Service Delivery in Rural Centres of Ontario to Individuals Who Are Laryngectomized [1]

Prestation des services aux personnes qui ont eu une laryngectomie et qui habitent des centres ruraux de l'Ontario

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Abstract

The purpose of this study was to obtain information on the type and scope of services provided to individuals diagnosed and treated for laryngeal malignancy. Information presented is based on survey data gathered from respondents representing small or rural population centres in the province of Ontario, Canada. Information was obtained on the type and number of laryngectomy surgeries performed, interdisciplinary laryngectomy care teams, the availability and extent of pre- and postoperative counselling services, voice and speech rehabilitation options offered, frequency and duration of speech rehabilitation programs, as well as other related services. Results indicate that services are not always available in such centres. The data are discussed relative to the need for such services, as well as the preconceived notion that these services will be available once individuals return to their home centres following medical treatment. As such, these data are interpreted within the context of assessing how comprehensive services are provided, as well as identifying the need for enhanced service provision.

Abrégé

Le but de cette étude était de recueillir de l'information sur le type et l'envergure des services offerts aux personnes diagnostiquées et soignées pour une malignité laryngienne. L'information présentée est fondée sur des données de sondage recueillies auprès de répondants représentant des agglomérations à faible population ou rurales de la province d'Ontario, au Canada. L'information a été obtenue sur le type et le nombre de laryngectomies effectuées, les équipes de soins interdisciplinaires post-laryngectomie, la disponibilité et l'étendue des services de counselling préopératoire et postopératoire, les options offertes en matière de rééducation de la voix et de la parole, la fréquence et la durée des programmes de rééducation de la parole, ainsi que d'autres services connexes. Les résultats indiquent que les services ne sont pas toujours disponibles dans ces centres. On examine les données relativement au besoin de tels services, ainsi qu'à l'idée qu'on se fait que ces services seront disponibles lorsque les patients retourneront dans leurs centres suite au traitement médical. On interprète donc ces données dans le contexte de l'évaluation de la méthode de prestation des services complets et afin de déterminer le besoin éventuel d'en améliorer la prestation.

Key words: laryngectomy, laryngeal cancer, rehabilitation, service delivery, health care

The manner and speed with which health care is being provided and the degree of change which has been observed in the 1990's has been remarkable. Budget constraints, an ever-increasing aging population, biomedical advances, increased workloads, isolated service settings, and reduction in support personnel have impacted traditional service delivery models. In addition, fee schedules for medical services which are designed to control billing practices, are felt to reward "curative" practices more so than "preventative" services like individual counselling or group education and support. The health care system has, perhaps unwittingly, focused on "illness" as opposed to "wellness" (Leatt & Williams, 1997). In large population centres such changes may culminate in less time for health care providers to spend with patients due to increased workloads, fewer support personnel, budget constraints and longer waiting lists for provision of services (Armstrong, Armstrong, Choiniere, Feldberg, & White, 1994). All of these factors have contributed to a sense that health care has become less patient-centered, raising many concerns for the future of rehabilitative medicine. Interestingly, the problems that plague larger centres may not always affect smaller rural communities. It has been reported that more rural communities in Canada (particularly in the north) have a more personal and patient-centered approach in working with the persons they treat[1].

Over the past decade or more there has been considerable interest in service delivery models used in rural communities within Ontario. In 1989, a steering committee was formed to consider a number of proposals for the revision of the Public Hospitals Act (originally proclaimed in 1931). In 1992, this steering committee submitted a report to the Minister of Health, Frances Lankin (Steering Committee, Public Hospitals Act Review, 1992). The report contained six guiding principles and many recommendations for change to the Public Hospitals Act. The first principle noted was "accessible and equitable patient-centered treatment and care." The report acknowledged that "there are practical difficulties in achieving availability, for example in thinly populated areas such as Northern Ontario", yet, while the Act cannot guarantee that hospital and health services are available throughout the province, the importance of "access and equity" was acknowledged. Thus, a renewed commitment to serving the health care needs of all Ontario residents, whether urban or rural, appeared to be emerging. Another stated principle in the Act was "commitment to quality." One positive result of the review was that government agencies increased their efforts to find ways in which

smaller communities could more easily access the services of physicians and other health care professionals, including speech-language pathologists, audiologists, occupational therapists, and physiotherapists (The Rural and Northern Health Care Framework, 1997). However, there are numerous issues and challenges associated with service provision in smaller communities where services may be limited or nonexistent.

Perhaps the predominant issue raised is: "Health care facilities in rural and northern areas are fewer and farther apart than those in urban centres" (The Rural and Northern Health Care Framework, 1997, p. 1). Travel distance, particularly during winter months, makes access to health care more difficult relative to larger population centres. In addition, smaller communities may find it more challenging to recruit and retain professionals from a variety of disciplines including speech-language pathology. There may also be increased difficulty acquiring equipment to enable professionals to provide the most basic diagnostic and therapeutic services, as well as for meeting professional practice guidelines (The Rural and Northern Health Care Framework, 1997). Despite these significant challenges, a strategy must continue to evolve to better serve rural Ontario's need for accessibility and quality in health care.

So, what is practice like in smaller rural communities? This is determined by many factors such as distance from a major centre, population base, setting (hospital, school, health unit, private sector), facilities/structures in place, and community support. In most instances, an individual requiring specialized medical and/or follow-up treatment would initially receive their care at a larger centre equipped to deal with their needs. The individual would then return to their home community. Thus, long-term follow-up is ultimately assumed to become the responsibility of the patient's home community hospital. The return to rural-based hospital care following an urban critical care stay is likely to become the trend as efforts to reduce the economic strains related to health care continue. The need to travel substantial distances to receive treatment may not be practical or desirable for most patients, particularly if they are still recovering. Further, such an option may not be cost-effective. Ideally then, long-term service provision should come from the community hospital. Assisting health care professionals in urban areas to gain an understanding of what services are or are not available in rural settings is essential if health care delivery is to be seamless. The first step in encouraging appropriate referrals back to these smaller centres evolves from a clear understanding of what is available in these settings. By doing so, this will help to ensure that the patient's needs for both quality and accessibility in health care are met optimally.

For the speech-language pathologist (SLP), one clinical group identified as requiring considerable support in the postoperative period are individuals who have undergone surgery for laryngeal cancer, particularly those undergoing total laryngectomy. Because individuals who undergo total laryngectomy have lost their ability to speak, they clearly require ongoing speech rehabilitation and support as they seek to acquire a method of alaryngeal communication. While few would dispute the need for long-term follow-up with this population, the fact is that a typical stay following total laryngectomy at a major centre may now range from only seven to ten days. This period is almost entirely characterized by a desire to stabilize general postoperative medical health. The rising costs of hospital stays and inpatient treatment, and expanding waiting lists, preclude stays that are always in keeping with the utmost needs of the individual. Thus, the patient may not receive the benefits of non-medical services such as speech and voice rehabilitation and associated counselling which are crucial to the person's ability to return to their pretreatment quality of life (Doyle, 1994).

Current statistics estimate that approximately 1300 people in Canada were diagnosed with laryngeal cancer in 1997 (National Cancer Institutes of Canada, 1997). Those who undergo total laryngectomy may require SLP services on a long-term basis in order to resume their pre-operative lifestyle. They require information and support, and direct therapeutic intervention which can only be provided through postoperative counselling, direct voice therapy to improve basic communication with family, friends and co-workers, swallowing therapy in many cases, and assistance with the other problems which may arise (e.g., vocational issues, reintegrating into the community). As discussed previously, these needs may not be met during the patient's stay at a large urban hospital. Allen, Culhane, Johnston, Laksmanis, Pouteau, Quinn, Stegenga, and Doyle (1998) explored the type and scope of service provision to persons undergoing laryngectomy in selected major population centres across Canada (e.g., Montreal, Vancouver, etc.). Allen et al. found that long-term postoperative care, education, and counselling for laryngectomized individuals was primarily the responsibility of personnel in the facilities where the surgeries were performed, particularly in the first six months postoperatively. In the 7 to 12 month postoperative period, some shift in responsibility to homecare or other service provision facility personnel was more frequently reported. In order to better serve the needs of individuals who do not live in close proximity to urban centres, it seems a logical next step to explore the delivery and extent of SLP services to laryngectomized patients who reside in thinly-populated areas. At this time, no information on the availability and/or provision of such care is available. Thus, the purpose of the present study was to investigate the type, accessibility, and breadth of pre- and postoperative services and laryngectomy surgery options available to persons treated for laryngeal cancer in 45 rural or remote communities in Ontario. By design, we chose to evaluate this information in communities that ranged in population from 5,000 to 80,000.

Method

Development of the Survey

Fourteen questions were included in the survey. The questionnaire was adapted from a previous questionnaire addressing similar issues in major population centres across Canada (Allen et al., 1998).[2] The list of potential participants for this study was generated from the 1997 Canadian Medical Directory (Gardiner, 1997) listing all hospitals in Canada and the 1995 Ontario Municipal Directory (Association of Municipal Clerks and Treasurers of Ontario). The list was

further refined from information provided through professional membership directories of the Ontario Association of Speech-Language Pathologists and Audiologists (OSLA) and the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA), as well as professional contacts across Ontario, and through population information provided by data from Statistics Canada.

Data Acquisition and Analysis

A copy of the questionnaire was sent to the SLP department of 45 hospitals across Ontario. These centres were selected because they were known to be facilities where speech-language pathology services were available. Those centres that were identified to not provide any speech or language services were excluded from the sample. The survey was directed to the attention of the supervising SLP or department head. Each participant was asked to complete the questionnaire and return it to the researchers. The solicitation for response was made between January and July 1998. A quantitative summary of laryngectomy services and surgery options available within each facility across Ontario was compiled from the completed questionnaires. The overall responses to each question from each responding facility were recorded and used to determine the frequency of responses.

Results

Of 45 surveys distributed to hospitals, a total of 32 (71%) were completed and returned by August 1998. The average population "catch basin" for responding facilities was 84,000 people. That is, each centre surveyed was asked to indicate the approximate population base for which they potentially could provide health care services. The results gathered and summarized herein are from the 32 responding Ontario hospitals. Ten of the responding hospitals (31%) indicated that SLP services for individuals who had a laryngectomy were not currently available through their facilities. The remaining 22 (69%) centres reported providing SLP services, but only 20 (62%) reported seeing laryngectomy patients.

Types of Laryngectomy Surgery Available

Respondents were asked to identify the types of laryngectomy surgeries available at their facility. Thirty of 32 respondents (94%) reported that laryngectomy was not performed at their centres. Of the remaining two (6%), one offered only total laryngectomy surgery to their patients and indicated that all other surgical procedures were performed at other facilities. The remaining hospital performed total, near-total, hemilaryngectomy, supraglottic laryngectomy, and related procedures (e.g., neck dissection). Participants were also asked to report the availability of tracheoesophageal (TE) puncture voice restoration. Only one facility (3%) reported providing both primary (i.e., performed at the time of laryngectomy) and secondary (i.e., performed some time following the laryngectomy) puncture procedures for postlaryngectomy voice restoration (Blom & Hamaker, 1996). If laryngectomy services were not performed at the responding facility, recipients were asked to indicate the city, facility, and approximate distance of the hospital where the individual would receive such procedures. Of the 32 responding hospitals, it was identified that surgical treatment was provided in one of seven larger centres (Hamilton, London, Kingston, Ottawa, Toronto, Sudbury, or Thunder Bay) which ranged from 35 to 400 kms from the patient's home community hospital.

Number of Individuals Seen Postoperatively

Respondents were asked to indicate the number of individuals undergoing total laryngectomy who were seen in one year. Seventeen respondents (53%) reported servicing between 1 and 10 individuals with total laryngectomy, while 7 (22%) reported servicing between 1 and 10 individuals with partial laryngectomy. The remaining 8 (25%) facilities indicated that no laryngectomy patients were seen at their facilities.

Laryngectomy Services Available

The types of SLP services available in the responding hospitals were separated into the following categories during data collection: a) education, b) counselling, and c) voice/speech rehabilitation. Results indicated that more respondents provided education, counselling, and voice/speech rehabilitation services on an individual (92%) rather than on a group basis (18%). Tables 1a, 1b, and 1c display the percentages of facilities providing education, counselling, and methods of voice/speech rehabilitation services, respectively.

Interdisciplinary Laryngectomy Care Teams

Only 2/32 respondents reported having formal interdisciplinary laryngectomy care teams in their hospital. Members of the team included SLPs, otolaryngologists, social workers, home care professionals, pastoral care providers, dieticians, and individuals who underwent laryngectomy. Rather than being part of a formal comprehensive team, 11/30 respondents reported close collaboration with

Table 1a. Types of education services avaiable for those undergoing laryngectomy and the percentage of facilities providing these services.

Services Available - Education	Number of Respondents	Percentage of Facilities
Preoperative Information	6/21	29%
Postoperative Information	20/21	95%
Voice/Speech Rehabilitation Options	19/21	90%
Support Groups	7/21	33%
Stoma Care	9/21	43%

Table 1b. Types of counselling services available for those undergoing laryngectomy and the percentage of facilities providing these services.

Services Available - Counseling	Number of Respondents	Percentage of Facilities
Preoperative	5/20	25%
Postoperative	16/20	80%
Individual	19/20	95%
Group	3/20	15%
Family	14/20	70%

Table 1c. Percentage of facilities providing postlaryngectomy voice/speech rehabilitation services.

Services Available - Voice/Speech Rehabilitation	Number of Respondents	Percentage of Facilities
Artificial larynx	21/22	95%
Esophageal Speech	16/22	73%
TE Speech	6/22	27%

other professionals when treating laryngectomy patients. Individual professions identified in the collaboration were otolaryngology (4/11), other medical doctor, nurse, social worker, physical therapist, dietician (3/11), other SLPs (2/11), and occupational therapists (1/11).

Professionals Providing Preoperative Care

Respondents identified several professionals as being involved in the provision of preoperative care in the areas of: a) information on surgery/treatment options, b) voice/speech rehabilitation options and related communication information, and c) counselling of patients undergoing laryngectomy surgery. Data indicated that a few disciplines were the primary providers of specific preoperative services (e.g., otolaryngology, SLP, other physician). Several respondents reported providing additional preoperative services to laryngectomized individuals. These included medic alert information, information on additional laryngectomy aids, specific stoma care information, and information on support groups. In addition, respondents from two facilities identified pastoral care workers as being involved in the provision of counselling, while one respondent indicated the involvement of former patients. Table 2 displays the percentages of hospitals providing these preoperative services and the professionals involved in the provision of such services. When preoperative information was not provided by the responding facility, recipients were asked to indicate the facilities where these services were provided. This request revealed that in all instances, such information was provided in larger centres (Hamilton, Kingston, London, Ottawa, Sudbury, and Toronto). In regard to the type of services requested from these larger centres, 23 respondents indicated they referred for surgical/treatment information, 20 for voice and speech rehabilitation options and information, 17 for counselling, and 11 for "other" reasons.

Immediate Postoperative Care

Respondents were asked to identify those professionals who provided immediate postoperative care to laryngectomized patients at their facility. Of the 32 respondents, only 8 (25%) reported providing such information. Table 3 shows those professionals providing immediate postoperative care to laryngectomized patients in regard to stoma care, counselling, TE puncture care, alaryngeal voice and speech training, information on support groups and other resource information, and information on new voice options.

Long-Term Postoperative Care

A number of respondents indicated that their facility provided long-term postoperative care to laryngectomized patients. Regarding stoma care at the one-month post operative stage, 45% of respondents reported that this service was available at their facility; 35% continued to provide this service at the 2-6 month postoperative stage, while only 20% provided information on stoma care 7-12 months postoperatively. TE puncture care at the one-month postoperative stage was offered by only 15% of respondents. During the 2-6 month postoperative period, 20% offered this service while only 10% provided TE puncture care services to their patients at the 7-12 month postoperative stage.

Some form of counselling was provided by 65% of respondents in the one- month postoperative stage. This remained relatively constant throughout the 2-6, and 7-12 month postoperative periods. Sixty percent of respondents provided counselling 2-6 months postoperatively, while 55% offered this service 7-12 months postlaryngectomy.

Information regarding postoperative voice options was provided by 65% of respondents at all three postoperative periods (1 month, 2-6 and 7-12 months). Voice-speech rehabilitation at the one month postoperative period was offered by 85% of respondents, while 65% reported providing voice-speech rehabilitation during the 2-6, and 7-12 month postoperative periods.

Information on support groups and other resources was provided by 70% of the respondents at 1 month and 2-6 month postoperative periods; 65% indicated that they provided information on support groups 7-12 months postsurgery.

When asked to indicate whether similar services were offered at private clinics or rehabilitation centres in their respective geographic

Table 2 Percentages of hospitals providing preoperative services and the individuals involved in the provision of preoperative care

	Surgery/Treatment Options and Information	Voice/Speech Rehabilation Opptions and Information	Counselling
Otolaryngologist	8/22 (36%)	3/22 (14%)	5/22 (23%)
SLP	4/22 (18%)	11/22 (50%)	9/22 (41%)
Medical Doctor	3/22 (14%)	–	2/22 (9%)
Nurse	1/22 (5%)	–	2/22 (9%)
Other	[a]1/22 (5%)	[b]2/22 (9%)	[c]3/22 (14%)
Social Worker	–	–	4/22 (18%)
Psychologist	–	–	1/22 (5%)
Physical Therapist	–	–	–
Occupational Therapist	–	–	–
Another Facility	18/22 (82%)	15/22 (68%)	15/22 (68%)

a Unspecified
b Both facilities specified laryngectomy groups
c One specified laryngectomy group two specifed pastoral care

areas, 19% of respondents indicated that these services were available elsewhere; 73% reported services were not available at other centers in the area, and 8% responded that they "did not know."

Methods of Providing Information

Voice/Speech Rehabilitation Options

Respondents reported using various methods of providing information on voice/speech rehabilitation options to laryngectomized patients. Pamphlets were used by 19/22 of the respondents; 16/22 reported presentation of information by SLPs, while 14/22 employed video presentations. Visits by individuals who had a laryngectomy and who used various methods of alaryngeal speech was reported by 9/22 respondents.

Voice and Speech Rehabilitation

Ninety-one percent of respondents reported conducting voice-speech rehabilitation on an individual basis while 18% employed group therapy. Fourteen percent specified other settings in which voice-speech rehabilitation sessions were conducted (e.g., home care, with the patient and his/her family, and through a "New Voice Group").

Duration, Frequency and Length of Voice-Speech Rehabilitation Sessions

Four of 20 respondents indicated that voice-speech rehabilitation services were not offered at their facilities. When asked to identify the typical duration of voice-speech rehabilitation sessions for laryngectomy patients, 3/20 reported a typical duration of less than one month; 7/20 reported durations of 1-3 months, and 7/20 reporting 3-6 months. Four centres reported providing service for 7-12 months postoperatively, but no facility reported a duration of more than one year.

When voice-speech rehabilitation services were offered, respondents were asked to indicate the typical frequency of appointments. When conducting sessions focusing on TE speech, 3/5 reported holding sessions more than once weekly and 2/5 reported using one session weekly. When providing instruction in esophageal speech, 9/15 indicated that more than one session per week was required, but only 1/15 reported holding sessions more than once per week. Instruction in the use of artificial laryngeal devices typically required more than one session weekly according to 7/19 respondents, while 14/19 held sessions once per week.

In regard to the typical length of voice-speech rehabilitation appointments, 33% of respondents reported one-hour sessions; 14/21 indicated that the typical duration of appointments was between 30-60 minutes; 1/21 reported requiring less than 30 minutes per session.

Recommendations Following Voice-Speech Rehabilitation

Respondents were also asked to identify what recommendations were made to laryngectomized patients following the completion of voice-speech rehabilitation. Of the 17 (81%) respondents, 13 reported discharging patients with some type of follow-up services (e.g., home care, home programming, and/or support groups); four reported simply discharging without follow-up.

Forty-eight percent of respondents indicated that patients were provided with home programming materials, while others received follow-up services through home care (29%) or private facilities (5%); 24% of respondents identified additional suggestions for their patients (e.g., laryngectomy support groups and contacting the facility whenever necessary) following discharge from formal speech treatment.

Table 3. Professionals identified as providing immediate postoperative care to those undergoing laryngectomy.

Area	Professional							
	Nurse	S-LP	ENT	RT[a]	PC[b]	MD	SW	Lar[c]
Stoma care	6/8 (75%)	2/8 (25%)	1/8 (13%)	1/8 (13%)	--	--	--	--
Counselling	1/8 (13%)	1/8 (13%)	--	--	1/8 (13%)	1/8 (13%)	1/8 (13%)	--
TE puncture care	1/8 (13%)	2/8 (25%)	1/8 (13%)	--	--	--	--	--
Voice re-training	--	8/8 (100%)	--	--	--	--	--	--
Support group/ other resource Information	--	5/8 (63%)	--	--	--	1/8 (13%)	--	1/8 (13%)
Information on new voice options	--	7/8 (88%)	2/8 (25%)	--	--	--	--	--

a Respiratory therapist
b Pastoral care workers
c Individuals who have had laryngectomy

Discussion

The purpose of the present study was to obtain more detailed information on service provision in small, urban, and remote population centres in Ontario. While earlier work by Allen, et al.(1998) examined the nature of laryngectomy services in major facilities across Canada, concerns about smaller centres were raised. Based on the findings of Allen, et al. (1998) it was suggested that smaller communities might offer more comprehensive services for laryngectomy treatment as a result of increased time for patient care, clearly identified case managers, and reduced caseloads. As an addendum to Allen et al's work, the present study sought to provide information regarding laryngectomy services in smaller health care centres in Ontario.

The present study achieved a return rate of 71% (i.e., 32/45). This response rate was acceptable and may indicate that the results obtained are likely representative of service delivery trends in smaller hospitals throughout Ontario. Hence, some general trends are noted and specific concerns raised.

Laryngectomy Services Available

As one might expect, 94% of respondents reported that no laryngectomy services were performed at their centres. Only two of 32 centres stated that their centre offered laryngectomy surgery. These findings are consistent with the notion that centres in smaller communities may not have direct access to the equipment, skilled professionals, and/or funding necessary for performing such extensive surgeries. Respondents reported that although surgeries were not performed at their centres (30/32), service provision beyond the immediate postoperative period was provided for individuals with laryngectomy (i.e., 69% of centres). Ten of 32 respondents stated that no services were offered postoperatively for individuals with laryngectomy. More than half of the responding centres reported seeing between one and 10 individuals who had undergone total laryngectomy, and another 22% reported serving between one and ten individuals with partial laryngectomy annually. The context within which these clients are seen postoperatively is on an individual basis (91%), as opposed to a group setting. This would be expected given the limited number of individuals with laryngectomy who are seen in the hospitals of smaller cities. Fewer numbers of patients/clients present a challenge in developing effective groups for speech rehabilitation. In addition, the sporadic nature of referrals from larger centres may mean that individuals are not always ready to enter group therapy at the same time.

Types of Services Available to Individuals with Laryngectomy

The majority of respondents appeared to provide some form of education, counselling, and voice/speech rehabilitation services. Perhaps not surprisingly, 95% of those surveyed reported that they provided education information in the postoperative period. In addition, 80% of those surveyed provided some form of counselling in the same period. This is reassuring given that both education and counselling are critical in the postoperative period. Because the period of time prior to surgery is often brief and the patient's emotional state may be heightened, information presented pre-operatively may need to be reiterated postoperatively.

Unlike the larger centres, where education and preoperative counselling are prominent, the role of respondents in the smaller centres, as evidenced by our numbers, may be to provide services postoperatively. This is due to the fact that surgery may be preferred in a larger centre with follow-up postoperative services delivered in the patient's home community. In many instances, this may be a population centre that is quite small or remote. It is interesting to note that relative to the findings by Allen et al. (1998), the current

study suggests levels of preoperative education and counselling reported by the smaller centres is less than that provided by the larger centres. That is, in comparing small to large centres, 29% versus 69% provided preoperative education, and 25% versus 92% provided preoperative counselling, respectively. Therefore, there are large differences between small and large centres when preoperative education and counselling services are considered. More noteworthy however, is that the postoperative figures for education and counselling are similar (e.g., for small to large, 95% versus 100% for education, and 80% versus 100% for counselling). The majority of these services are provided on an individual basis (e.g., 95%) in the smaller centres. This is similar to what has been noted to occur in the larger centres. Therefore, for both small and large centres it appears that the method of choice for dispensing information is clearly on an individual basis.

While the present data are not comprehensive, some concern is raised regarding the finding that counselling services were provided to families in only 70% of the smaller centres surveyed. Given that the caregiver/family/peer support of the laryngectomized individual is so crucial to one's emotional well-being, physical adjustment, and positive self-concept, it would be preferable to see a higher percentage of respondents offering these services. However, it is also clear that counselling services are often reported anecdotally across a variety of communicative disorders. This suggests that clear efforts to expand the counselling role of other professionals is necessary.

With reference to postoperative voice and speech rehabilitation, it was found that the electronic artificial larynx was the primary mode of alaryngeal communication followed by esophageal speech in the smaller centres; tracheoesophageal (TE) speech took place in only 27% of smaller centres. The fact that the artificial larynx continues to predominate may be due to several factors including clinician familiarity with this alaryngeal mode of communication, the ease of implementation, reduced time in training the client, and fewer complications. Additionally, the overall reduction in health care dollars continues to be a continuing problem that impacts service provision in all centres. In addition, the artificial larynx may be one of the few devices with which the clinician had received training during graduate school.

The emergence of TE puncture as a relatively new procedure may have led to the fact that professionals in smaller centres may not possess sufficient education or training or materials in this area. Because the artificial larynx is a well-established mode of alaryngeal communication, it may be more appealing as a therapeutic option to clinicians who have less training and experience in the area of postlaryngectomy speech rehabilitation. It is important to note that TE puncture voice restoration may require a secondary surgery if not done at the time of laryngectomy. This may reduce its consideration as an alaryngeal mode by clients living in smaller or rural areas, as they would have to travel to a larger centre to have the procedure done.

Interdisciplinary Teams

It appears that the lack of interdisciplinary teams (Allen et al., 1998), is not inherent solely to the large health care centres. In the present study, only 6% of respondents reported having formal laryngectomy care teams within their hospital. Although only two of the 32 respondents reported having such teams, 11 (37%) indicated that while they did not have a formal laryngectomy care team, they collaborated closely with other professionals (e.g., nursing, social work, physiotherapy, physician, occupational therapy, dietician, and other SLPs). Several reasons may account for these findings: there may be a lack of skilled healthcare professionals within smaller centres due to recruitment issues and budget constraints. Further, the number of individuals referred to smaller centres may not justify the existence of a formal laryngectomy team.

Professionals Providing Preoperative Care

In terms of options for surgical treatment, voice and speech rehabilitation, and counselling, respondents indicated that preoperative information was provided by another facility in 82%, 68%, and 68% of the cases, respectively. This is consistent with the previous findings that preoperative care is handled primarily by professionals in larger centres (Allen et al., 1998). Of all professionals identified, the otolaryngologist most often provided the surgery treatment options and information (36%); this trend was also noted by Allen et al. (1998). When voice/speech rehabilitation options and counselling were provided in the smaller facilities, the provision of this information was most often offered by the SLP (50%) and (41%), respectively.

Speech-Language Pathology Services

The role of the SLP in the postoperative period was primarily in voice retraining (100%) while presenting information on other voice options also was an area of expertise provided by the SLP (88%). Other information provided by the SLP included support group information (63%), stoma care (25%), counselling (13%) and TE puncture (13%). With the exception of stoma care, where nurses were involved 75% of the time, the SLP appeared to be one of the primary professionals providing all aspects of postoperative care. The burden of counselling and TE puncture information fell to several professionals including nurses, pastoral care, social workers, and otolaryngologists.

Long-Term Postoperative Care

Long-term postoperative education and counselling were services that figured prominently in laryngectomy care offered by the respondents in smaller centres. Intuitively, this might be expected as the needs of the individuals with laryngectomy change throughout the

course of their care. Initially, the immediate needs of patients are predominantly addressed via didactic means (e.g., training in the care of TE puncture and stoma). However, the long-term effects of radical surgery (e.g., lifestyle changes, stigma of having cancer and subsequent surgery, altered self-perception, loss of voice/identity, artificial voice) mean that the patients' needs are not so easily met by service delivery models aimed at reducing costs by expediting discharge. The present results suggest that respondents in smaller facilities 'pick up where the larger facilities leave off'. Thus, counselling, support groups, postoperative voice options and voice speech rehabilitation ultimately appear to become the responsibility of the patient's home community hospital. It is important to note that the majority of this support is offered in the one month postoperative stage. This high level of support may be indicative of the support individuals are believed to need in making a smooth transition from larger to smaller centres.

The finding that 91% of respondents reported providing voice-speech rehabilitation on an individual basis as opposed to group sessions is worth considering. While this finding may be the result of personal preference in providing treatment for patients with laryngectomy, it is possible that there are not sufficient numbers or individuals who are at the same point at the same time in their course of treatment to form a group.

Conclusions

In conclusion, this survey sought to determine the type, accessibility, and breadth of pre- and postoperative services and surgery options available to persons undergoing laryngectomy in 45 smaller communities in Ontario with populations greater than 5,000 and less than 80,000. It is important to note that for the purposes of this preliminary study, only SLP departments in smaller hospitals were surveyed. For this reason, results from this body of work are not easily generalized to other facilities that may offer similar services (e.g., Community Care Access Centres, health units, private practices).

However, from respondents surveyed, certain trends emerged. It appeared that services in smaller facilities were limited during the preoperative and immediate postoperative periods. The burden of providing long-term postoperative care (e.g., counselling, support groups, voice-speech options and rehabilitation) seems to fall to these smaller communities. While individuals may feel that larger centres are able to meet their immediate surgical needs, speech-language pathologists and other professionals in smaller centres provide the long-term counselling. This may account for the perception held by health care consumers that the provision of care is more personalized in smaller communities. In reality, it may be the active listening and one-on-one time spent with a SLP, that individuals are responding to when claiming that service in smaller communities is more patient centred.

As mentioned previously, the growing interest in the service delivery models of smaller communities has precipitated the development of six guiding principles. The principle of "accessible and equitable patient-centred treatment and care" acknowledges difficulties in accessing services in less densely populated areas. One of the themes that surfaced in the process of reviewing respondents' comments was that very few were seeing persons with laryngectomy in any great numbers. If we agree that a typical postsurgery hospital stay for a person with laryngectomy is between 7-14 days, and on average larger centres will continue postoperative care up to six months (Allen et al., 1998), one is left wondering just who is providing long-term care (i.e., in a period greater than 6 months). Of even greater concern was the presumption made by Allen et al., that these individuals were likely to receive long-term support from their home communities (i.e., the smaller communities addressed in the present survey). However, the results of the present survey indicated that these individuals were not seen frequently by SLPs in smaller centres. This apparent 'gap in service' was perplexing in several respects. Currently, the thrust of health care reform has been aimed at returning individuals to their home communities for rehabilitation. In order for this to be efficient it is paramount that 'links' between larger centres and smaller hospitals be established. The reality, based on the preliminary results of this study and that of Allen et al., suggest that these 'links' are not well connected, and in some instances, non-existent. Minimally, it would seem that the speech-language pathology community at large should consider establishing appropriate mechanisms to avoid such gaps in service. Although the present project has focused on aspects of care relative to those with laryngeal cancer, such gaps are probably not uncommon across a variety of communication disorders. This suggests that both provincial and national professional organizations should evaluate the nature of such potential problems and aggressively lobby to increase timely and efficient service provision.

Given the aforementioned challenges facing individuals with laryngectomy when returning to their home communities, future directions for research might address how best to 'bridge the gap' that appears to exist between larger and smaller community hospitals. It is undoubtedly most important to keep in mind at all times, the patient. An individual with laryngectomy will have to deal with barriers related to stigma associated with cancer and subsequent facial disfigurement, lifestyle adjustment, communication, and social relationships. As such, it is not unreasonable to expect that these individuals should have access to a healthcare system that most effectively meets their rehabilitative needs. This requires continued efforts on behalf of those individuals with a variety of communication disorders by clinicians working in concert with their provincial and professional organizations to ensure the highest quality of care possible.

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[1] Judy Ball, personal communication, August, 1997

[2] The original questionnaire from which the present inquiry evolved can be found in Allen et al. (1998, p. 186-187).

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