

Critical Review:

What topics and team members in pre-operative counselling for persons undergoing a laryngectomy create a positive perception of care?

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This critical review examines existing literature regarding pre-operative counselling practices for patients undergoing laryngectomy, and the different patient perceptions such practices create. Study designs included surveys, and one systematic review. Overall, the evidence gathered from this review uncovered no guiding protocol or framework for deciding what key topics and healthcare professionals should be included in the pre-operative counselling for a person undergoing a laryngectomy. However, certain healthcare professionals and topics were repeatedly noted to either increase the effectiveness of counselling or identified as important to include.

Introduction

According to the American and Canadian Cancer Societies, cancer of the larynx occurs in approximately 14,000 patients per year. For some of these, intervention will require the surgical removal of part or the total larynx. A total laryngectomy means the removal of the vocal cords and creation of a stoma (or opening) at the base of the neck through which the patient breathes. A patient loses their source of phonation, protection of the respiratory tract and joining connection of the mouth and nose to the trachea. Without the presence of the vocal apparatus, patients must establish an alternate mode of voicing such as esophageal speech or by using an electrolarynx. Needless to say, a laryngectomy is a life-changing surgery, as patients learn to breathe, voice and ultimately live in a new way.

Although each patient is unique in their needs and responses, there are common challenges posed by a total laryngectomy. Physical alterations are thought of first, but there are physiological and social changes as well (Ward, 2003). Indeed, a laryngectomy poses many social challenges given that communication is disrupted. It has been reported that vocational issues, high levels of stress, anxiety, depression, and reduced participation in previously enjoyed activities are just some of the barriers patients cope with (Cady, 2002).

Given the extent of the changes involved in laryngectomy, pre-operative counselling is particularly important in this population; patients need preparation for the ramifications of their surgery. One challenge to providing adequate pre-operative counselling is considering who has the expertise to provide it. In fact, there is probably no one health care professional who has all of the relevant knowledge. Surgeons, for example, are experts in the physical and physiological changes associated with the surgery whereas Speech-

Language Pathologists (SLPs) are knowledgeable about the impact on communication and communication options. Perhaps not surprisingly, a holistic approach has been evolving over the years to include a multidisciplinary support team and consideration of the information to be disseminated (Renner, 1995).

One of the earliest reports of perceptions of patients with laryngectomy, regarding preoperative counselling experiences, was provided by Blanchard (1982). These original findings suggested that many patients held negative perceptions regarding the pre-operative counselling they received. Given the challenges of providing effective pre-operative counselling to patients with laryngectomy, it is important to consider evidence from professionals and patients when trying to understand best practices.

Objectives

The primary objective of this paper was to critically review existing literature regarding what specific healthcare professionals and pre-operative counselling topics produce positive perception of care for patients undergoing a laryngectomy. The secondary objective is to provide recommendations for clinical practice.

Methods

Search Strategy

Articles related to the topic of interest were found using the following computerized databases: PubMed, Scopus, Medline, and Web of Science. Key terms used for the database search were as follows:

[Laryngectomee] AND [(Counselling) OR (Sharing information)] AND [(Pre-operative) OR (Current Practices)].

The search was limited to articles written in English and between the years of 1985 to 2018.

Selection Criteria

Studies selected for inclusion in this review paper were required to investigate pre-operative counselling practices of healthcare professionals. As well, articles were included if they examined pre-operative counselling perceptions of patients who underwent laryngeal surgery.

Data Collection

Results of the literature search yielded six articles that met the selection criteria. Four papers (Berkowitz and Lucente (1985), Salva and Kallail (1989), Ward et al. (2003), and Zeine and Larson (1999)) utilized survey studies, one, Fitzgerald and Perry (2016), employed a systematic review, and the last, Raol et al. (2017), conducted a retrospective chart review.

Results

Berkowitz and Lucente (1985) conducted a survey examining the pre-operative counselling practices of 294 otolaryngologists who performed laryngectomy. Participants were recruited from a national head and neck surgery registry, although information on how many invitations were issued, how contact was made, or whether reminders were sent was not reported. The survey was created for the study. Results indicated that almost all surgeons value pre-operative counselling and believe it is important for post-operative rehabilitation. Also, the majority of physicians spend between 30 minutes to an hour providing that service. In regards to the current review, it was reported that the SLP was included more often in the pre-operative counselling than any other non-physician. Topics always discussed by the physician were: causes of cancer, extent of surgery required, alternatives to surgery and information on speech loss; 80% of physicians reported they described all the methods of alaryngeal speech pre-operatively.

Strengths of this study included an appropriate design for the study objectives. The survey had a variety of question types and space to allow extension of answers and was published fully in the article. Descriptive statistics only were reported, as would be expected for the study design. The timeframe of the preformed surgeries to survey responses was not given. This study demanded physicians to recall when reporting on pre-operative counselling moments and no questions regarding the consistency of their practice for all patients seen was included. There was no follow-up on the patients' perceptions and what they valued from the pre-operative counselling.

Overall, this study provided suggestive evidence on general practices and specific topics physicians include during pre-operative counselling with their patients.

Salva and Kallail (1989) conducted a survey study examining the unique counselling needs of 66 male and 52 female laryngectomees. A study-designed 2-form survey was distributed and incorporated questions regarding the respondents' lifestyle changes, informational needs, and feelings. It was noted that the respondents could have had their laryngectomy within 2 to 10 years at the time of the survey distribution. Acceptable reliability and validity were reported. Results revealed there were significant sex differences pertaining to certain questions. It was found that more males than females reported pre-operative counselling being helpful. For the current study, it was reported that the spouse, other family members and the SLP were effective in the patients' adjustment to surgery.

Respondent diversity was positive as surveys were distributed across a wide geographical region in North America. The study included a section for extended comments and focused on a new dimension of counselling needs: sex differences. One weakness of the study was the gap of time post-surgery to survey response, which varied greatly across participants.

Overall, this study provided suggestive evidence around the unique needs and feelings of male and female laryngectomees and what individuals they found effective in pre-operative counselling.

Ward et al. (2003) conducted a survey study examining information dissemination during pre and post-operative counselling in 77 patients who had undergone laryngeal surgery, 41 of their spouses/caregivers between 1990 and 2000, and who were registered in the Australian healthcare system. Participants were mailed a 36-item study-designed questionnaire asking for biographical information, disseminated information, involvement of health professionals, spousal involvement and an "optimal counselling" checklist. Response rate was adequate, and the majority of surveys were completed fully. Results were analyzed using descriptive statistics and appropriate qualitative ratings for open-ended responses. Overall, study results revealed that a large majority of patients and spouses were satisfied with the care they received. With regards to the current review, respondents reported a doctor, SLP, and a laryngectomee support visitor as being the top three disseminators of pre-operative information. As well, topics discussed were: surgery and related treatments, physical and social changes, swallowing difficulties, and communication options.

Strengths of the study included the questionnaire being provided fully and including appropriate questions and choices, as well as opportunities for extended responses. Recruitment was also aimed at all possible qualifiers and response rate was reasonable. Focus on “optimal counselling” was investigated in a section of the questionnaire. The questionnaire also made efforts to use simplified language to avoid vague or biased questions. Data analysis was appropriate given the study design. The study however, included a need for patients to recall experiences from about 10 years prior. As well, potential bias may exist in that there was no way to blind participants, as the questionnaire was not given right after counselling experiences.

Overall, this study provided compelling evidence regarding the range of topics and expertise needed in pre and post-operative counselling.

Zeine and Larson (1999) conducted a survey study to examine whether “complete” information was getting to laryngectomy patients and their spouses relative to previous findings (Keith, Linebaugh and Cox 1978). A total of 125 patients (107 with total laryngectomy) and 28 spouses were recruited from one institution and one workshop. Questions were designed to gather data on the quality and quantity of support services, patients’ satisfaction, speech rehabilitation process, experiences and feelings post-surgery, and biographical background. Results indicated that a portion of patients were not aware of the loss of speech before their surgical procedures. Respondents reported receiving the majority of their pre-operative information from the surgeon, SLP and from another laryngectomy. Respondents reported they would benefit from a SLP, surgeon, nurse, and family doctor taking part in their counselling. Respondents felt the “inability to speak”, physiological issues, and social changes were key areas to discuss. The authors argued that the proportion of patient and spouses reporting satisfaction with the information provided was higher than in the past study.

A good response rate from laryngectomees and their spouses was recorded in this study. The study developed two questionnaires that were tailored for the patient and spouse viewpoints. Both questionnaires were provided fully in the article and included a variety of question types. Also, the study focused on the timing of when speech options were addressed and the feelings around speech rehabilitation. Weaknesses included the narrow recruitment avenues and no opportunity for the participants to provide detailed explanations in the questionnaire. As well, no information was provided on when the questionnaires were distributed and how long prior the patients’ surgery had occurred. Only

descriptive statistics were provided and comparisons lacked detail.

Overall, this study produced highly suggestive evidence regarding pre-operative information, the healthcare professionals involved, and what areas should be followed-up on post-surgery for individuals with laryngectomee.

Fitzgerald and Perry (2016) conducted a systematic review of the literature between 1975 and 2015 to investigate pre-operative counselling for laryngectomees, what those practices entailed, and the perceptions of spouses/caregivers. A search strategy, including a concept map and a PICO schema, was used when searching for English language articles from certain databases. Overall, within the 40-year criteria, only 56 papers from a variety of countries were retrieved and, due to inclusion criteria, 21 were analyzed. All publications were given a level of evidence; none achieved a level I evidence, and the majority were level IV. Overall, most of the papers’ designs were quantitative and had no structure to be comparable. Therefore, a critique and narrative review was completed to investigate each study’s clinical questions. Results indicated that the true definition of “counselling” is not properly used throughout the literature. It was found that no operationalization existed for what topics, healthcare professionals, and format should be included in pre-operative counselling. With regards to the current review, it was found that the ENT surgeon or the SLP usually provided counselling. General trends in content discussed were: physical changes, methods of speech, and psychosocial issues.

This study included selected publications from multiple countries and covered a wide time range. The methodological procedure was well designed and appropriate for the study. The study focused on the definition of “counselling” and was able to address the clinical questions. Although there was a range of later to more recent papers, the most recent paper was from 2006. When it came to the critique and narrative reviews, no descriptive details of the process were given.

Overall, this study produced compelling evidence regarding pre-operative counselling practices lacking a structure protocol.

Raol et al. (2017) conducted a retrospective chart review investigating pre-operative counselling for 58 patients undergoing a total laryngectomy between 2005 and 2015. Documentation notes, from medical charts, were reviewed retrospectively and 2 coders independently noted medical and nonmedical elements

of counselling. Acceptable reliability between coders was reported. Results indicated all patients had notes written by the head and neck surgeon, where only 28% had notes written from the SLP. As well, variation in documentation focus was found; physicians focused on treatment and non-physicians (SLP, social worker, RN) were more involved with treatment burdens/patient concerns during discussion.

Strengths of this study included documentation analysis involving two coders and high inter-rater agreement. Also, data were from notes taken at the time of the pre-operative counselling rather than relying on recall. It must be taken into consideration that the study gathered information from one institution and therefore only looked at the counselling protocols established there. As well, the study never followed-up on how each patient's counselling experiences affected their perception of care.

Overall, this study produced suggestive evidence regarding the specific pre-operative topic theme each team member tends to focus on and what information that entails.

Discussion

Taken together, the results of the six reviewed studies provided suggestive and or compelling evidence in regards to pre-operative counselling practices or patient perceptions of care. It was revealed that no structured protocol exists when it comes to what team members and or topics should be included in pre-operative counselling. However, certain healthcare professionals and topics were more frequently seen as being a positive factor in patients' care.

Specifically looking at the healthcare professionals, the surgeon/physician/primary doctor and SLP were the only two professionals that were consistently noted to participate in the pre-operative counselling for all reviewed studies. Another laryngectomee was involved in four out of the six articles. No article discussed one sole professional undertaking the counselling alone, as a team approach in some form was always executed.

In regards to topics, four articles explicitly described content of pre-operative counselling practices. Of those, there were three themes that consistently were discussed. In some form, surgery/treatment, physical changes and communication options or loss of speech were included in the pre-operative information.

Clinical Implications

Although the articles demonstrated no set guidelines to follow when proceeding with pre-operative counselling, two articles do show a few patterns that created patient satisfaction. Ward et al. (2003) and Zeine and Larson (1999), reported the majority of laryngectomee patients from their studies being satisfied with the pre-operative counselling that was provided. The top three healthcare professionals who were consistently the "source of pre-operative counselling" were the: surgeon, SLP, and another Laryngectomee. Zeine and Larson (1999) did not provide details on what topics were discussed in the investigated pre-operative counselling practices. However, when asking patients what topics should be covered, all items listed matched with Ward et al. (2003) findings. The topic themes were: impending surgery and related treatments, physical/physiological and or social sequelae, swallowing difficulties, and communication options.

Healthcare professionals working with this population should note that effective pre-operative counselling practices stem from (1) an interdisciplinary team approach, which is more positively perceived by patients when the (2) surgeon and SLP are included. As well, (3) social and physiological changes should not be neglected in the information sharing, as patients expressed worry about their new day-to-day functioning as reported (Salva & Kallail, 1989; Zeine & Larson, 1999).

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