Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/burns

The speech-language pathologist's role in multidisciplinary burn care: An international perspective

Anna F. Rumbach [a,*], Nicola A. Clayton [b], Michael J. Muller [c,d], Peter K.M. Maitz [e]

[a] School of Health and Rehabilitation Sciences, Speech Pathology, The University of Queensland, St Lucia, Brisbane, QLD 4072, Australia
[b] Speech Pathology Department & Burns Unit, Building 42, Hospital Rd, Concord Repatriation General Hospital, Sydney, NSW 2139, Australia
[c] Stuart Pegg Adult Burns Centre, Level 4 James Mayne Building, Royal Brisbane & Women's Hospital, Butterfield Street, Herston, QLD 4029, Australia
[d] Burns, Trauma & Critical Care Research Centre, The University of Queensland, Brisbane, Australia
[e] Burns Unit, Level 7, Hospital Rd, Concord Repatriation General Hospital, Sydney, NSW 2139, Australia

ARTICLE INFO

Article history:
Received 11 May 2015
Received in revised form
4 January 2016
Accepted 5 January 2016

Keywords:
Speech-language pathology
Burn injury
Referral criteria
Multidisciplinary team
Swallowing
Communication

ABSTRACT

Purpose: To explore international practices of speech-language pathology (SLP) within burn care in order to provide direction for education, training and clinical practice of the burns multidisciplinary team (MDT).

Method(s): A 17-item online survey was designed by two SLPs experienced in burn care with a range of dichotomous, multiple choice and open-ended response questions investigating the availability and scope of practice for SLPs associated with burn units. The survey was distributed via professional burn association gatekeepers. All quantitative data gathered were analysed using descriptive statistics and qualitative data were analysed using content analysis.

Result(s): A total of 240 health professionals, from 6 different continents (37 countries) participated within the study. All continents reported access to SLP services. Referral criteria for SLP were largely uniform across continents. The most dominant area of SLP practice was assessment and management of dysphagia, which was conducted in concert with other members of the MDT.

Conclusion: SLP has an international presence within burn care that is currently still emerging.

* *Corresponding author.*
E-mail addresses: a.rumbach@uq.edu.au (A.F. Rumbach), nicola.clayton@sswahs.nsw.gov.au (N.A. Clayton), Michael.Muller@health.qld.gov.au (M.J. Muller), peter.maitz@sydney.edu.au (Peter K.M. Maitz).
http://dx.doi.org/10.1016/j.burns.2016.01.011
0305-4179/

1. Introduction

The heterogeneity and complexity of burn injuries demands a diverse range of skills for optimal patient care. This has necessitated specialised burn rehabilitation services that incorporate the efficacious and collaborative input of a skilled multidisciplinary team (MDT). Speech-language pathologists (SLPs) have been introduced as skilled health care providers in burn injury rehabilitation in some facilities. The heterogeneity and complexity of burn injuries demands a diverse range of skills for optimal patient care and thus burns is considered an advanced area of clinical practice for SLPs. The SLP role includes the assessment and management of dysphagia (disordered swallowing), communication disorders (including laryngotracheal pathology), tracheostomy weaning, in addition to the prevention of orofacial contracture formation in view of the functional limitations it poses to communication and swallowing [1–18]. Despite these early reports within the literature, the SLP scope of practice in burn care is not yet well defined. Therefore, the current study aimed to: (1) examine the extent of the SLP role within multidisciplinary burn care; (2) determine the frequency and nature of SLP services provided, and; (3) examine the routine care of areas traditionally associated with the SLP skill-set when SLP services are not available or not engaged, on an international scale. It is the intent to use the information gathered from this research to gain insight into the current profile and utilisation of SLP in burns and provide direction for training in the domains that SLP would traditionally practice in western countries.

2. Methods

During a three-month period (July–September 2013), advertisements issued by international industry gatekeepers (Australian and New Zealand Burn Association [ANZBA], British Burn Association, and International Society for Burn Injuries [ISBI]) were utilised to disseminate a link to an anonymous online survey conducted via SurveyMonkey (www.surveymonkey.com). Recruitment was international, and requested participation from anyone working as part of the MDT. The purpose-built 17-item questionnaire was developed by a SLP with clinical and research experience in burn care. The structure, clarity and content validity of each survey item was refined through feedback cycles involving a second SLP with clinical and research experience in burn care prior to the survey link being activated. Items consisted of dichotomous (e.g., yes/no), multiple choice and open-ended response questions investigating the availability and extent of SLP services provided within specialist burn care settings and details regarding the arrangements for the management of swallowing and communication difficulties that exist when SLP services are not available or not engaged (see supplemental material online). Participants were required to provide consent prior to accessing the online questionnaire, and all data was collected in a de-identified manner to encourage participation.

All responses gathered via SurveyMonkey were downloaded into a Microsoft Excel file and analysed using descriptive statistics. Qualitative data were analysed by the two researchers that developed the original questionnaire. For questions that required open-ended responses, broad concepts and categories were inductively generated using content analysis [19,20]. Analyses were compared and where discrepancies occurred, a consensus was reached on the main themes as they emerged most frequently during the analysis. Not all individuals completed all questions and therefore, results are reported as a proportion of the respondents completing each field, with both percentage and number of respondents provided where appropriate. For open-ended responses, the main themes that emerged during analysis are representative of only part of the cohort. Ethical approval to conduct this research was granted by The University of Queensland's Behavioural and Social Sciences ethics committee (approval number 2 013 000 695).

3. Results

Two hundred and forty members of burn care MDTs from 6 continents (37 countries) participated in this study (Table 1). Respondents predominantly worked in facilities that serviced both paediatric and adult patients or adults exclusively. The number of admissions per year to facilities worldwide was highly variable, with acute admissions ranging from 40 up to 1500 per year depending on the geographic location of the burn unit. All burn services were localised to major metropolitan areas. Allied health services were well represented worldwide, with physiotherapy (PT), occupational therapy (OT), psychology, social work and dietetics services being available in a large number of facilities. All continents reported SLP services were available and utilised to some degree as part of comprehensive patient care, with the majority of services being available in-house in Australia, Europe, and North America. Combinations of in-house and contracted (offsite) SLP services were reported in Asia, Europe and North America. The SLP service in the burn facility in Africa was in-house, whilst the one facility in South America who had access to SLP services reported that the service was contracted from outside their burn facility if and when required.

3.1. *SLP services—referral practices and areas of involvement*

SLPs from Australia, Europe and North America reported receiving less than 1 and up to 16 referrals per month, with frequency of referrals being dependent on the number, nature, and type of acute burn admissions received in a monthly period and the referral criteria utilised. Criteria for referral to SLP were largely aligned across the continents however frequency of use differed (see Table 2).

Respondents were asked to highlight practice areas within the context of burn care in which SLPs provided a service (Table 3). Of the six areas of practice listed (supplemental material online–Question 11), clinical assessment and management of swallowing and communication disorders (voice, speech and augmentative and alternative communication [AAC]) were reported by 50% or more of respondents from each continent to include SLP involvement (see Table 3).