

SURGERY

Information needs of Hong Kong Chinese patients undergoing surgery

Amanda Henderson PhD, RN, RM

Adjunct Associate Professor, Research Centre for Clinical Practice Innovation, Nathan Campus, Griffith University, Qld, Australia
Nursing Director (Education), Princess Alexandra Hospital, Woolloongabba, Queensland, Australia

Wai-Tong Chien BN, MPhil, RMN

Associate Professor, The Nethersole School of Nursing, Chung Chi College, The Chinese University of Hong Kong, Shatin, NT, Hong Kong

Submitted for publication: 6 January 2004

Accepted for publication: 22 April 2004

Correspondence:

Dr Amanda Henderson
Nursing Director (Education)
Princess Alexandra Hospital
Woolloongabba, 4102
Queensland
Australia
Telephone: 617 3240 2780
E-mail:
amanda_henderson@health.qld.gov.au

HENDERSON A & CHIEN W-T (2004) *Journal of Clinical Nursing* 13, 960–966

Information needs of Hong Kong Chinese patients undergoing surgery

Background. The provision of information to patients is an important aspect of contemporary health care. Limitations in health resources necessitates that the provision of information is carefully planned and culturally specific to maximize the benefits to patients from the resources available.

Aim and objectives. The purposes of the study were to recognize Chinese surgical patients' information needs on admission and ascertain why the information is important to assist in understanding how it is used and, therefore, its potential impact.

Methods. A descriptive study design was used. A convenience sample of 83 surgical patients took part comprising 51 men and 32 women. An eight-item questionnaire based on the right of patients to information as listed in the *Patients' Charter* in Hong Kong using a 5-point Likert scale and one open-ended question to comment on why the information was important to them was completed by patients on the day of admission.

Results. Patients rated highly the need for all types of information. They rated most highly the need for information about the signs and symptoms indicating postoperative complications and when to seek medical help. Patients did not rate as highly, information regarding why the doctor believes the surgery is important, treatment alternatives and explanation of the procedure.

Conclusions. These findings indicate that Chinese patients are desirous of a range of relevant information.

Relevance to practice. Nursing staff, in particular, need to consider the 'timeliness' of information and the cultural appropriateness of how information is delivered.

Key words: Chinese, culture, information needs, patients, surgery

Introduction

The provision of relevant and appropriate information to patients during hospitalization is a fundamental aspect of health care. The ideological perspective accompanying the provision of information stresses its importance in the promotion of patient autonomy, dignity and self-respect

(Leino-Kilpi *et al.*, 1993). The practical aspect is that patients can become active participants in their care and also have sufficient self-care skills to prevent complications (Leino-Kilpi *et al.*, 1993). Contemporary health care in many western countries aims to embrace both these notions through the establishment of Patient Charters and other guidelines regarding patients' right to information.

The *Patients' Charter* in the United Kingdom reinforces the rights of patients to information about their condition and their treatment (Smith *et al.*, 1997). Research indicates that patients in the United Kingdom value the giving of information in a clear, understandable fashion (Cortis & Lacey, 1996). In Hong Kong, the *Patients' Charter* (Hospital Authority, 1997) includes the 'Right to Information', particularly the rights to be given a clear description of 'the medical condition, with diagnosis and prognosis,' and 'the treatment proposed including common risks and appropriate alternatives.'

The impact of providing information

Information giving is recognized as an integral aspect of nursing practice in most acute care settings (Latter *et al.*, 1992). The value of information is justified through the positive effects on patients, for example, the reduction of anxiety when information has been imparted during the preoperative period (Devine & Cook, 1986; Hathaway, 1986; Breemhaar & van der Borne, 1990; O'Connor *et al.*, 1990; Mamon *et al.*, 1992; Lithner & Zilling, 1998). During the pre- and post-operative period, the provision of appropriate information regarding pain relief and wound care can result in a reduction in the use of services by patients during their recovery phase (Henderson & Zernike, 2001).

The content of information provided to patients

Upon consent to treatment, patients desire a range of content areas pertaining to surgery. These include: what happens to them in the operating room (Leinonen *et al.*, 1996); knowledge about the postsurgery recovery period, information on care/help when at home, side-effects of medications and what to do about them; and details about fatigue and bed rest (Breemhaar *et al.*, 1996; Cortis & Lacey, 1996; Henderson & Phillips, 1996; Smith & Smith, 1999). The composition of discharge information is also an important consideration if patients are to care for themselves adequately at home (Hedges *et al.*, 1999). Despite its recognized importance, there is evidence that it is often poorly provided (Henderson & Zernike, 2001; Atwal, 2002).

Fox (1998) suggests that information giving is often based on what health professionals perceive are the patients' needs, however, this can be quite different to what patients identify as their needs. Studies have identified that patients rank situational information, such as explaining activities, events and what is expected of the patient as the most important content area for teaching, whereas nurses have ranked psychosocial support such as dealing with worries, concerns

and what events feel like as the most important content area (Brumfield *et al.*, 1996; Fox, 1998).

Appropriate timing of information

Desired information about illness or treatment can be dependent on patients' progress through the illness trajectory. Research with cancer patients as early as 1966 identified that, in the advanced stages of the disease, patients focused on symptoms associated with daily living rather than the diagnosis and/or prognosis that were patients' priorities in the initial stages (Abrams, 1966). Changes in desired information are particularly evident in conditions such as stroke that are usually accompanied by a long rehabilitation phase. The transition from the acute episode to resuming a normal lifestyle is accompanied by many variations in the type of information that is requested (Hanger *et al.*, 1998).

While research into chronic conditions has identified the potential for patients' information needs to change there has been little exploration of this concept in relation to surgical patients. Prior to discharge from the acute care settings, patients have identified information about the treatment of complications and medications as a priority (Jaarsma *et al.*, 1995; Jickling & Graydon, 1997). However, concerns during the recovery phase, when the patient is at home, often pertain more to returning to activities of daily living and 'feeling normal' (Henderson & Phillips, 1996; Goodman, 1997).

Cultural implications for the provision of information

There is a wealth of research showing cultural variation in health teaching and patients' responses to it (Niven, 1994). Bennett *et al.* (1999) highlight that Hong Kong, in particular, is a unique situation with its mostly Chinese population within a Western health care system. They explain that, although the city has a largely Western appearance, a strong traditional Chinese identity prevails. Research into the Chinese culture is not as prolific, and the significance of information giving about surgical procedures and care, as identified by research in the Western world, cannot be assumed.

Chinese people often show their concerns and feelings about others and their own health condition by taking care of physical needs, rather than by communicating those feelings in words (Meredith *et al.*, 1994). This non-verbal communication through physical care and touch is similarly found in the Latino culture, where caring behaviours provided by family members or health care providers, are believed to transmit confidence for the recovery of patients and enhance the ability of patients to cope (Morales, 1994). The Chinese

'see the individual as a relational being who is socially situated and defined within an interactive context' (Bennett *et al.*, 1999, p. 264). The interactive social context is generally the family, therefore, the provision of information is invariably related to what the family considers appropriate (Pang, 1999). It is not surprising that research has identified that, in Hong Kong, patients rely much more heavily on family and friends for health information and advice than patients surveyed in the United States (Smith & Smith, 1999).

Chinese patients' desire to obtain professional advice and health information from doctors, nurses and other health professionals may be different from that in Western countries. Available evidence about patient preferences for information and practices in Hong Kong is scant (Smith *et al.*, 1999). Research specifically focusing on communication of medications identifies patients are keen to learn more about side-effects (Smith & Smith, 1999).

Rationale of this study

Limitations in health resources necessitate that the provision of information is carefully planned and provided through a systematic approach to maximize the benefits to patients from the resources available. Consideration needs to be given to the impact, content and timing of information given to patients to address their health needs (Entwistle *et al.*, 1997).

When developing information materials for a Chinese population it is important to: firstly, recognize the content of their specific needs at the time of hospitalization that may be different from a predominantly Western population; and secondly, ascertain why the information is important as it can assist in understanding how it is used and, therefore, its potential impact.

Method

Aim

The purpose of this study was to identify information needs of Chinese patients perceived as important about their surgery and postoperative care, and to explore why they believed this information was important.

Design

A descriptive study design was used. This design is considered appropriate given that the use of a self-report questionnaire is described as efficient and economical for collecting descriptive data from a large sample and for subsequent analysis

(Portney & Watkins, 2000). An eight-item questionnaire was designed based on the right to information as expressed in the *Patients' Charter* (Hospital Authority, 1997), with one open-ended question at the end.

Sample and setting

The subjects for the study comprised 86 Chinese surgical patients from a 1000-bed regional general hospital in the New Territories, the largest geographical region in Hong Kong. They were a convenience sample based on the accessibility of patients recruited from two surgical wards (i.e. one male and one female ward) of the study hospital over 3 months. During the study period, approximately 400 eligible patients were admitted for surgery in the hospital and this sample represented 21.5% of the population. Inclusion criteria were:

- No impairment of cognitive status;
- An ability to communicate in Cantonese;
- Consent to participate in the study.

Instrument

A structured questionnaire comprised of a Chinese version of the Patients' Need for Knowledge of Proposed Surgery, an open-ended question and a demographic data sheet was used. The questionnaire required about 20 minutes to complete.

Patients' needs for knowledge of proposed surgery (PNKPS)

The measure was developed to assess patients' information needs based on the 'rights to information' contained within the *Patients' Charter* (Hospital Authority, 1997). This charter was formulated in accordance with the Patients' Charter in the United Kingdom (Smith *et al.*, 1997). Questions were developed on the following content areas: (1) personal medical history and details in relation to the proposed surgery; (2) rationale of why the surgery is necessary; (3) treatment alternatives and their benefits and risks; (4) the procedure of the surgery; (5) its short-term outcomes; (6) its possible complications; (7) its effects on daily living; and (8) warning signals of its complications and seeking medical help.

A final open-ended question asked patients to comment on why they believed the information was important to them. This information could potentially provide insight into the impact of the provision of such information.

Patients rated their desire in obtaining the information about each item on a 5-point Likert-type scale, with 1 denoting 'strongly disagree' and 5 denoting 'strongly agree'. Number 3 was a neutral comment for patients who

desired not to comment as to whether they agreed or disagreed with the statement. The questionnaire was translated into Chinese by the second author and then back-translated by an independent translator of Chinese language to verify the intended meanings in the questionnaire. The resulting Chinese version of the scale was administered to a panel of 10 bilingual Registered Nurses and 10 surgical patients, requesting their appraisal of the relevance of the theoretical construct of interest. The rating was on a 4-point rating scale, whereby the panel members rated the relevance of each item as 1 = not relevant, 2 = somewhat relevant, 3 = relevant and 4 = very relevant. The content validity index, representing the proportion of items that received a 3 or 4 rating by the expert panels, was 0.89 in this pilot test indicating acceptable level of validity (Waltz *et al.*, 1991). No amendment to the items was made. The questionnaire was piloted to ascertain its internal consistency (Cronbach's alpha coefficient was 0.88 for the total scale).

It is important to note that patients were not asked to rate the priority of information but rather identify all the information that they agreed should be given to them. Participants, therefore, had the opportunity to state that they 'strongly agreed' that all the information should be given to them. The questionnaire was limited to one A4 page so it was not so time consuming for the respondents to complete.

Demographic data sheet

A demographic data sheet was attached at the end page of the scale. This sheet included questions about the patient's age, gender, educational level, monthly household income, previous experience of surgery and the nature of the proposed surgery.

Ethical considerations

Permission to access the study site and ethical approval were sought from the Ethics Committees of the study hospital and Faculty of Medicine, The Chinese University of Hong Kong. Over the study period, the research assistant approached patients upon admission into the two surgical wards and agreement was sought from patients to participate in the study. Patients' written consent for the study was obtained before inclusion. They were informed of the purpose of the study, anonymity and confidentiality of data were assured, and patients had the right to withdraw from the study at any time.

Data collection procedure

Patients were approached individually by the research assistant upon admission and prior to the preoperative teaching given by the nurses in the surgical wards. Those patients who

agreed to participate in the study completed the questionnaire in an interview room of the surgical wards.

Data analysis

Descriptive statistics were employed on the quantitative data in the questionnaire and the demographic sheet using the Statistical Package for the Social Sciences (SPSS) Programme for Windows version 11.0. One-way ANOVA test was used to test any significant differences between information need and demographic data. Qualitative data from the open-ended question were summarized and analysed by content analysis (Miles & Huberman, 1994).

Results

Demographic characteristics

A total of 83 surgical patients participated in the study. This comprised 51 men and 32 women. The patients' age ranged from 15 to 93 years (mean = 46.8 years, SD = 10.6 years). Subjects were mainly patients who underwent procedures requiring relatively short hospital stay, such as appendicectomy, haemorrhoidectomy, incision of perineal abscess, transurethrostomy and nephrolithotomy. Over 80% of them obtained secondary school (63.9%) and tertiary (undergraduate and postgraduate level, 18.1%) education. The monthly household income ranged from HK dollars 6800 to 34 000 (US\$ 872–4359) and their average household income was similar to that for Hong Kong population in 2001 (i.e. HK dollars 8100 or US\$ 1038). Over one half of them (54.2%) had no previous experience of surgical procedure and only six of them (7.2%) had more than one surgery prior to this admission.

Desire for information

All the participants rated the needs of all types of information highly. The mean and SD of the eight items of the PNKPS are indicated in Table 1. The need statements scores were ranked in order of importance.

None of the mean values was lower than 4, that is, patients agreed that all aspects of information about their treatment were important. None of the participants strongly disagreed with any of the statements. The dispersion for each of the scores was small. The highest score was a mean of 4.41 for item 8: 'Information about the signs and symptoms indicating postoperative complications and when to seek medical help' and the lowest was a mean of 4.07 for item 1: 'Information about areas to be covered in history taking.'

Table 1 Item mean and standard deviations of the PNKPS for patients ($n = 83$)

Item (in descending order of importance)	Mean	SD
Information about the signs and signals indicating postoperative complications and when to seek medical help (8)	4.41	0.84
Information explaining the possible complications of my surgical procedure (6)	4.35	0.68
Information explaining how the surgery/procedure will affect my lifestyle after discharge (7)	4.28	0.51
Information explaining how the surgery/procedure will affect me in the first 24/48 hours (5)	4.24	0.91
Information explaining why the doctor believes the surgery is necessary (2)	4.17	0.58
Information about treatment alternatives including benefits and risks of each alternative (3)	4.16	0.83
Information explaining how the doctor will perform the surgery (4)	4.14	0.78
Prior to my admission information about the type of personal details required by the hospital (1)	4.07	0.72

PNKPS, patients' needs for knowledge of proposed surgery.

Numbers in parentheses indicate the item number of the PNKPS.

For the comparison between demographic data and the mean scores for desired information, females were generally more desirous of information than males. This difference between males and females was consistent with all responses. The mean scores of all the eight items were significantly different between the patients with primary school, secondary school and tertiary levels of education ($P < 0.005$). Tertiary level of education was significantly different from the other two levels during the *post hoc* comparisons for each need statement, using the Scheffe test ($P < 0.004$). Otherwise, there were no significant differences for other demographic variables ($P < 0.05$).

Reasons for rating information needs as important

The final question on the survey was an open-ended question that asked participants to describe why they believed it was important to receive information regarding their surgery, in particular, the information that they 'strongly agreed' should be given (Table 2). This descriptive information assisted in confirmation of the findings obtained from the quantitative data.

The participants' responses to this question could easily be categorized into four subject areas, however they were not entirely separated. Predominantly, patients wanted information to understand the surgery and assist the treatment and

recovery process. This finding was consistent with both items 6 and 8 that related to information about the possible complications of the surgery, signs and signals of such complications and when to seek medical help.

Discussion

Participants rated highly the desire for all types of information about the proposed surgery. This may be explained in two ways (1) over 80% of the sample obtained secondary school education or above. Findings by Thompson *et al.* (1993) support that individual variables, such as age and educational level, have a substantial impact on a patient's desire to seek health information; and (2) patients' understanding of their rights for information about treatment and care within health care has increased markedly. The Hong Kong Hospital Authority (2001) reported that hospital customer demands and requests for health-related information and standards increased during the 1990s: patients and families in Hong Kong are more active in seeking information about their illness and treatment plan.

These findings about the content of the information that patients' desire has been limited in identifying the definitive information of importance to patients. Rather, these findings have implications for the following:

- The timing of the provision of information;
- Effective practices for the provision of information within the Chinese culture.

Timing of information

The significance of the 'timeliness' of the administration of the questionnaire is indicated through those content areas deemed most important by participants. For example, participants did not express as much interest in the alternatives to the proposed surgery as other areas. This was possibly an indication that patients had already been

Table 2 Reasons for rating information needs

Reason for why information was important to them	Number of responses
I want information to understand and assist the treatment and recovery process	28
Because I have a right to know	17
This helps me care for my physical condition afterwards	14
This helps me to make the decisions about my care	5

explained choices and alternatives prior to admission and possibly were satisfied with the explanation received. The results indicate that participants are thinking of their needs beyond the surgical operation/procedure. The desire for information about signs and symptoms indicating postoperative complications, when to seek medical help and explanation of the possible complications are consistent with the findings of other patient groups surveyed prior to discharge (Henderson & Phillips, 1996; Jickling & Graydon, 1997).

Unfortunately this group of patients was not followed through immediately prior to or after discharge from hospital; this is of interest because other research has identified that when patients return home they are often more concerned with 'returning to normal', that is, resuming a normal lifestyle. While the effect of the procedure on lifestyle (item 7) assumed some importance it was not the greatest concern as identified by other studies (Henderson & Phillips, 1996; Goodman, 1997; Fox, 1998). Once again this factor can be representative of the timing of the study. Concerns about lifestyle have also been associated with populations who are further along the recovery continuum or, alternatively, the illness trajectory, when they are surveyed (Abrams, 1966; Hanger *et al.*, 1998).

Provision of information in the Chinese culture

These findings indicate that participants desire information. However, information disclosure is not an automatic right of patients but rather is at the discretion of the doctor in the Chinese tradition (Pang, 1999). It is imperative, therefore, that culturally correct strategies are investigated to ensure that the information patients desire is appropriately provided. In Hong Kong, similar to Western countries, health professionals play the more dominant role in their interactions with patients: doing most of the talking, setting the agenda, controlling how time is allocated, and giving the patient direction on how to behave following the explanation (Smith *et al.*, 1999). These forms of medical dominance are well described in the Western literature (Waitzkin, 1991).

Of significance in this study is the finding that patients do want to ask questions, as they value information. Given the cultural traditions this finding behoves clinicians to explore how relevant information is best disseminated in the cultural context. Chinese people value mutual obligation and role performance within family, and place much emphasis on interdependence rather than on the independence emphasized in Western cultures (Bennett *et al.*, 1999). The challenge for the provision of information is therefore establishing and

facilitating family oriented interaction while ensuring the patients' information needs are met.

Limitations

The use of convenience sampling in one general hospital may result in selection bias and limit the generalizability of the results. However, the sample (i.e. 21.5% of target population) was recruited continuously from the two surgical units over a 3-month period. The characteristics of the sample were similar to that of other general hospitals in Hong Kong that catered for similar acuity of Chinese patients, according to the statistical report of the Hospital Authority (2001).

While descriptive information from the open-ended questionnaire was useful in verifying the quantitative data from the questionnaire, the data collection method limited obtaining a greater breadth of understanding of the issues pertaining to information needs.

Conclusion

This descriptive study of the information needs of patients undergoing surgery emphasizes both the timeliness and cultural considerations in the provision of information. While it is acknowledged that there are cultural differences between Chinese and Western preferences and quite different traditions regarding the delivery of information and education, the desire for information about surgical intervention was fairly consistent. It would seem that the participants were keen to engage actively in their recovery process. It is important that appropriate information is delivered at each stage of the admission and discharge process.

If information regarding surgery is desired by Chinese patients, more research would be worthwhile to examine whether, similar to the West, there are difficulties and limitations in the delivery of this information. Cultural difference may contribute to alleviating or exacerbating some of the issues regarding dissemination of this information.

Acknowledgements

The authors would like to thank Shaw College, Chinese University of Hong Kong, for their financial contribution to this study.

Contributions

Study design: AH, WTC; data collection and analysis: WTC, AH; manuscript preparation: AH, WTC.

References

- Abrams R. (1966) The patient with cancer – his changing pattern of communication. *The New England Journal of Medicine* 274, 317–322.
- Atwal A. (2002) Nurses' perceptions of discharge planning in acute health care: a case study in one British teaching hospital. *Journal of Advanced Nursing* 39, 450–458.
- Bennett K., Smith D. & Irwin H. (1999) Preferences for participation in medical decisions in China. *Health Communication* 11, 261–284.
- Breemhaar B. & van der Borne H.W. (1990) Case study: development and evaluation of a model of patient education in surgical wards. *Patient Education and Counseling* 28, 31–44.
- Breemhaar B., van der Borne H.W. & Mullen P.D. (1996) Inadequacies of surgical patient education. *Patient Education and Counseling* 28, 31–44.
- Brumfield V., Kee C. & Johnson J. (1996) Pre-operative teaching in ambulatory surgery settings. *AORN Journal* 64, 941–952.
- Cortis J.D. & Lacey A.E. (1996) Measuring the quality and quantity of information-giving to in-patients. *Journal of Advanced Nursing* 24, 674–681.
- Devine E.C. & Cook T.D. (1986) Clinical and cost saving effects of psychosocial educational interventions with surgical patients: a meta-analysis. *Research in Nursing and Health* 9, 89–105.
- Entwistle V.A., Watt I.S. & Sowden A.J. (1997) Information to facilitate patient involvement in decision-making – some issues. *Journal of Clinical Effectiveness* 2, 69–72.
- Fox V. (1998) Post-operative education that works. *AORN Journal* 67, 1010–1017.
- Goodman H. (1997) Patients perceptions of their education needs in the first six weeks following cardiac surgery. *Journal of Advanced Nursing* 25, 1241–1251.
- Hanger H.C., Walker G., Paterson L.A., McBride S. & Sainsbury R. (1998) What do patients and their carers want to know about stroke? A two-year follow-up study. *Clinical Rehabilitation* 12, 45–52.
- Hathaway D. (1986) Effect of pre-operative instruction on post-operative outcomes: a meta-analysis. *Nursing Research* 35, 269–274.
- Hedges G., Grimmer K., Moss J. & Falco J. (1999) Performance indicators for discharge planning: a focused review of the literature. *Australian Journal of Advanced Nursing* 16, 20–28.
- Henderson A. & Phillips S. (1996) Surgical patients' information needs on discharge: are they being met? *International Journal of Nursing Practice* 2, 229–235.
- Henderson A. & Zernike W. (2001) A study of the impact of discharge information for surgical patients. *Journal of Advanced Nursing* 35, 1–7.
- Hospital Authority (1997) *Patient's Charter*. Hospital Authority, Hong Kong.
- Hospital Authority (2001) *Annual Report 2000–01*. Hospital Authority, Hong Kong.
- Jaarsma T., Kastermans M., Dassen T. & Philipsen H. (1995) Problems of cardiac patients in early recovery. *Journal of Advanced Nursing* 21, 21–27.
- Jickling J. & Graydon J. (1997) The information needs at time of hospital discharge of male and female patients who have undergone coronary artery bypass grafting: a pilot study. *Heart and Lung: The Journal of Acute and Critical Care* 26, 350–357.
- Latter S., MacLeod C.J., Wilson-Barnett J. & Maben J. (1992) Health education in nursing: perceptions of practice in acute settings. *Journal of Advanced Nursing* 17, 164–172.
- Leino-Kilpi H., Iire L., Suominen T., Vuoreneimo J. & Valimaki M. (1993) Client and information: a literature review. *Journal of Clinical Nursing* 2, 331–340.
- Leinonen T., Leino-Kilpi H. & Jouko K. (1996) The quality of intra-operative nursing care: the patients' perspective. *Journal of Advanced Nursing* 24, 843–852.
- Lithner M. & Zilling T. (1998) Does pre-operative information increase the well-being after surgery? *Nursing Science and Research in the Nordic Countries* 18, 31–33.
- Mamon J., Steinwachs D.M., Fahey M., Bone L.R., Oktay J. & Klein L. (1992) Impact of hospital discharge planning on meeting patient needs on returning home. *Health Services Research* 27, 155–175.
- Meredith W.H., Abbott D.A. & Zheng F.M. (1994) Healthy family functioning in Chinese cultures: an exploratory study using the Circumplex Model. *International Journal of Sociology of the Family* 24, 147–157.
- Miles M.B. & Huberman A.M. (1994) *An Expanded Sourcebook: Qualitative Data Analysis*, 2nd edn. Sage Publications, Thousand Oaks, pp. 50–88.
- Morales E. (1994) Meaning of touch to hospitalised Puerto Ricans with cancer. *Cancer Nursing* 17, 464–469.
- Niven N. (1994) *Health Psychology: An Introduction for Nurses and Other Health Care Professionals*. Churchill Livingstone, London.
- O'Connor F.W., Devine E.C., Cook T.D., Wenk V.A. & Curtin T.R. (1990) Enhancing surgical nurses' patient education: development and evaluation of an intervention. *Patient Education and Counseling* 16, 7–20.
- Pang M.S. (1999) Protective truthfulness: the Chinese way of safeguarding patients in informed treatment decisions. *Journal of Medical Ethics* 25, 247–253.
- Portney L.G. & Watkins M.P. (2000) *Foundation of Clinical Research: Application to Practice*, 2nd edn. Prentice Hall, New Jersey.
- Smith D. & Smith S.J. (1999) Chinese elders' communication about medicine. *Health Communication* 11, 237–248.
- Smith M., Rousseau N., Lecouturier J., Gregson B., Bond J. & Rodgers H. (1997) Older people satisfied with discharge information? *Nursing Times* 93, 52–53.
- Smith D.H., Dixon A.S., Lam C.L.K. & Lam T.P. (1999) Patient-centered communication in Hong Kong. *Health Communication* 11, 285–297.
- Thompson S.G., Pitts J.S. & Schwankovsky L. (1993) Preferences for involvement in medical decision-making: situational and demographic influence. *Patient Education and Counseling* 22, 133–140.
- Waitzkin H. (1991) *The Politics of Medical Encounters*. Yale University Press, London.
- Waltz C.F., Strickland O.L. & Lenz E.R. (1991) *Measurement in Nursing Research*, 2nd edn. F.A. Davis, Philadelphia.