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Quality assessment in a day surgery unit

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The aim of this study was to assess the quality of day surgery by examining the experiences of patients to ascertain where and how quality can be improved. Therefore interviews were carried out with 39 patients at the University Hospital in Maastricht. These interviews were compiled using a model for quality assessment of day surgery developed by the National Organisation for Quality in Hospitals in the Netherlands. Results show that patients are satisfied with the quality of day surgery. Nevertheless it appeared that improvements could be made in the fields of: information disclosure, continuity of care from the day surgery unit (DSU) to the emergency department, pain medication for some procedures and facilities for patients at home.

Key words: Quality assessment, day surgery, information disclosure, continuity of care, pain medication

Introduction

There has been a growing interest in quality in healthcare over the past years. During the 1960s the main concern was with the control of developments in healthcare; the effectiveness of medicine and care was of central importance, rather than financial control. The standardization of practice is an important 'product' of this period, which contributed to the control of the growth in healthcare. Such standards made it possible to judge medical practice more accurately and a start was made on an internal quality-assurance system[1].

During the 1970s quality of care became of increasing interest as a result of new medical technology and medicines. Questions about the contribution of these developments to the quality of care arose[2].

In the 1980s financial resources became restricted and this led to growing concerns about quality. This was because a restriction of resources could endanger the quality of care and because an absence of quality standards might imply that funds were not being adequately used[3]. This restriction in resources has also led to an increase in day surgery, which brings us to the growing importance of quality assessment in day surgery and the reasons for its pre-eminence. First, there is a tendency towards carrying out more complex clinical procedures which are more demanding for patients, and therefore ensuring a high standard of care is especially important. Second, because of the shorter period of time that patients are under supervision in day surgery units (DSUs) and the resulting increase in responsibilities for the patient that this entails, the organization and execution of day surgery demands high standards of quality[4]. Finally, next year will see the introduction of a quality bill for healthcare institutions in the Netherlands. This bill will make it a necessity that all institutions are able to provide annual reports to the authorities which demonstrate that they provide their care in a qualitatively responsible way[5]. This clearly implies the need for adequate quality assessment and continuous quality improvement.

Whereas the study covered the viewpoint of surgeons, anaesthetists and nurses, its chief aim was to assess the quality of day surgery from the patients' perspective. It is this perspective that will be the focus of this study, which assessed quality using the following problem thesis: what is the experience of patients and care-providers regarding the quality of day surgery, and what measures can be taken to bring about improvements?

Methods

Day surgery was assessed using questionnaires in order to identify the strong and weak aspects of the care provided. These questionnaires were compiled using most of the items of a model for quality assessment of day surgery as proposed by the National Organisation for Quality in Hospitals in the Netherlands (Table 1).

This model gives hospitals the opportunity to analyse their day-care facilities with regard to various aspects of

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Table 1. Model for quality of day surgery

Patient capability	Impact
Patient	Surgical procedures
Physical status	Physical impact
Psychosocial status	Psychological impact
Facilities at home	Preoperative estimation of complications
Attendance and care at home	
	Health care providers
	Competence
	Attitude
	Availability
	Continuity
	Effectiveness
	Carefulness
	Safety
	Organization
	Accessibility
	Integral care
	Provision of information and instructions
	Efficiency

quality and to describe the desired situation[6]. All these aspects were assessed except those under the surgical procedure heading. Tables 2, 3 and 4 show some of the questions which were used to assess the aspects outlined in the model.

After giving consent, patients were interviewed three times: in the morning before the operation, just before discharge from the DSU and 1 week after surgery at the outpatients department.

Results

In 1993, 825 patients were admitted to the day care unit at the university hospital of Maastricht. Of these patients, 242 were under the care of the surgical department. The interviews in this study were carried out over a period of 3 months and provided a sample of 39 patients. Of these, only two patients were interviewed the morning before the operation because they did not undergo surgery as a result of hypertension and were sent home. There were also two patients who did not keep their appointments at the outpatients department and therefore a total of 35 patients were interviewed three times.

In addition to the results given in Tables 2, 3 and 4, the following results can also be reported:

Before the operation at the DSU (n=39)

The accessibility of the DSU was good, 56% of the patients (22 out of 39) considered the time spent on the waiting list to be satisfactory. This time was, on average, 7 weeks. The preoperative information was found to be inadequate by almost half of the patients, concerning both anaesthesia (49%; 19 out of 39) and surgery (46%; 18 out of 39). Patients mentioned worries about things such as: how big will the scar be; where will the incision be; what can and cannot be done after the operation and the period of time off work required. Furthermore, it appeared that 8% of the patients (three out of 39) did not have any previously arranged home care for the first 24 h after the operation. This was mainly as a result of a lack of information about the necessity of care at home and, in consequence, an underestimation of the impact of the operation.

As already mentioned, two of the patients had to be sent home because of hypertension. This illustrates an

Table 2. Before operation at the DSU (*n*=39)

Experienced waiting time between visiting outpatients department and intake at the DSU i.e. accessibility	too long: sufficient: too short:	41% 56% 3%
Patients who had heard of day surgery before their own intake	yes: no: 41% of the patients had had surgery before at the DSU	74% 26%
Patients who found the information about the surgery sufficient? i.e. provision of information and instructions	yes: no:	54% 46%
Patients who found information about anaesthesia sufficient? i.e. provision of information and instructions	yes: no:	51% 49%
Transport home arranged? i.e. attendance and care at home	yes: no:	95% 5%
Is care at home available for the first 24 h after the operation? i.e. attendance and care at home	yes: no:	92% 8%

Table 3. Just before discharge from the DSU (n=37)

Attitude of nurses i.e. attitude	good: sufficient: insufficient:	97% 3% 0%
Availability of nurses i.e. availability	good: sufficient: insufficient:	100% 0% 0%
Attitude of surgeons i.e. attitude	good: sufficient: insufficient:	60% 24% 16%
Availability of surgeons i.e. availability	good: sufficient: insufficient:	68% 19% 13%
Looking back, was the information about the operation sufficient? i.e. provision of information and instructions	yes: no:	73% 27%
Looking back was the information about the anaesthesia sufficient? i.e. provision of information and instructions	yes: no:	84% 16%
Pain experienced? i.e. physical status	none: a little: reasonable: quite a lot: a lot:	22% 35% 19% 19% 5%
Nausea experienced? i.e. physical status	yes: no:	16% 84%
Is the information about postoperative life rules clear? i.e. provision of information and instructions	yes: no:	80% 20%
What would you choose if similar treatment was required again? i.e. effectiveness	day surgery: in-hospital treatment:	89% 11%

Table 4. 1 week after operation at the outpatients department (n=35)

Was care available at home for the first 24 h after the operation? i.e. attendance and care at home	yes: no:	86% 14%
Pain at home? i.e. physical status	yes: no: 14 patients did not take the prescribed pain medication	40% 60%
Nausea at home? i.e. physical status	yes: no:	17% 83%
Was the information about the postoperative life rules sufficient? i.e. provision of information and instructions	yes: no:	77% 23%
What would you advise other people who needed similar treatment to do? i.e. effectiveness	day surgery: in-hospital treatment:	89% 11%
Have you had contact with the hospital after your discharge from the DSU? i.e. continuity	yes: no:	6% 94%

area of inefficiency in day surgery care which could be improved by better preoperative screening.

At the time of discharge from the DSU (n=37)

The patients were very satisfied with the attitude and availability of nurses, but satisfaction was lower and in some cases insufficient with regard to the attitude and availability of surgeons and anaesthetists. Patients complained that the time available for questions to and explanations from surgeons and anaesthetists was insufficient. Furthermore, it also appeared that the surgeon/anaesthetist would sometimes make his/her visit when the patient was still asleep. Similar reasons were also given by patients who complained about the lack of information regarding the surgical procedure (27%; 10 out of 37) and anaesthesia (16%; six out of 37) provided during the day.

Concerning the physical status of the patients, the results showed that upon discharge 43% of the patients (16 out of 37) complained of reasonable to severe pain and 16% (six out of 37) of nausea. Apart from pain around the scar (12 out of 37), two of the patients also experienced pain in the throat and two had a headache.

Postoperative information appeared to be inadequate for 20% of the patients (15 out of 37) at the time of discharge. Patients appeared not to have had enough information about practical things, such as what to do with the plasters/bandages; showering; walking and returning to work.

After 1 week at the outpatient department (n=35)

It appeared that 14% of the patients (five out of 35) did not have any home care for the first 24 h after the surgery. This was due to a lack of information which meant that either home care was not arranged or patients thought they did not need any care at home.

At home, 40% of the patients still experienced severe pain. It appeared that 14 patients did not consider their prescribed pain medication necessary.

Regarding the continuity of care, two out of the 37 who underwent surgery had to visit the emergency department on the evening of their operation because of haemorrhage. These patients complained about the lack of available information on their treatment at this department. This suggests that there is insufficient information transfer from the DSU to the emergency department. Neither of the patients had to be readmitted.

The effectiveness of the surgery in day care was rated as reasonable by the patients; 89% (31 out of 35) would choose day surgery if similar treatment was required again. Remarkably, all of those patients who underwent inguinal hernia repair felt that their stay under professional care at the DSU was too short considering the pain that such surgery involves.

Recommendations

In general, it can be said that day surgery in the unit is carried out with a relatively high level of patient satisfaction, but work in the following areas could lead to further improvements at the unit:

Concerning the patients

More effective pain medication for procedures that are more demanding on the patient, such as inguinal hernia repair, can contribute to a higher quality of care.

Concerning the healthcare providers

Better continuity of care. There is a need for better information transfer from the DSU to the emergency department; this could be attained by using forms which contain specific information about the anaesthesia and surgery for every patient.

Concerning the organization

The information disclosure to the patients could be improved by, for example, providing more information through the nursing team, whose attitude and availability were considered outstanding. This could be facilitated by giving instruction and clinical lessons to the nursing team. Furthermore, additional information on clinical procedures could be provided through explanatory leaflets or a video presentation on day surgery, and it should include information about the necessity of home care after the operation.

Conclusion

Quality assessment is essential in today's medical institutions. This study shows that, with a balanced questionnaire, it is possible to evaluate and improve the quality of day surgery and of day care in general. A list of standard questions can and should be developed in order to assess quality in day care and, where necessary, improve its effectiveness and efficiency.

References

1 Harteloh PPM, Casparie AF. *Kwaliteit van zorg, van een zorginhoudelijke benadering naar een bedrijfskundige aanpak*. Utrecht: De Tijdstroom, 1991
2 Wulff HR. *Rational diagnoses and treatment*. London: Blackwell Scientific Press, 1976
3 Lohr KN, Rettig RA. *Quality of care and technology assessment*. Washington, DC: National Academic Press, 1989
4 Kruijswijk Jansen H. Rapportage kwaliteit van dagverpleiging. *Tijdschrift voor Ziekenverpleging* 1993; 10
5 Van Wijmen F. Het voorstel kwaliteitswet zorginstellingen. *Kwaliteit van Zorg* 1994; 1
6 Vermeij DJB, Grasveld- van Berckel MA. Dagverpleging en kwaliteit van zorg: een model. *Medisch Contact* 1989; 13