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Ambulatory Surgery 8 (2000) 119–127

Ambulatory Surgery

www.elsevier.com/locate/ambsur

Anxiety management: a distinct nursing role in day surgery

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Received 15 November 1999; accepted 26 November 1999

Abstract

Improved anaesthetic techniques and the increase in minimal access surgery over the past 20 years has had a considerable impact upon the pattern of nursing care required by the surgical patient. In order to adapt to these changes some day surgery nurses have opted for an extension to their role while the majority have expanded their remit and perform nursing interventions within a multi-skilled role. Amid these changing patterns, the nursing profession has been active in conducting research into best practice concerning day surgery. Consequently, a great deal of information is available regarding areas for possible growth. One possible growth area which is also a vitally important issue for patients prior to day surgery is anxiety management. A future nursing role could involve formal anxiety management implicit within a multi-skilled role and as part of an expanded role. The role possibilities are discussed together with an information provision plan as both are central to the effective handling of pre-operative fears.

Keywords: Day surgery; Extended and expanded nursing roles; Information provision; Formal anxiety management

1. New era for surgical nursing

Changes to surgical and anaesthetic practice over the past two decades has resulted in a decline in the number of days patients spend in hospital. The average stay has fallen from nine days in 1974/5, to seven days in 1986 [1] and is still falling today (currently 5.4 days) [2]. The length of hospital stay in the UK within the last 20 years has fallen by almost 50%. Furthermore, 60% of all elective surgery in the UK is now undertaken on a day case basis and in some surgical specialities this figure has reached 80% [3]. This is in line with the NHS Management Executive (1993) [4] which states 50% of all elective surgery should be undertaken on a day case basis by 1997/98 with certain surgical specialities able to perform 80% of their surgery by the year 2000. The Audit Commission (1998) [5] also recommends an even greater level of transfer from in-patient surgery to day surgery.

Advances in surgical and anaesthetic practice have ensured many changes to the future of surgical nursing [6,7]. For example, patients undergoing a cholecystectomy in the 1970's regularly required hospitalisation for 2–3 weeks and consequently a considerable amount of physical care. Pearce (1975) [8] states "… on the tenth day the patient is sent down to the X-ray department for the injection of some radio-opaque material along the T-tube." (p. 40). Watson (1979) [9] (a then prominent nursing text) dedicated a whole chapter to the copious levels of physical pre- and post-operative care required during hospitalisation. Currently, only a small number of cholecystectomies are undertaken on a day case basis in the United Kingdom although this is set to rise as the British Association of Day Surgery has recently included cholecystectomy in its 'trolley of procedures' stating that 50% should now be possible in day surgery [10].

The changes associated with cholecystectomy provides one example of how the proportion of physical nursing intervention has fallen and is no longer required to the same degree by the majority of patients undergoing elective surgery. The nursing profession has been slow to react to these enduring changes in surgical and anaesthetic practice and must explore future roles in surgical nursing. Reaction may have been delayed by a common misconception regarding day surgery i.e. day surgery only involves a small amount of minor surgery.

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0966-6532/00/$ - see front matter
PII: S0966-6532(99)00061-X

This assumption is quite false as the figures above seek to highlight. Medical advances now permit patients undergoing intermediate surgery (not minor) and general anaesthesia (not just local or regional anaesthesia) to recover at home rather than in hospital [11,12]. This permanent move away from in-patient surgery to more day case surgery has inevitably lead to a number of changes to the traditional role of the surgical nurse.

2. Current role of the nurse in day surgery

In the UK the role of the nurse in a modern surgical unit (excluding theatre) can be broadly placed into three overlapping categories, i.e. traditional managerial role, expanded multi-skilled nursing role and extended specialist nursing role. Firstly, the managerial role involves the day to day running of a modern surgical unit, i.e. strategic planning, multi-disciplinary organisation of work, ensuring correct functioning of the unit, health and safety issues, personnel matters, etc. These multiple issues provide many challenges as they have the potential to impact enormously upon the day surgery patient, i.e. waiting list initiatives, staff recruitment and retention, auditing, etc. These challenges are unyielding as the throughput of patients is not only relentless but growing [3,10].

The expanded multi-skilled (or multi-tasked) role has been largely pre-determined in order to maintain a steady flow of patients through the day case unit and undertake the surgery scheduled for each day [13,14]. In the absence of the copious levels of physical nursing intervention, outlined above, this has been both a logical and practical progression for the role of the nurse. Much nursing intervention concerns the patient's medical fitness for surgery and embraces all aspects of patient care in a matter of 3–4 h, e.g. admission procedures, physical preparation, transfer to the operating theatre, recovery from anaesthesia and discharge home. [14–16]. While these are obviously vitally important aspects within the nurses' role they can be widely viewed as medically orientated tasks to ensure surgical safety and a progressive throughput of patients in the limited time available [13]. Having a multi-skilled nursing workforce within a day surgery unit does, carry numerous benefits [17–19]. Null and Bonser (1997) [20] state "… the development of new skills and increase of each nurse's knowledge base was identified as an opportunity for both professional growth and personal marketability." (p. 324). Nonetheless, in this American study 'cross-training' and adequate preparation of staff required careful planning. The education of staff is also an issue in the UK as a lack of good training may render multi-skilling programmes problematic [21,22].

More recently some of these para-medical tasks have been perceived as an area of extension for the role of the nurse and ones in which other nursing skills can be employed [23–25]. Pre-operative assessment clinics, for example, are being successfully run by nurses and are providing the opportunity for more traditional nursing skills to be incorporated e.g. interpersonal skills, organisational skills, therapeutic use of self [14,15,25,26]. The benefit of having nurses with extended roles in other areas, able to undertake medically orientated procedures has likewise been well documented [27–32]. But it has been suggested that concentrating too much on quasi-medically orientated tasks may dilute the skills of the nurse [13,33]. Nurses with specialist extended paramedical roles may have to exercise some caution as their professional roots lie in nursing and should therefore avoid becoming too far removed from the nursing domain [29,34]. At the British Association of Day Surgery Annual Scientific Meeting held in Harrogate in 1998 their was a ground swell of opinion from the nurses present against medically orientated tasks becoming a commonly accepted part of their remit. Frequently the number of multi-skilled nurses and specialist nursing roles are determined locally depending largely on requirements [35]. While these new roles may have embraced challenges geared to maximise efficiency they may have inadvertently overlooked some crucial patient centred issues.

A dominant issue for the vast majority of patients prior to day surgery is their anxiety, e.g. fear of anaesthesia, pain and discomfort. Day surgery is providing the ideal opportunity for more accurate pre-operative anxiety management to address these considerable fears. The potential to adopt these changes may now be feasible as (i) the majority of elective surgery now takes place in day surgery, (ii) patients visit hospital prior to surgery for a pre-assessment and (iii) information provision (the most challenging aspect for day surgery) is inextricably linked with anxiety management. Information provision is only one challenging issue currently facing day surgery although the introduction of an anxiety management role and information provision strategy could have a decisive impact upon all current challenges. Recognising the positive contribution a methodical anxiety management plan can offer by making much needed changes may provide a huge boost for day surgery nursing intervention i.e. the development of a new role whose roots lie firmly in nursing research.

3. Current day surgery challenges

Four main challenges have emerged from one of the first reviews of the literature to exclusively examine the opinions of the day surgery patient, i.e. information provision, nursing and anaesthetic practices, patients' experiences within the day surgery unit and recovery at home [36,37]. This review of 67 studies has been up-

dated by a further 32 papers in the two years since the original article was written. However, the above conclusions still firmly remain the most challenging aspects for day surgery, i.e. information, nursing practices, patients' experiences and home recovery. The updated reference list can be found in the reference section below [38–67,76,100] and the references from the original paper in Mitchell (1999a) [36] and Mitchell (1999b) [37]. The updated list of 99 studies has been subdivided into qualitative and quantitative papers in order to gain greater insight into their classification, validity and reliability (Table 1).

Table 1
Classification of all studies reviewed concerning patients' perceptions of day surgery

Qualitative	Quantitative		
Phenomenological	Audit	Survey	Quasi-experimental
Avis (1994) [36]	Baskerville et al. (1985) [36]	Aasboe et al. (1998) [50]	Augustin et al. (1996) [36]
Donoghue et al. (1995) [81]	Birch et al. (1994) [36]	Agboola et al. (1998) [51]	Coslow et al. (1998) [65]
Donoghue et al. (1997) [86]	Bottrill (1994) [36]	Bhattacharya et al. (1998) [52]	Domar et al. (1987) [36]
Kleinbeck et al. (1994) [36]	Chung et al. (1994) ([36])	Birch et al. (1993) [36]	Edwards et al. (1991) [36]
Otte (1996) [36]	Clyne et al. (1978) [36]	Brumfield et al. (1996) [36]	Gaberson (1995) [36]
Thatcher (1996) [36]	Codd (1991) [38]	Buttery et al. (1993) [36]	Goldmann et al. (1988) [97]
	De Jesus et al. (1996) [36]	Caldwell (1991) [36]	Hulme et al. (1999) [65]
	Fenton-Lee et al. (1994) [36]	Callesen et al. (1998) [53]	Kempe et al. (1985) [101]
	Firth (1991) [36]	Claxton et al. (1997) [54]	Markland et al. (1993) [36]
	Fitzpatrick et al. (1998) [39]	Cozzarelli (1993) [36]	Mealy et al. (1996) [36]
	Gupta et al. (1994) [36]	Daoud et al. (1999) [75]	Vogelsang (1990) [82]
	Haddock et al. (1999) [40]	Done et al. (1998) [55]	Wicklin et al. (1994) [36]
	Hawkshaw (1994) [36]	Donoghue et al. (1998) [56]	Zvara et al. (1996) [67]
	Heseltine et al. (1998) [41]	Fengling et al. (1998) [57]	
	Ismail (1997) [42]	Frisch et al. (1990) [94]	
	Kangas-Saarela et al. (1999) [43]	Gamotis et al. (1988) [36]	
	Kelly (1994) [36]	Ghosh et al. (1994) [36]	
	Kennedy (1995) [36]	Gnanalingham et al. (1998) [58]	
	King (1989) [36]	Guilbert et al. (1997) [36]	
	Lewin et al. (1995) [36]	Haldane et al. (1998) [59]	
	MacAndie et al. (1998) [36]	Harju (1991) [36]	
	Marquardt et al. (1996) [36]	Icenhour (1988) [95]	
	Menon (1998) [45]	Jamison et al. (1987) [36]	
	Petticrew et al. (1995) [99]	Lawrence et al. (1997) [60]	
	Ramachandra (1994) [36]	Lindén et al. (1995) [61]	
	Rudkin et al. (1996) [36]	Lindén et al. (1996) [62]	
	Stephenson (1990) [36]	Lisko (1995) [36]	
	Thomas et al. (1987) [47]	Mackenzie (1989) [36]	
	Willsher et al. (1998) [48]	Male (1981) [36]	
	Wilkinson et al. (1992) [36]	Micheals et al. (1992) [36]	
	Woodhouse et al. (1998) [49]	Mitchell (1997) [75]	
		Nkyekyer (1996) [36]	
		Nyamathi et al. (1988) [36]	
		O'Connor et al. (1991) [36]	
		Oberle et al. (1994) [78]	
		Parsons et al. (1993) [36]	
		Philip (1992) [36]	
		Pineault et al. (1985) [36]	
		Pollock et al. (1997) [105]	
		Ratcliffe et al. (1994) [36]	
		Read (1990) [36]	
		RCS & East Anglian R.H.A. (1995) [36]	
		Sigurdardottir (1996) [36]	
		Singleton et al.. (1996) [36]	
		Smith (1998) [62]	
		Wedderburn et al.. (1996) [102]	
		Willis et al.. (1997) [103]	
		Winwood et al.. (1993) [64]	
Total (99)			
6	32	48	13

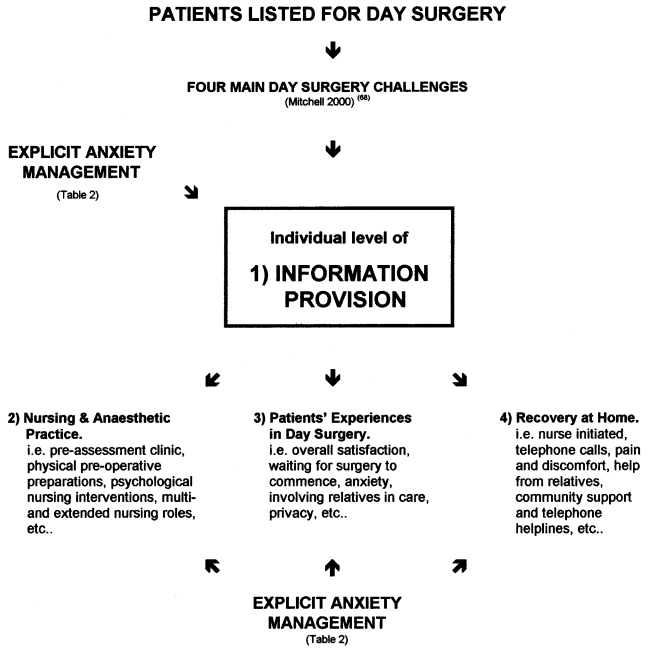

Fig. 1. Pivotal role of information provision in anxiety management.

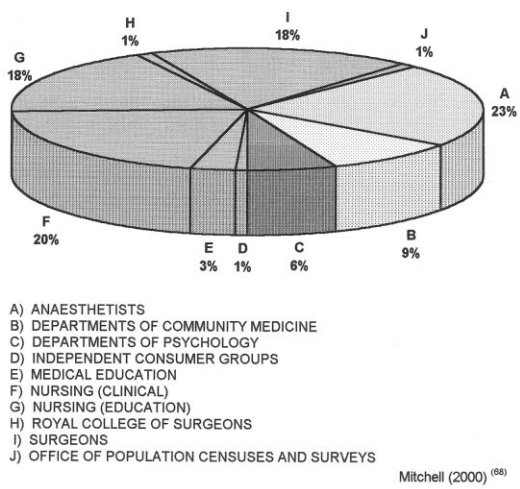

Fig. 2. Classification of professionals undertaking studies concerning patients' perceptions of day surgery (based on primary researcher).

Improvements to information provision are recommended by 57.6% ($n = 57$) of the 99 studies and was implicit in many others (Table 1). Three of the main issues identified in the review [36] are directly linked to the fourth-information provision, i.e. nursing and anaesthetic practices, patient's experiences of day surgery and recovery at home (Fig. 1). Numerous studies within the review plus a subsequent study have firmly linked lower levels of anxiety both in the day surgery unit and at home during recovery with adequate information provision [36,37,68]. Of the main issues, information provision presents the greatest challenge as it is pivotal to the other three (Fig. 1). Tackling the perplexing problems of information provision may therefore address all the major challenges currently facing day surgery. Attempting to resolve patient information issues may uncover new horizons for the role of the nurse in day surgery, i.e. anxiety management nurse specialist.

To date the nursing profession has made a major contribution to the amount of research concerning the opinions of day surgery patients (Fig. 2). Nurses are therefore a very suitably placed group to recommend and implement these necessary changes as 38% of all the studies into day surgery patients' perceptions have been conducted primarily by nurses [68] (Fig. 2). At the British Association of Day Surgery Annual Scientific Meeting held in Bournemouth in 1999 a survey was undertaken of the delegates present regarding the most suitable group to manage a day surgery unit. Nurse led units were voted overwhelmingly to be the most effective way to manage a day surgery unit. The opportunity to introduce an innovative anxiety management nursing role, which draws firmly on nursing research, could not be better.

4. Anxiety management: a distinct nursing role

Research over 30 years has steadfastly confirmed that when patients enter hospital to undergo surgery they are very anxious regarding the anaesthetic, the operation, the possible pain and discomfort, and being unconscious [69–75]. In a recent study of the pre-operative anxiety associated with day surgery, 97% of patients experienced a degree of anxiety [68] (Fig. 3). An additional fear, closely associated with day case procedures, may be increasing in parallel with the amount of day surgery being undertaken i.e. anxiety resulting from the wait on the day of surgery [68] (Fig. 4). Increased difficulties during the induction of general anaesthesia have also been demonstrated with an anxious patient [76]. Patient anxiety prior to day surgery may eventually become an even greater issue and

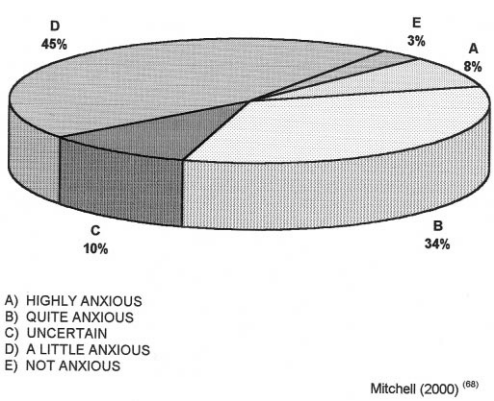

Fig. 3. How anxious would you rate your patient prior to her operation today?

Table 2
Anxiety management in day surgery

Nursing diagnosis (i.e. need/problem)		
	An increased level of anxiety resulting from the impending general, local or regional anaesthesia, surgical procedure, recovery and medical outcome.	
Cues (not exhaustive)		
	Objective: increased blood pressure, increased pulse rate, increased respiration's, perspiration, dry mouth, frequent micturition, palpitations, trembling, gastro-intestinal disturbance, pale or flushed skin, red blotches on neck and chest, patient stating main pre-operative fears from research i.e. thoughts of being anaesthetised, being unconscious, the possible pain and discomfort afterwards and the operation itself. Subjective: excessive talking, quiet or withdrawn, illogical thoughts, focus on self, fidgety, nail biting, inappropriate laughing or giggling, weepy, rude, unco-operative, wringing hands, tone of voice, aggressive behaviour, precarious state of emotional arousal.	
Goal	To assist the patient in the effective management of their anxiety	
Nursing intervention (not exhaustive)		
Information provision	Focus on provision of correct level of information i.e. vigilant avoidant and fluctuating and coping styles (Krohne et al. 1996) [109]	Give choice of information pathway in the pre-assessment clinic and (i) supply the relevant and accurate information or (ii) send via the post. Provide both written and verbal information. Provide all information 1 to 3 weeks prior to surgery. All information on the day of surgery to centre around coping style match, i.e. a vigilant coper told every detail. Provide clear distinction between patient preference for information on the day of surgery. 24–48 h post-operative nurse initiated telephone call service. 24 hour telephone helpline and encourage patient to use it.
Promoting cognitive re-framing (cognitive coping strategies)	Focus on most common pre-operative fears (Teasdale, 1995) [110].	Utilise any re-framing ploy, i.e. modern anaesthetic equipment, highly trained and nurses, highly effective and modern anaesthetic agents, constant thorough checking and safety procedures, many operations performed daily without a single problem; while unconscious will be constantly monitored; while recovering will be constantly monitored, etc.
Therapeutic use of self	Focus on nurses' physical presence	Be physically close to the patient, talking and using touch. Demonstrate a friendly, professional, assured assertive and calm manner. Convey emotional stability. Distract with conversation and calming words.
Providing control	Focus on involving the patient in decisions whenever and wherever possible	Involve in decision making — real or perceived, large or small. Give more/less control when requested. Encourage questions and provide consistent answers. Encourage relatives/ friends to remain if so desired. Deal swiftly and effectively with any pain and discomfort. Ensure waiting time is minimal and keep informed of schedule.
Promoting self-efficacy	Focus on praise and encouragement	Convey an optimistic outlook. State repeatedly how well they are coping/managing. Encourage belief in positive self management once discharged. Encourage autonomy. Encourage patient to use telephone helpline.
Evaluation	Focus on patient	Nurse initiated telephone contact after 24–48 h. Give patient anonymous satisfaction questionnaire on discharge for return by post. Randomly telephone to complete a satisfaction with care questionnaire. Establish regular multi-disciplinary reviews of practice.

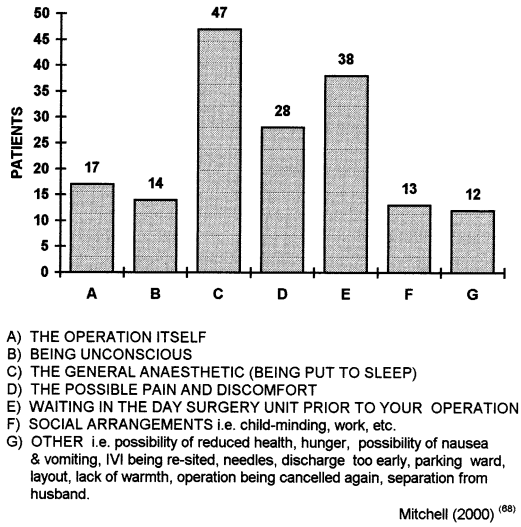

Fig. 4. What aspects of day surgery increased your anxiety?

Table 3
Anxiety management nurse practitioner role

Possible central responsibilities
Create structured programme of information provision.
Evolve multiple methods of information dissemination.
Ensure differing levels of information for all procedures.
Develop protocols to guarantee continuity of the required level of information throughout the pre and post-operative phases.
Ensure implementation of anxiety management careplan.
Develop brief multi-disciplinary notes to oversee whole process.

merely add to the need for more explicit anxiety management programmes.

Loss of the more traditional surgical nursing roles, outlined above, has created an opening in which the freedom to address these crucial patient centred issues could be realised. This is in line with the Government's new strategic intentions for nursing where new roles and new ways of working are to be encouraged [77]. A future nursing role in day surgery should involve formal anxiety management implicit within a multi-skilled role and as part of an expanded nursing role (Fig. 1). Brief multi-disciplinary notes could be used to oversee this process [68] together with an orthodox anxiety management careplan which draws on research evidence [68]. This distinctive nursing role could spearhead the implementation of an anxiety management careplan (Table 2) and the creation of a structured programme of information provision (Table 3). The structured programme could included (i) differing levels of information for all procedures, (ii) multiple methods of information dissemination and, crucially, (iii) ensure continuity of the required level of information throughout the pre and post-operative phases [68,75] (Table 4). A structured programme of provision such as this, immediately commenced once elective day surgery has been recommended, will also have an unseen benefit as simply establishing an efficient, well run and professional day surgery unit has enabled patients to manage their anxiety more effectively [68].

A number of studies have indicated patients need to be contacted prior to surgery in order to gain information concerning their planned surgery [78–82]. This could be incorporated within the pre-assessment visit, by telephone or post (Table 4). Verbal information could be provided at this point and the chosen written information discussed and given to the patient to take home [55,67,83–85]. A visit to the day surgery unit, if requested, should be made available in order to meet the staff and become more accustomed to the surroundings as 44% of patients in a study by Mitchell (1997) [75] would have preferred a visit. The type of information required by surgical patients has already been established and would simply require adapting to each surgical procedure [86–94]. The patient's relatives can be of great help at this stage although they will require information prior to the day of surgery to enable them to adequately care for their relative upon discharge [95,96].

On the day of surgery any outstanding questions can be answered and the chosen level of information continued. Providing patients with unwanted information

Table 4
Information management plan for day surgery

3–4 Weeks prior to surgery	Day of surgery	Following discharge
Structured programme of information provision.	Chosen level of information provision continued.	Chosen level of information provision continued.
Choice of verbal and written information to take home, i.e. simple, intermediate or extended information.	Outstanding questions answered.	24–48 h nurse initiated telephone call.
Information provision incorporated into the pre-assessment or provided by telephone and post.	Relatives' help employed where possible.	Community service available (if required).
Visit to unit if requested.	Relatives kept well informed.	Use of telephone helpline encouraged.
Anxiety management plan utilised.	Anxiety management plan utilised.	Anxiety management plan utilised.
Multi-disciplinary notes utilised.	Multi-disciplinary notes utilised.	Multi-disciplinary notes utilised.

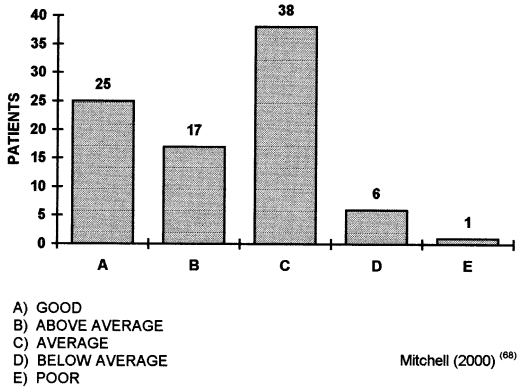

Fig. 5. Overall, how would you rate your patient's adjustment to her surgery today?

can be a waste of resources and only make them more anxious [68,97,98]. The continuation of the correct level of information is therefore crucial within the anxiety management process and must be strictly observed [68,75]. (Tables 3 and 4). This may also help to improve patient adjustment to surgery as some patients clearly do not adjust well to their operation [68] (Fig. 5). The development of protocols to enable the continuity of the correct level of information must therefore be a central part of the nurse specialist's remit, as stated above (Table 3). The patients' relatives must be kept informed and invited to remain with the patient during their stay, subject to all party agreement [99,100].

Patients should be discharged with the desired levels of information together with a contact telephone number. The use of a telephone helpline service should be encouraged as it can reduce the need to contact the community services [101–103]. During the post-operative phase a nurse initiated telephone call can be made to also reduce the demands placed upon the community resources and to ensure a more positive recovery [68,104,105]. If a telephone is unavailable in the patients home, a day surgery out-reach team or community based service could be provided as this has proven to be of great benefit [63,106–108].

5. Conclusion

Much research evidence highlights the fears experienced by day case patients prior to surgery. Information provision has been targeted as a challenging aspect for day case patients as many are very anxious regarding the lack of information. The nursing profession has a tremendous opportunity to develop a new, exciting and dynamic anxiety management role in day surgery. This role could have at its core a planned programme of information provision and encompass an explicit programme of anxiety management. The benefits improved information provision can bring have been clearly identified. Likewise the tools to undertake this new and inspiring anxiety management role are available. The Government is in support of new nursing roles and improved patient satisfaction stating "Developing roles and improving services go hand in hand" (p. 71) [77]. Ultimately, the clinical application of the changes outlined above must be considered against local circumstances, financial and legal pressures. However, improved patient information provision and formal programmes to enhance anxiety management can only be of benefit to all concerned in day surgery.

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