching-learning process, developing the ability to perform critical analysis of current health situation, improved fight and coping with the necessary conditions in the postoperative period.[3]

Postoperative period is the period from the end of the surgical procedure up until the recovery of the patient after hospital discharge, which includes healing time of the surgical wound and prevention of possible discomfort and complications.[4]

Postoperative complications are classified in relation to the time lapsed after the surgical procedure. The categories are as follows: Immediate, occurring within the first 24 hours, Medium, those that develop until the seventh day, and Late, i.e. those that develop after the stitches are removed at hospital discharge and the patient is already at home. The systems that are more susceptible to postoperative complications are respiratory, digestive, cardiovascular and hepatobiliary. The frequency of these complications is associated with the type of clinical condition, type of anesthesia, surgical stress, as well as postoperative care and guidance.[5]

The postoperative period is a very delicate period for the patient and the family, involving several psychological, emotional and physical factors that can influence the recovery.[6]

Considering the complexity of the surgical procedure, we understand the need of the individual and his or her family to adapt to the new context of social life. This process requires assistance by a multidisciplinary team in order to perform all general health guidelines as well as those related to the patient's clinical condition.[7]

High thoracic and abdominal surgeries are procedures that often cause fear and doubt in patients. Thus, health guidance should be performed clearly and objectively, including surgical aspects, the process of recovery during a postoperative period and the ways to prevent possible infections. In this context, it is understood that ineffective postoperative communication may lead to a number of problems that may affect the individual's recovery conditions.[8]

During the postoperative period, health guidance becomes the most important tool that should be used by health professionals in order to develop patient independence during postoperative recovery and promote knowledge that allows early detection of signs and symptoms of possible complications that may arise during this period.[9] In this sense, this study aims to evaluate the influence of health guidelines on postoperative complications of thoracic and upper abdominal surgery.

METHODS

This research includes a quantitative cross-sectional study, which was conducted from November 2014 to April 2015; with 266 individuals admitted to the surgical clinic of the Municipal Hospital of Imperatriz, a place intended for preoperative and postoperative patients. The study included individuals of both sexes, aged between 18 and 80 years old, who were in the postoperative period of thoracic and upper abdominal surgeries. Excluded from the study were those who were in severe clinical conditions and were unable to answer the questionnaire, or had cognitive impairment or mental disorder.

Data were collected using a structured questionnaire containing sociodemographic data, clinical and care information during the postoperative period, as well as the

collection of data related to postoperative complications contained in medical records.

Initially, a verbal invitation was made to individuals in the postoperative period after high thoracic and abdominal surgery. After acceptance, they were instructed to sign the Informed Consent Form and were informed about the research procedures and then the questionnaire was applied. During the application the subject was in the most comfortable posture possible of their own choosing.

To perform the correlation analysis cited above, the BioEstat 5.0 software was used and the Chi-square statistical test was applied, using a 5% (0.05) margin of error.

This research is part of an umbrella project approved by the Research Ethics Committee of the Federal University of Maranhão-CEP-UFMA, opinion number 629,315.

RESULTS AND DISCUSSION

Among the 266 individuals, 188 (70%) were male and 78 (30%) female; 109 (40%) were married, 143 (54%) single, 5 (2%) divorced and 9 (4%) widowed; of these, 44 (16.5%) were illiterate, 117 (44%) had incomplete elementary school, 43 (16.1%) had completed elementary school, 23 (8.7%) incomplete high school and 39 (14.7%) subjects had completed high school; with family income less than three minimum monthly salaries.

Of the sample, only 82 (30%) received any type of guidance and 184 (70%) received no health guidance from the multidisciplinary hospital staff during the postoperative period.

The orientations by the multidisciplinary team of the hospital during the postoperative period aimed to encourage the patients to self-care, as well as to contribute to the prevention of possible complications and to improve their recovery and maintain health (Table 1).

Table 1 - Guidance provided by the multidisciplinary team to individuals in the postoperative period. Imperatriz, Maranhão, Brazil, 2015.

Guidance Type	n (%)
Early postoperative movement	30 (36,60)
Rest and return to daily activities	13 (15,85)
Dietary care during the postoperative	08 (9,75)
Bed Positioning	08 (9,75)
Breathing exercises	07 (8,55)
Care for surgical aspects	06 (7,30)
Immediate postoperative net restriction	05 (6,10)
Immediate postoperative nutritional diet	05 (6,10)
Total	82 (100)

The most recurrent health orientations by the hospital health team were directed at stimulating early postoperative movement (n.30). This guidance type aims to improve venous return, improve pulmonary function, increase peripheral circulation and improve peristaltic movements. It was followed by the guidance related to rest, which aims to accelerate the healing process and the return to daily activities, aiming to gradually reintegrate the patients into their previous occupations (n.13).

Table 2 - List of postoperative orientations and development of complications. Empress, Maranhão, Brazil, 2015.

	RO n (%)	P25%	P75%	DP	NRO n (%)	P25%	P75%	DP	Total	p
Complications	4 (1,5)	4,0	4,0	1,0	16 (6,1)	16	16	1,0	20	
Without complications	78 (28)	22,5	59,5	8,1	168 (63,9)	54	13	5,2	246	0,4
Total	82 (30)				184 (70)				266	

RO: Received Guidance; NRO: Not Received Guidance; P25%: 25th percentile; P75%: 75th percentile; SD: Standard Deviation.

As shown in the table, 2.30% of respondents said they had received some type of guidance related to the surgical procedure and postoperative care, and 70% said they had not received any guidance. However, by correlating guidance with the frequency of postoperative complications, of the 82 individuals who received guidance only 4 were affected by complications, and of the 184 who did not receive guidance, 16 developed complications during the postoperative period.

Statistically, a value of p = 0.4 was found, which was not statistically significant among individuals who had orientation as compared to those who had no orientation on the development of postoperative complications.

When guidance is given prior to surgery, patients are more successful in preventing postoperative complications. However, the majority of the subjects who were part of the research, were admitted to the hospital to perform emergency surgeries, that is, most of the surgeries performed were not elective surgeries, therefore it was impossible to provide guidance before the surgical procedures. Thus the respondents did not go through the period of health guidance prior to surgery and ended up receiving guidance only in the postoperative period.

In this sense, we need to consider what is the best moment for such guidance, as well as the language of such guidance, since, when the advice is not formulated clearly and objectively, it reduces the quality of advice and may permit the occurrence of postoperative complications, directly interfering with recovery and delaying rehabilitation.

When linking guidance and complications, we observed that four subjects who received guidance developed some type of complications, more specifically evisceration, dehiscence, umbilical hernia and infection. Guidance related to early

postoperative movement was received by individuals who developed evisceration and infection; the patient who developed dehiscence received guidance on how to care for surgical incision in order to prevent infection, and the patient who developed umbilical hernia received guidance on net restriction in the immediate postoperative period.

Subjects who received no guidance and had complications manifested the following, as described in table 3.

Table 3 - Complications developed by individuals who did not receive postoperative guidance. Imperatriz, Maranhão, Brazil, 2015.

Complications	n (%)
Dehiscence	03 (18,75)
Evisceration	02 (12,50)
Infection	05 (31,25)
Inflammation	02 (12,50)
Increased Intra-Abdominal Pressure	03 (18,75)
Chest Drain Displacement	01 (6,25)
Total	16 (100)

Based on the results summarized in table 3, it appears that majority of the respondents (31.25%) developed infections, which may be explained by low quality guidance.

Different from the results found in this study, another study[10] points out that 71.42% of their subjects surveyed indicated that they had received some type of orientation in the postoperative period, which had a positive impact on postoperative recovery.

Postoperative guidance influences how the patient will react after the surgical procedure, as the feelings of fear and anxiety that trouble postoperative period make the patient more susceptible to complications.[11] However, guidance process should begin in the preoperative period so that the patient can find out about the procedure to be performed and the recovery procedures, as well as the care needed. However, given the type of hospital, most of the subjects underwent emergency procedures with reduced preoperative stage.

Results indicate that guidance is effective in preventing complications and ensuring better recovery of the patient in the postoperative period, however guidance should be shared in the preoperative period, because the fact that the patient is oriented only in the postoperative period makes learning difficult due to stress and anxiety.[12]

Other studies[13,14] show that patients who receive preoperative guidance and interventions experience significantly reduced number of complications when compared to those who only receive postoperative interventions.

Another important factor for the dynamic process of orientation is the analysis of how patients adhere to these guidelines, since it is up to them to follow them or not.[14]

The main complications that arose in the postoperative period among the studied subjects were: infection (31.25%), increased intra-abdominal pressure (18.75) and dehiscence (18.75). In other studies, the most common complications in the postoperative period of abdominal surgery were evisceration and infection.[15]

Orientation on care after surgical incision is directly related to decreased risk of infection or major complications, since having received clear and objective orientation, the patient understands and performs aseptic techniques and other procedures in order to avoid possible infection or at least identifies early signs of an infectious process.[16] In the present study, we found that 05 (31.25%) of the individuals who did not receive health guidance developed an infectious process in the postoperative period, which represents the most prevalent complication.

CONCLUSION

The findings of this research of the number of complications when comparing individuals who received guidance and those who did not, were not statistically significant. The postoperative period is a troubled period when patients experience fear, doubts and anxieties, which may compromise their health and lead to complications during.

During the postoperative period, patients and family members need guidance on the procedure to which they were submitted, the risks and care that should be implemented to restore and maintain health. Thus, health guidance should be the most important tool used by the hospital's multidisciplinary team to clarify any doubts that may arise for patients and their families.

Even with no statistically significant results, it is important to implement health guidance protocols in the postoperative period of upper thoracic and abdominal surgery, since among the individuals who received health guidance the number of complications was lower than group not received. Also, due to the nature of the hospital where the study was performed, surgery is normally urgent and it is not possible to ensure preoperative care, so post-orientation may contribute positively to clinical practice, ensuring better recovery.

REFERENCES

1. Carneiro ACLL, Souza VD, Godinho LK, Faria ICMD, Silva KL, Gazzinelli MF. Educação para a promoção da saúde no contexto da atenção primária. Rev Panam Salud Publica. 2012;31(2):115-20.
2. Couto IRR, Martins D, Santo FHE, Neves P. Knowledge and practice: education in health as link facilitative in the care process. Rev Pesqui Cuid Fundam. 2013;5(1):3485-92. doi: http://dx.doi.org/10.9789/2175-5361.2013v5n1p3485.
3. Reeves S, Perrier L, Goldman J, Freeth D, Zwarenstein M. Interprofessional education: effects on professional practice and healthcare outcomes (update). Cochrane Database Syst Rev. 2013;28;(3):CD002213. doi: http://dx.doi.org/10.1002/14651858.CD002213.pub3.
4. Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R, McHugh MD. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. Lancet. 2014;383(9931):1824-30. doi: https://doi.org/10.1016/S0140-6736(13)62631-8.
5. Haines KJ, Skinner EH, Berney S, Austin Health POST Study Investigators. Association of postoperative pulmonary complications with delayed mobilisation following major abdominal surgery: an observational cohort study. Physiotherapy. 2013;99(2):119-25. doi: https://doi.org/10.1016/j.physio.2012.05.013.
6. Pieri M, Belletti A, Monaco F, Pisano A, Musu M, Dalessandro V, Landoni G. Outcome of cardiac surgery in patients with low preoperative ejection fraction. BMC Anesthesiol. 2016;16(1):97. doi: https://doi.org/10.1186/s12871-016-0271-5.

7. Pancieri AP, Santos BP, Avila MAGD, Braga EM. Checklist de cirurgia segura: análise da segurança e comunicação das equipes de um hospital escola. Ver Gaúch Enferm. 2013;34(1):71-8.
8. Santos FDRP, Nunes SFL, Pascoal LM, Silva JO, Almeida RP. Educação em saúde para pacientes no pós-operatório de cirurgias torácicas e abdominais. Rev Ciênc Ext. 2015;11(1):171-7.
9. Rodriguez-Davalos MI, Arvelakis A, Umman V, Tanjavur V, Yoo P S, Kulkarni S, Emre S. Segmental grafts in adult and pediatric liver transplantation: improving outcomes by minimizing vascular complications. JAMA Surg. 2014;149(1):63-70. doi: https://doi.org/10.1001/jamasurg.2013.3384.
10. Veronovici NR, Lasiuk GC, Rempel GR, Norris CM. Discharge education to promote self-management following cardiovascular surgery: An integrative review. Eur J Cardiovasc. Nurs. 2014;13(1):22-31. doi: https://doi.org/10.1177/1474515113504863.
11. Nakasato GR, Lopes CT, Lopes JDL, Barros ALBLD. Diagnósticos de enfermagem no perioperatório de cirurgia cardíaca. REME Rev Min Enferm. 2015;19(4):980-93. doi: http://www.dx.doi.org/10.5935/1415-2762.20150062.
12. Riegel F, da Silva FG, Siqueira DS, Dal Pai D. Perceptions of patients undergoing bariatric surgery guidelines pre-operative nursing team. Rev Enferm UFPI. 2014;3(3):53-7. doi: https://doi.org/10.26694/reufpi.v3i3.1806.
13. Possa SS, Amador CB, Costa AM., Sakamoto ET, Kondo CS, Vasconcellos AM, Yamaguti WP. Implementation of a guideline for physical therapy in the postoperative period of upper abdominal surgery reduces the incidence of atelectasis and length of hospital stay. Ver Port Pneumol. 2014;20(2):69-77. doi: https://doi.org/10.1016/j.rppneu.2013.07.005.
14. Oliveira MDSS, Sampaio AC, de Figueiredo CM, de Santana Ferreira SM, Feitosa NMG, dos Santos RR, Santana MDR. Acting Front to Nursing Psychological Repercussions in Breast Cancer Patients. Open J Nurs. 2016;6(12):987. doi: http://dx.doi.org/10.4236/ojn.2016.612095.
15. Laffitte AM, Polakowski CB, Kato M. Early oral re-feeding on oncology patients submitted to gastrectomy for gastric cancer. ABCD Aarq Bras Cir Dig. 2015;28(3):200-3. doi: http://dx.doi.org/10.1590/S0102-67202015000300014.
16. Jesus DFD, Marques PF. Nursing assistance at the hospital discharge after cardiac surgery: integrative review. Rev Bras Cir Cardiovasc. 2013;28(4):538-44. doi: http://dx.doi.org/10.5935/1678-9741.20130087.

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