

Patient Satisfaction Survey as a Tool Towards Quality Improvement

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Abstract

Over the past 20 years, patient satisfaction surveys have gained increasing attention as meaningful and essential sources of information for identifying gaps and developing an effective action plan for quality improvement in healthcare organizations. However, there are very few published studies reporting of the improvements resulting from feedback information of patient satisfaction surveys, and in most cases, these studies are contradictory in their findings. This article investigates in-depth a number of research studies that critically discuss the relationship of dependent and independent influential attributes towards overall patient satisfaction in addition to its impact on the quality improvement process of healthcare organizations.

Keywords: Patient satisfaction; Quality improvement; Healthcare.

Introduction

Healthcare industries have seen recent movements towards continuous quality improvement and this has gained momentum since 1990 and according to Donabedian's declaration for incorporating patient perception into quality assessment, healthcare managers thus incorporate patient centered care as a major component in the healthcare mission.¹ The healthcare managers that endeavor to achieve excellence take patient perception into account when designing the strategies for quality improvement of care. Recently, the healthcare regulators shifted towards a market-driven approach of turning patient satisfaction surveys into a quality improvement tool for overall organizational performance.² In 1996, evaluation of patient satisfaction was mandatory for all French hospitals.³ Laurent et al. 2006 conducted a study in a tertiary teaching hospital in France aiming to assess the opinions of clinical staff towards the effect of in-patient satisfaction surveys on the quality improvement process. A favorable result of 94% revealed that the patient was able to judge hospital service quality, especially in its relational, organizational and environmental dimensions.³

In Germany, measuring satisfaction has been required since 2005 as an element of quality management reports.⁴ Since 2002,

the Department of Health (DOH) has launched a national survey program in which all NHS trusts in England have to survey patient satisfaction on an annual basis and report the results to their regulators.⁵ Therefore, measurement of patient satisfaction is a legitimate indicator for improving the services and strategic goals for all healthcare organizations.⁶

In this review, the primary aim is to carry out an in-depth investigation into a number of research studies that critically discuss the relationship of dependent and independent influential attributes to overall patient satisfaction in addition to its impact on the quality improvement process within healthcare organizations. The literature also focuses on measurement tools of patient satisfaction.

Methodology and Search strategy

Two methods were used as search strategies. The first was keywords and the second is called the snowball search method. Recent studies published in the last 15 years, from 1997 until 2012 and those written only in English were selected.

The research studies included satisfaction surveys of patients who have been hospitalized or patients visiting the out-patient departments within tertiary hospitals in different foreign countries. The research empirically excluded all patient satisfaction surveys related to ambulatory care centers, specific departments or specialties.

The databases utilized were Google Scholar, Medline, Emerald, Pub-Med and Science Direct, while the main keywords used were: patient satisfaction surveys, quality improvement, patient feedback, hospitals and patient satisfaction measurement. The outcome of the research study was 29 articles that appeared to be highly relevant to the subject under investigation.

The concept of patient satisfaction

There is no consensus between the literatures on how to define the concept of patient satisfaction in healthcare. In Donabedian's quality measurement model, patient satisfaction is defined as patient-reported outcome measure while the structures and processes of care can be measured by patient-reported experiences.⁷ Many authors tend to have different perceptions of definitions of patient satisfaction. Jenkinson C et al. (2002) and Ahmed et al. (2011) pointed out that patient satisfaction mostly appears to represent attitudes towards care or aspects of care.^{8,9} While Mohan et al. (2011) referred to patient satisfaction as patients' emotions,

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feelings and their perception of delivered healthcare services.¹⁰ On the other hand, other authors defined patient satisfaction as a degree of congruency between patient expectations of ideal care and their perceptions of real care received.⁹

Measurement of patient satisfaction

The reviewed literature agreed on the fact that there is an impact of measuring patient satisfaction on quality improvement of care. Patients' evaluation of care is a realistic tool to provide opportunity for improvement, enhance strategic decision making, reduce cost, meet patients' expectations, frame strategies for effective management, monitor healthcare performance of health plans and provide benchmarking across the healthcare institutions.^{7,9,11,12}

In addition, due to the tendency of healthcare industries to concentrate on patient-centered care; patient satisfaction reflects patients' involvement in decision making and their role as partners in improving the quality of healthcare services.^{9,13} Mohan et al. also deemed the significant correlation between measuring patient satisfaction and continuity of care where the satisfied patients tend to comply with the treatment and adhere to the same healthcare providers.¹⁰ Patient satisfaction represents a key marker of communication and health-related behavior.⁴ In contrast, some of the literature dismiss patients' views as a wholly subjective evaluation and an unreliable judgment of the quality of care.^{7,10,14}

Basically, there are two approaches for evaluating patient satisfaction—qualitative and quantitative. The quantitative approach provides accurate methods to measure patient satisfaction. Standardized questionnaires (either self-reported or interviewer-administrated or by telephone) have been the most common assessment tool for conducting patient satisfaction studies.^{14,15}

There is a great variation in questionnaires as instruments of measuring patient satisfaction. The spectrum includes: instruments provided by private vendors, which are usually not published and their reliability and validity are not clear. Secondly, there are quite a number of publically and standardized instruments such as patient satisfaction questionnaires; PSQ-18 and consumer assessment health plans (CAHPS). Such instruments have the advantage of good reliability and validity; however, offer limited scope of survey questions.¹ Thirdly, internally developed instruments which are mainly generated entirely *de novo* or import questions from other existing standardized instruments.¹ A survey conducted in 16 academic medical centers across the USA in 2002 to determine the type of patient satisfaction instrument that was used at each center established that the majority of institutions use an internally developed instrument for outpatient satisfaction, while they used private vendor's instruments for inpatient satisfaction. Patient satisfaction measurement tools should be reliable and valid in order to precisely function and to realise the main goal of collecting patient's feedback.¹⁴

Another large survey conducted in major acute care hospitals in five countries (United Kingdom, USA, Sweden, Switzerland and Germany) to determine the applicability and relevance of short

form questionnaire (PPEQ- 15) from Picker Patient Experience Questionnaire for inpatient experience concluded that PPEQ -15 demonstrates a high correlation of selected items, high consistence validity across countries and a high association of the gold standard.⁵

On the other hand, Yellen et al. (2002) and Kilbourne et al. (2004) declared that based on many standardized, validated patient satisfaction instruments which have been developed primarily to assess patient satisfaction with specific aspects of care, these have little potential of validity and reliability in other settings of care.^{6,16} Therefore, selecting an appropriate patient satisfaction instrument is a critical challenge for healthcare organizations.

One critical literature review on survey instruments and other existing studies ascertained that the plethora of survey instruments measuring patient satisfaction in healthcare industries is heartening; however, core instruments need to be standardized and there needs to be centralized uniform information collection.^{6,11,14}

Determinants of patient satisfaction

In the increasingly competitive market of healthcare industries, healthcare managers should focus on achieving high or excellent ratings of patient satisfaction to improve the quality of service delivery; therefore, healthcare managers need to characterize the factors influencing patient satisfaction which are used as a means to assess the quality of healthcare delivery. In order to understand various factors affecting patient satisfaction, researchers have explored various dimensions of the perceived service quality, as meaningful and essential measures of patient perception of healthcare quality. Kaneet et al. (1997) and Marley et al. stated that measuring satisfaction should "incorporate dimensions of technical, interpersonal, social, and moral aspects of care."² Research of patient satisfaction in advanced as well as developing countries has many common and some unique variables and attributes that influence overall patient satisfaction.⁹

Most of the studies in the literature review examined the correlation between demographic factors such as age, gender, health status and level of education with patient satisfaction; however, the findings from these studies are conflicting. Two studies, one conducted in Scotland whereby 650 patients discharged from four acute care general hospitals during February and March 2002, and the second study was conducted in 32 different large tertiary hospitals in the USA; both showed that male patients, patients older than 50 years of age, patients who had a shorter length of stay or better health status and those with primary level education had higher scores related to variable health service-related domains.^{15,17}

On the other hand, a national survey performed in different accredited hospitals of Taiwan found that patient characteristics such as age, gender and education level only slightly influenced patient satisfaction but that the health status of patients is an important predictor of a patient's overall satisfaction.¹² In addition, Nguyen et al. (2002) and Jenkinson et al. (2002) declared from their studies that the two strongest and most consistent determinants of higher satisfaction are old age and better health status.^{8,18} While

two studies reported contrary results regarding the influential effect of the two controlled variables (age and gender) on overall patient satisfaction in different aspects of healthcare services.^{4,10} In contrast, a 2006 national survey of 63 hospitals in the five health regions in Norway showed that age, gender, perceived health and education level were not significant predictors of overall patient satisfaction.⁷

These factors are not modifiable and are impractical for healthcare managers that are eager to improve patient satisfaction.¹⁹ Though these patient characteristics should be considered for fair adjustment of patient satisfaction studies in order to be utilized in benchmarking with other healthcare institutions.¹⁵ On the other hand, the researchers extensively discussed the multidimensional attributes of healthcare settings that were shown to be the most potent determinants for improving the overall patient satisfaction. Healthcare managers need to direct more efforts towards those highly ranked attributes and initiate some improvement strategies in other areas of health services that are unsatisfactory from the patient's perspective.

A remarkable outcome of four studies conducted in tertiary hospitals in different countries revealed that the nurses' courtesy, respect, careful listening and easy access of care was particularly the strongest driver of overall patient satisfaction. These aspects of nursing care are highly ranked by patients compared to other independent factors such as physician care, admission process, physical environment and cleanliness.^{4,20-22} In addition, a study carried out in 430 hospitals in the USA found the nurse work environment and patient-nurse staffing ratio had statistically significant effects on patient satisfaction and recommendations.²³

In 2011, Otani et al. surveyed 32 different large tertiary hospitals in the USA to identify the relationship of nursing care, physician care and physical environment to the overall patient satisfaction and the results showed that all attributes were statistically significant and positively related to overall satisfaction; however, nursing care was the most critical to increase overall patient satisfaction. The researchers also found that the courtesy and respect of healthcare providers impact more on patient satisfaction while communication and explanation are the second most important aspect.¹⁷ In contrast, a survey conducted at 13 acute care hospitals in Ireland revealed that effective communication and clear explanation had the strongest impact in improving the overall patient satisfaction among other attributes of care.²⁴ These findings provide evidence of the importance of the nursing role as the most significant determinant of overall patient satisfaction.

While three other studies found that interpersonal communication skills of physicians in terms of their attitude, explanation of conditions, level of care, emotional support, respect for patient preferences and involving patients in decision making were more influential factors than clinical competence and hospital tangibles on patient satisfaction.^{12,25,26} However, a survey conducted in a tertiary care academic hospital in the USA showed that only 33% of physicians were rated as excellent for their communication behavior which suggests that there is room for improvement in physician communication behavior in the hospital to improve

quality of care.¹³ In addition, the main outcome of a study using the data of 202 participants from general acute care hospitals in the USA, concluded that most determinants of patient satisfaction was related to communication, empathy and caring from hospital personnel.²

There are some contrary comments which were disclosed regarding the aspects of hospital environment and amenities which scored lowest for a patient satisfaction index in a study carried out in out-patients departments in South Korea.²² Correspondingly, a study conducted in a public hospital in France found the most common problems experienced by patients were related to hospital living arrangements and amenities.¹⁸ A similar result was reported in a study conducted at five hospitals served under the BJC Healthcare System.¹⁹ Furthermore, in 2012 Arshad et al. reported that the major dissatisfaction in an out-patients department was the long waiting time and overcrowded registration.²⁶ In contrast, a study carried out in five different hospitals in Scotland found that physical comfort had the highest satisfaction rate compared to other core dimensions: information, coordination of care and emotional support.⁸

Impact of satisfaction surveys results on hospital quality improvement

Over the past 20 years, patient satisfaction surveys have gained increasing attention; however, there is little published research on improvements resulting from feedback information of patient satisfaction surveys,²⁷ and most often these studies are contradictory in their findings.³ Four studies in the literature review investigated to what extent healthcare managers and policy makers obtain patient views to target new quality improvement projects. More recently, a survey conducted in a teaching hospital in France confirmed that reported data from satisfaction surveys led to the implementation of some improvement initiatives mainly in a hospital environment but no significant change in care providers' behavior such as interpersonal skills.³

On the contrary, the main finding of a wide state survey conducted in Victoria, Australia, over a 5 year period showed that very limited improvement initiatives have been commenced.²⁷ On the other hand, in 2002 Barr et al. examined the quality improvement activities in 13 tertiary care hospitals in response to public reports of patient satisfaction. The results showed that each of these hospitals introduced a variety in the range of quality improvement initiatives that address different aspects of care.²⁸ Correspondingly, a survey assessed patients' perception feedback in 50 hospitals in Massachusetts, which resulted in a wide range of successful improvement projects.²⁹

Conclusion

Patient satisfaction is not a clearly defined concept, although it is identified as an important quality outcome indicator to measure success of the services delivery system. Patient evaluation of care is important to provide opportunity for improvement such as strategic

framing of health plans, which sometimes exceed patient expectations and benchmarking. The advantages of patient satisfaction surveys rely heavily on using standardized, psychometrically tested data collection approaches. Therefore, a standardized tool needs to be further developed and refined in order to reflect positively on the main goals of patient satisfaction survey. This literature review provides a comprehensive understanding of determinants of patient satisfaction either dependent or independent variables, and compares the magnitude of the effects of various independent healthcare dimensions on overall patient satisfaction. There was a common salient determining factor between the studies which was interpersonal skills in terms of courtesy, respect by healthcare providers in addition to communication skills, explanation and clear information, which are more essential and influential than other technical skills such as clinical competency and hospital equipment.

Although feedback from patient satisfaction surveys is an established yardstick for healthcare quality improvement plans, they are still not being systematically and extensively utilized for developing improvement initiatives. Furthermore, it is agreed that a patient satisfaction questionnaire is considered to be a significant quality improvement tool; therefore, detailed description of the different questionnaires that have been used to assess patient satisfaction surveys will be discussed extensively in a separate study. Finally, this review of various elements of patient satisfaction ranging from its measurement, predictors for improving overall patient satisfaction and impact of collecting patient information to build up strategic quality improvement plans and initiatives has shed light on the magnitude of the subject. It thus provides the opportunity for organization managers and policy makers to yield a better understanding of patient views and perceptions, and the extent of their involvement in improving the quality of care and services. Furthermore, managers implement effective change by unfreezing old behaviors, introducing new ones, and re-freezing them for better healthcare.³⁰

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