

KEY POINT SUMMARY

OBJECTIVES

The authors noted three goals for the study

- To identify factors related to patient satisfaction with endoscopic procedures and the relative importance of each factor
 - 2. To develop an instrument to adequately measure patient satisfaction with endoscopic procedures
- 3. To determine whether the timing of the questionnaire relative to the endoscopic procedure would affect the results

Factors Influencing Patient Satisfaction When Undergoing Endoscopic Procedures

Ko, H. H., Zhang, H., Telford, J. J., Enns, R. 2009 | Gastrointestinal Endoscopy Volume 69, Issue 4, Pages 883-891

Key Concepts/Context

Patient satisfaction with endoscopic procedures helps establish performance standards, increases the accountability of physicians and staff, may facilitate patient compliance, and can lead to improvements in the quality of care. Limited data are available regarding the best mechanism and timing for assessing patient satisfaction with endoscopy. In this survey study of 261 Canadian patients undergoing endoscopic procedures, factors associated with patient satisfaction included: personal manner of the endoscopist and nurses, perception of endoscopist's technical skill, environment of the endoscopy unit, and longer time spent with the physician explaining the procedure. Additional time after the procedure was correlated to lower satisfaction, potentially due to recall bias.

Methods

A prospective cohort study was conducted in the endoscopy unit of a tertiary-care academic hospital in downtown Vancouver. The study consisted of consecutive patients who were 18 years and older, scheduled to undergo EGD, colonoscopy, or both, and who provided informed consent. Research assistants administered preprocedure and post-procedure questionnaires. The first questionnaire was administered after meeting the endoscopist and the post-procedure questionnaire after recovery from sedation and before leaving the endoscopy suite. A third questionnaire (post-procedure format) was administered to the patients by mail (50%) or by telephone (50%) between one and 12 weeks after the procedure. The survey was based on the American Society for Gastrointestinal Endoscopy modification to the original Group Health Association of America patient satisfaction survey (mGHAA-9). This considers six aspects of the experience: (1) waiting time for an appointment, (2) waiting time before the procedure, (3) personal



DESIGN IMPLICATIONS

This study highlights the importance of the physical environment as an overall contributing factor to satisfaction. However, the lack of detail included in the study related to the physical environment and what specific factors of the built environment influenced satisfaction, it is difficult to draw specific conclusions about design strategies which might range from the use of positive distractions to considerations surrounding visual and acoustical privacy.

manner of the physician, (4) personal manner of the nurses and support staff, (5) technical skills of the physician, and (6) adequacy of explanation of the procedure. The remaining questions include the overall rating of the visit and willingness to return and recommend. Additional items on the study survey included: the adequacy of pain and/or discomfort control during the procedure, anxiety before the procedure, and chronic use of psychotropic medications, narcotics, or recreational drugs. The data were analyzed with SAS with the patient satisfaction outcomes regrouped to construct a binary variable - "not very satisfied" or "very satisfied." The "not very satisfied" group consisted of "somewhat satisfied," "fair," and "somewhat dissatisfied" responses. The "very satisfied" group consisted of patients who responded as "very satisfied". Logistic regression was used to evaluate the association of each factor with the outcome after adjusting for age, education level, previous endoscopic experience, and chronic pain condition.

Findings

In 2006, 261 patients surveys were completed (53% men). Of these, 226 patients (86.6%) were very satisfied with their endoscopy. Factors positively associated with satisfaction included: doctor's personal manner; doctor's technical skills; nurse's personal manner; physical environment; and more time with doctor discussing the procedure. Higher levels of pain or discomfort were associated with less satisfaction. Follow-ups with 141 of the 261 patients (54%) indicated these patients were less satisfied and recalled experiencing more pain than respondents who were questioned sooner after the procedure.

Limitations

The authors identify several limitations:

- 1. The single site and related demographics may not be generalizable
- 2. The Canadian healthcare system may create different priorities compared to other cultures or systems
- 3. The small sample size may not be sufficient for analysis of subtle differences in factors
- 4. There are no conclusions that one specific factor is more important than others, because the confidence intervals (CIs) overlap
- 5. Other factors not included in the study may also impact satisfaction

The investigators also note that most patients appeared very satisfied immediately following the procedure, which may have been influenced by residual sedation and the survey setting. Satisfaction tended to decrease over time, possibly because of recall bias.





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While the authors describe the functional components of the unit, there are no plans, diagrams, or photographs to provide additional insight about the quality of the built environment.