Exploring Child Life Role and Impact of Providing Psychosocial Care During Short-Term Medical Missions

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ABSTRACT:
Certified Child Life Specialists (CCLSs) have been engaged with other health professionals to provide care within international short-term medical missions (STMMs). However, there is minimal research describing the care they provide, their professional roles, and the impact of their services on the beneficiaries, as well as the volunteer CCLSs. This exploratory, survey-based, descriptive study reports findings regarding roles and experiences of 55 CCLSs who volunteered to provide psychosocial care for children and families on STMMs. They reported providing play, normalization, psychological preparation for medical procedures, and emotional support, resulting in observable reduction in patient and parent anxiety. Nonpharmacological pain management and education for capacity building regarding psychosocial care were not routinely provided. Using Campinha-Bacote’s cultural competency framework and Knowles’ adult learning theory, we explored the reciprocal impact for CCLSs volunteering on STMMs. CCLSs reported improvement in their own cultural competency, professional skills, and child life competencies. Findings suggest providing psychosocial care on STMMs benefited patients, families, and the CCLSs. A brief commentary on children’s rights and ethical considerations for those in a child life role on STMMs is included. Practice and research implications are provided to enable greater understanding of the child life role in STMM contexts and to inform prospective CCLS volunteers of this opportunity, as well as to educate STMM organizations about the role of child life.

Addressing global health care needs in the form of short-term medical services from high income resource countries to low- and middle-income countries has been shown, along with interest in international volunteerism, to make a difference in improving unmet health care needs worldwide (Hawkins, 2013; Steinke & Shieh, 2014; Sykes, 2014). Various terms are used in the literature to refer to these short-term medical services including missions, programs, humanitarian assistance, outreach, or service trips, with medical missions, and short-term medical missions (STMMs) used more frequently (Sykes, 2014). Health care services provided on STMMs range from surgical care to care for acute, life-threatening conditions, or providing treatment for chronic conditions; and mission durations range from two days to one month (Maki
et al., 2008). STMM volunteer teams are generally composed of physicians, nurses, and other professional health care providers with team composition varying from two to 90 providers per mission (Maki et al., 2008; Steinke & Shieh, 2014). The current study focuses on the role of child life specialists on STMMs. The authors would like to acknowledge at the outset that the COVID-19 pandemic has resulted in additional layers of vigilance in health care settings, severely curtailed global travel, and temporarily ceased, reduced, or modified many STMM initiatives. Since the current study addresses an underexplored topic of child life services on STMMs, it serves to advance the relevant foundational literature.

According to Sustainable Development Goals’ child health data, more than five million children throughout the world die each year before they reach their fifth birthday, and children born into poverty are almost twice as likely to die before the age of five as those from wealthier families (United Nations, 2020). While this number has dropped by 53% since 1990, there is still much progress to be made (UNICEF, 2018). The disproportionate burden of child mortality and morbidity in resource-limited countries supports the need for international volunteerism with STMMs that offer health care services to children. Volunteers serving on STMMs can impact child health outcomes in developing countries by delivering and promoting local sustainability of health education, and surgical, medical, and psychosocial care that some communities in developing countries may have difficulty accessing. Children cope uniquely with health care experiences and often display negative reactions to medical procedures, with potential for immediate and long-term psychological impact including eating and sleeping disturbances, decreased cooperative behavior, increased fear, and post-traumatic stress (Thompson et al., 2018). There are limited available guidelines for integrating psychosocial care in STMM practice, and this care is mostly underprovided in routine patient care in developing countries. In general, psychosocial care in medical settings is defined as the provision of psychological and emotional support as well as practical advocacy as it relates to promoting resilience for patients adjusting to their diagnosis, accessing and adhering to medical treatment, and developing coping skills to incorporate their illness successfully into their lives (Reiss & Sandborn, 2015). There is a need to develop a more consistent definition of psychosocial care provision during STMMs which focuses on children’s health. Toward this aim, the current study explored the experiences and roles of Certified Child Life Specialists (CCLSs) providing psychosocial care on STMMs. As a category of psychosocial provider workforce, CCLSs have become involved in serving on international STMMs to provide support and education that address child development, typical fears, and behavioral responses of children, parental anxieties, coping strategies, and parent-child interactions (Desai et al., 2018).

Many STMMs follow international standards for patient safety based on the World Health Organization (WHO, 2012) and United Nations Children’s Fund (UNICEF, 2018) standards of practice for child health in developing countries. These standards of practice focus on building sustainable partnerships with local communities, respecting differences in cultural perspectives and beliefs, and delivering developmentally appropriate psychosocial care to children and families. Upholding these standards generates significant promise for improving health outcomes in resource-limited countries and strengthening capacities within host communities (Hawkins, 2013; Seager et al., 2010).

The United Nations Conventions on the Rights of Children (UN-CRC) proclaims that children should have the “first call” on resources to secure their rights, and primacy be given to the principle of “the best interests” of the child (United Nations General Assembly, 1989). The UN-CRC provides a framework for the integration of the principles of children’s rights into health care such that children have the right to receive medical care in ways that diminish their suffering, does minimal psychological damage, and promotes their full development. Children have a right to have their voices heard, questions answered, pain managed, have familiar caregivers present during difficult procedures, as well as have options to play and learn even while receiving medical care (Canadian Institute of Child Health, 2002; Desai et al., 2018). STMMs are fast paced and task oriented; they provide medical and surgical procedures to generally a large volume of patients, in limited space, with a potential for language barriers with medical workers who may be foreign to the patients and families. These are
additional elements which could lead to anxiety in children and their families or caregivers beyond receiving health care in an unfamiliar clinical setting. This suggests the need for inclusion of specialized staff who understand child development, family dynamics, psychosocial risk factors in pediatrics, and coping skill development to address the psychological needs of children in health care settings. However, psychosocial care services for children in medical settings in countries where STMMs typically occur face restrictions related to awareness, access, trained personnel, resource prioritization, capacity, and accountability. For example, according to Enright (2020), of 6,170 known CCLSs, the following is the breakdown of the top five countries where they reside: 5,704 in USA, 346 in Canada, 55 in Japan, nine in Qatar, and seven in the UK. Whereas in countries where STMMs may be hosted, there are three CCLSs living in the Philippines, and two CCLSs each living in China, India, Kenya, Mexico, and Romania.

**Child Life Specialists’ Role and Credentials**

Support for an expanded role of CCLSs on the international level is reflected in the ACLP’s Official Documents (Association of Child Life Professionals, 2016). Child life practices are applicable to any health care setting and transferrable to other environments in which the potential for infants, children, and youth to cope, learn, and master developmental milestones is placed at risk (Association of Child Life Professionals, 2020). The core of the child life profession is providing developmentally appropriate patient education about diagnoses, psychological preparation for medical procedures, planning and rehearsing coping strategies, nonpharmacological pain management, therapeutic play, and family support for pediatric patients and their families (Romito et al., 2021). CCLSs focus on the strengths and well-being of children while promoting their optimal development and minimizing the adverse effects from experiences in health care or other potentially stressful settings. CCLSs adhere to child life competencies, which are the minimal level of acceptable practice as defined by the Association of Child Life Professionals (ACLP), formerly known as the Child Life Council (Association of Child Life Professionals, 2020).

CCLSs must hold at least a bachelor’s degree preferably in fields related to child life, human development, child development, education, or psychology. The CCLS certification credential is administered by the Child Life Certifying Committee. At the time of this publication, the credential is earned by completing a college degree including 10 courses approved by the ACLP, completing a CCLS-supervised 600-hour clinical internship, and passing the child life certification examination (Association of Child Life Professionals, 2020).

**Ethical Considerations for CCLSs Serving on STMMs**

Ethical principles such as beneficence, non-maleficence, autonomy, justice, and competence should be upheld when providing child life services (Brown et al., in press), including when integrating psychosocial care during STMMs. Poverty, illiteracy, limited access to health care services, limited availability of medications, as well as cultural and language differences can result in exploitation of the population served on STMMs (Murray, 2016). First, the principle of competence needs to be considered when the CCLS is preparing to serve on an STMM. Adequate preparation of the CCLS regarding working within the culture of the host country, its health care system, prior missions at the specific site, working correctly with interpreters, and with humility to provide psychosocial care where it may not be the norm should be considered. The child life role is integrated to support the child and family’s autonomy. Using trained interpreters as cultural brokers to provide information at an appropriate cultural reading level would help promote the child and family’s sense of control (Ho, 2008). STMMs should work within existing health care structures to enhance self-sufficiency for patients and their families and create sustainable projects that the community can continue to build upon through future missions (Murray, 2016). CCLSs serving on STMMs have a unique opportunity toward raising awareness regarding psychosocial care services in health care settings in developing countries. This study provides a brief commentary regarding ethical considerations of integrating child life role on STMMs. Additionally, considerations regarding STMMs providing an opportunity for personal and professional development of volunteers (Sykes, 2014; Withers et al., 2013) are explored for CCLSs.

**Impact of Volunteering on STMMs on the CCLS**

STMMs not only increase health outcomes for children and families within developing countries, but also have been found to improve cultural competency levels and professional development for health care
professionals serving on STMM teams (Campbell et al., 2011). The present study draws from Campinha-Bacote’s (2002) cultural competency theory and Knowles’ (1973) adult learning theory to explore and support the reciprocal impacts for CCLSs volunteering on STMMs. Cultural competency refers to a body of knowledge, skills, attitudes, and behaviors in which health care professionals can deliver sensitive, empathetic, humanistic care that is respectful for patients (Fox, 2005). Cultural competency theory emphasizes that developing cultural competence is an ongoing process that is strengthened by direct cultural encounters (Campinha-Bacote, 2002). The more contemporary concept of cultural humility means being aware of power imbalances, being humble in every interaction with every individual, and is a life-long process (Foronda et al., 2016). While the construct of cultural humility acknowledges power disparities between provider and client, challenges institutional-level barriers, as well as provides a theoretical re-visioning of traditional cultural education efforts, it is less developed than existing cultural competency models (Fisher-Borne et al., 2015). For the current exploratory study, the cultural competency model offered a more reasonable fit.

Experiential learning is a major construct of adult learning theory. Adult learning can be a byproduct of experiences, and adults learn best from their own experiences, as well as from the experiences of others (Knowles, 1984). CCLSs volunteering on STMMs often work with a culturally diverse group of patients and families, collaborate closely with a global interdisciplinary team, and adapt to provide psychosocial care in a resource-limited setting which in turn can impact their cultural competencies, professional skills development, and child life competencies.

**Purpose of Current Study**

The present study aimed to (i) explore the roles and experiences of CCLSs volunteering on STMMs; (ii) examine the perceived impact of psychosocial care provided by CCLSs on patients, families, and health care providers within host countries; (iii) explore how CCLSs prepare to serve on an STMM; (iv) examine the impact that serving on STMMs can have on CCLSs’ cultural competency, professional skills development, and child life competencies; and (v) examine barriers for CCLSs toward serving on STMMs.

**Methods**

This study received approval from the University and Medical Center Institutional Review Board of East Carolina University and the Institutional Review Board of Operation Smile, an international medical nonprofit organization providing access to safe cleft surgery to individuals around the world.

**Data Collection**

A cross-sectional, two-section survey was administered using Qualtrics online survey software to elicit responses from CCLSs. The cross-sectional, exploratory, descriptive study design allowed for surveying participants at a single point of time, across many geographical settings, to identify patterns of this unexplored role of CCLSs on STMMs (Alreck & Settle, 2004; Sedgwick, 2014). Participants were recruited through the ACLP online forum and Operation Smile’s child life specialty contact list. All CCLSs were eligible to complete the first section of the survey, and only those CCLSs who had served on at least one international STMM outside of the respondent’s country of residence were eligible to complete the second section of the survey. Study reminders were sent twice after the initial posting to increase participant response.

**Survey Instrument and Data Analysis**

The survey tool was developed by the first two authors and content was validated by two experts in the field. The tool was piloted by five CCLSs and appropriate modifications for language clarity were made. The first section of the survey tool included questions regarding participant demographic information and explored barriers toward volunteering on STMMs. The second section included questions regarding participant experiences with international STMM(s); role of CCLS on the interdisciplinary STMM team; perceived impact and sustainability of child life services or psychosocial care, training, and preparation for STMM(s); as well as the impact of the STMM experience on the participants’ cultural competency, professional skills development, and child life competencies. The tool included both close-ended and open-ended questions.

Specific questions measuring cultural competency and professional development were adapted with permission from Campbell et al.’s (2011) survey tool. The cultural competency scale (α=.82) consisted of
12 items relating to various aspects of cultural competency (e.g., awareness of health care disparities). The professional development scale ($\alpha = .88$) consisted of eight items relating to various aspects of professional development (e.g., ability to communicate effectively with a team). Questions assessing whether STMM experiences contributed toward improved child life practices were created based on the child life competencies included in the ACLP’s Official Documents (Association of Child Life Professionals, 2016).

Descriptive frequency data were analyzed using SPSS 22 statistical software. Two authors and a research assistant independently analyzed open-ended questions using thematic analysis, then met to discuss findings and discrepancies until consensus was reached.

Results

Results from responses of the 55 participants who had served as a CCLS on at least one international STMM and had completed both sections of the survey are primarily reported in this article. The number of CCLSs responding to the different questions varied throughout the survey, and the frequency percentages were calculated based on the total number of CCLSs who responded to that question. Additionally, responses from 66 CCLS who had never served on any STMM were examined for their reported barriers toward serving on STMMs.

Key Characteristics of Respondents Who Have Served on STMMs

The mean age of the participants was 37.87 years (SD= 10.07), and work experience as a CCLS ranged from two to 28 years. Demographic information and key characteristics are presented in Table 1. The desire to help children and families in resource-limited countries was selected as the top reason for volunteering on a STMM by over half ($n=30$ of 54, 55.5%) of respondents. Personal growth ($n=24$ of 49, 49%), professional growth ($n=22$ of 43, 51.2%), and interest in travel ($n=18$ of 47, 38.3%) were reported as the next three reasons for volunteering on STMMs. Notably, influence of professional colleague or peer, and spiritual/religious reasons were least frequently reported as facilitators for volunteering on STMMs.

Participants most frequently volunteered on STMM(s) in Asia ($n=36$, 65.5%), with the top three countries being the Philippines ($n=10$), Vietnam ($n=8$), and Cambodia ($n=7$). CCLSs also volunteered in Africa ($n=29$, 52.7%) and South/Central America ($n=29$, 54.4%). The most frequently reported countries they volunteered in Africa included Kenya ($n=8$), Morocco ($n=8$), and Ethiopia ($n=7$). The most reported countries they volunteered in South/Central America were Nicaragua ($n=4$), Bolivia ($n=3$), Honduras ($n=3$), and Peru ($n=3$).

Majority of the participants ($n=45$, 81.8%) reported volunteering for Operation Smile. Other organizations participants reported volunteering with for STMM-type service were CURE, Partners in Health, The Daisy Fund/World Eye Cancer Hope, Connect-123, The CRUDEM Foundation, For Hearts and Souls, and Standish Foundation for Child and Family Centered Healthcare. Participants reported most frequently ($n=50$, 90.9%) volunteering on surgical STMMs in resource-limited countries which provided care for children who had clefts, craniofacial deformities, burns, cardiac defects, ophthalmic, or orthopedic needs.
Role of CCLSs on STMMs: Types of Psychosocial Care and Interventions Provided

The types of psychosocial care and interventions provided by CCLSs on STMMs were separated into four categories including play and normalization, psychological preparation and support for medical procedures, education regarding pediatric psychosocial care, and administrative tasks.

Play and Normalization

Thirty-four (63%) of 54 participants reported that they always provided normalization of the environment through creating a child-friendly play space at the mission hospital site. Half (n= 27 of 54, 50%) of respondents reported always providing orientation for children and their families to the medical setting. Child life specialists also reported always providing developmental play (n=26 of 54, 48.1%), medical play (n=24 of 54, 44.4%), therapeutic play (n=22 of 54, 40.7%), safety/infection control-toy cleaning (n=10 of 54, 18.5%), and group games (n=9 of 53, 17%).

Psychological Preparation and Support for Medical Procedures

Over half of participants (n=31 of 54, 57.4%) reported always providing emotional support to children and half (n=27 of 54, 50%) reported always providing emotional support and education to parents. Twenty-four (44.4%) of 54 participants reported providing psychological preparation for surgery and other potentially stressful experiences most of the time. Participants reported providing guidance in using non-pharmacological pain management techniques some of the time (n=21 of 53, 39.6%), most of the time (n=9 of 53, 17%), and always (n=8 of 53, 15.1%).

Education Regarding Pediatric Psychosocial Care for Health Care Professionals

Participants reported that they always supervised local volunteers and/or STMM team students and volunteers (n=19 of 54, 35.2%). Participants reported providing informal, ongoing education to STMM team members regarding psychosocial care (n=20 of 54, 37%), and regarding child development (n=19 of 54, 35.2%) most of the time. Notably, 29 (53.7%) of 54 CCLSs reported never providing formal education (e.g., lecture or seminar) regarding child development, and 28 (51.9%) of 54 reported never providing formal education about providing psychosocial care for children and families in healthcare settings to STMM members or international host health care providers.

Administrative Tasks Provided by CCLSs on STMMs

CCLSs reported always managing and providing toys and medical play materials on STMMs (n=39 of 53, 73.6%). Over half (n=37 of 52, 71.2%) of the participants reported always working within the cultural context. Most (n=44 of 53, 83%) participants reported never developing/implementing a budget for a CCLS position on the STMM. Twenty (37.7%) of 53 participants reported never helping in the development and evaluation of child life services within the STMM. Four (26.7%) of 15 participants reported usually completing other types of administrative or logistical tasks while volunteering on STMMs such as assisting with packing and unpacking medical equipment, facilitating team building activities, and helping other team members as needed.

CCLS Role Clarity on STMM

Nearly three-fourths (n=37 of 54, 68.5%) of participants perceived that their role as a CCLS was clearly defined on the STMM, while 16 (29.6%) of 54 participants perceived that their role as a CCLS on the STMM was only somewhat defined. Twenty-four (45.3%) of 53 participants perceived that the interdisciplinary team clearly understood their role as CCLS, while 29 (54.7%) of 53 participants perceived that their role was only somewhat understood. Analysis of open-ended responses reinforced that interdisciplinary STMM team members were often surprised by the range of knowledge and skills CCLSs utilized to improve the holistic care provided to patients and families; therefore, educating them regarding CCLS role was necessary.

Impact of Child Life Services on STMM Beneficiaries

Immediate Coping Outcomes as Reported by CCLSs for Patients and Families

Table 2 shows CCLSs’ perceptions regarding the immediate impact of providing psychosocial care on patients within the host countries. Importantly, as noted in Table 2, coping outcomes were perceived as favorably impacted most of the time by over half of participants. Effective pain management was perceived to be the least impacted coping outcome. Forty-eight (94.1%) of 51 participants reported observing parents/families who received child life services to exhibit less stress and anxiety and noted that these parents were able to support their child more effectively during the STMM experience. Also, 39 (73.6%) of
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Forty-two (79.2%) of 53 participants reported always leaving play resources for their child life counterpart. Notably, 47 (88.7%) of 53 participants reported that patients and their families verbalized being less anxious about medical procedures/surgery after receiving child life services. Additionally, 47 (88.7%) of 53 participants noted that fellow STMM health care providers and local health care providers were more committed to providing family-centered care because of learning about the CCLS role and interacting with child life specialists.

### Reported Efforts Toward Creating Sustainable Impact of Child Life Services

Notably, 47 (88.7%) of 53 participants reported that interdisciplinary STMM health care providers expressed interest and commitment for providing family-centered care because of learning about the child life role and interacting with child life specialists. Forty-two (79.2%) of 53 participants reported always leaving play resources for their child life counterpart or nurses to use with patients in the host countries. Meanwhile, 38 (73.1%) of 52 participants reported never sending any type of resources to the host country after returning home from the mission. About half (n=27 of 51, 52.9%) of participants reported maintaining a sustainable partnership with at least one host country medical team member, for a time frame ranging from one year to over 10 years, typically via email or online communication. However, 39 (73.6%) of 53 participants reported never following up with any medical team member from the host country regarding psychosocial care after returning from the mission. In open-ended responses regarding following up with host country team, a common theme emerged that there were limited opportunities for CCLSs to personally follow up with medical team members from the host country. Instead, the participants felt that the STMM organization possibly provided follow up communication regarding provision of psychosocial care. One participant responded, “I feel that the hosting [STMM] foundation has made strides, rather than me personally.”

### Table 2 Perceptions of CCLSs Regarding Immediate Outcomes on Beneficiary Patients in STMM Host Countries (N=53)

<table>
<thead>
<tr>
<th>Observed Immediate Outcomes:</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the Time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients exhibited less stress and anxiety.</td>
<td>0 0 0 0</td>
<td>13 25.0</td>
<td>31 99.6</td>
<td>8 15.4</td>
<td></td>
</tr>
<tr>
<td>Patients were more engaged throughout the healthcare experience.</td>
<td>0 0 0 0</td>
<td>17 32.1</td>
<td>28 52.8</td>
<td>8 15.1</td>
<td></td>
</tr>
<tr>
<td>Patients were less scared of medical procedures.</td>
<td>0 0 0 0</td>
<td>21 39.6</td>
<td>28 60.4</td>
<td>4 15.1</td>
<td></td>
</tr>
<tr>
<td>Patients were more comfortable with healthcare providers.</td>
<td>0 0 1 0</td>
<td>19 35.8</td>
<td>27 50.9</td>
<td>6 11.3</td>
<td></td>
</tr>
<tr>
<td>Patients were able to cope more effectively.</td>
<td>0 0 0 0</td>
<td>17 32.1</td>
<td>32 60.4</td>
<td>4 7.5</td>
<td></td>
</tr>
<tr>
<td>Patients exhibited more cooperation with medical procedures.</td>
<td>0 0 1 0</td>
<td>19 35.8</td>
<td>27 50.9</td>
<td>6 11.3</td>
<td></td>
</tr>
<tr>
<td>Patients exhibited more effective pain management.</td>
<td>1 4 1 19.0</td>
<td>30 56.6</td>
<td>13 24.5</td>
<td>5 9.4</td>
<td></td>
</tr>
<tr>
<td>No difference observed in the patient’s ability to cope with the healthcare experience.</td>
<td>30 56.6</td>
<td>12 22.6</td>
<td>5 10.2</td>
<td>2 4.1</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Note. Number of participants that responded to each question varied. Percentages were calculated based on total number of participants who responded to each question.

53 participants reported that patients and their parents/families verbalized being less anxious about medical procedures/surgery after receiving child life services. Additionally, 47 (88.7%) of 53 participants noted that fellow STMM health care providers and local health care providers were more committed to providing family-centered care because of learning about the CCLS role and interacting with child life specialists.

### Training and Preparation for CCLSs Prior to Serving on STMMs

Participants reported using four main training methods that had the most impact on preparing them for the STMM experience. These included communicating with other CCLSs who had served on STMMs (n=42, 76.4%), conducting their own research regarding mission site (n=34, 61.8%), reviewing mission-related information packets sent by the STMM organization (n=32, 58.2%), and communicating with other medical team members (n=22, 40%). Least frequently utilized training methods reported were individualized face to face training (n=2, 3.6%), online methods (e.g., webinar or modules; n=3, 5.5%), child life conference presentations (n=2, 3.6%), and own previous experience working internationally (n=1, 1.8%). Two (3.6%) CCLSs reported receiving no training or preparation prior to their STMM experience. Participants reported wanting more information and preparation prior to STMMs regarding CCLS role expectations, promoting child life’s sustainability in host countries, and information regarding types of appropriate supplies to bring on STMMs.
Impact of Serving on STMMs on CCLSs

CCLSs reported that volunteering on STMMs had a noteworthy impact on their self-perceived growth as a child life professional. The areas of growth included cultural competency, professional skills development, and enhancing child life competencies.

Cultural Competency

Fifty-three respondents reported on cultural competency development items on Campbell et al.’s (2011) survey tool. Table 3 shows CCLSs’ perceptions regarding how serving on STMMs impacted their cultural competency. Notably, as seen in Table 3, CCLSs overwhelmingly reported that volunteering on STMMs not only increased their self-awareness regarding their own values, beliefs, and personal biases, it also strengthened their ability to communicate with patients from different socioeconomic and cultural backgrounds. One participant reflected:

“The STMM brought me back to the root of why we do what we do! Play is so vital and healing to children and play and preparation were my focus. Even when I was struggling with the language barrier, I was reminded that play is universal and does magical things for children no matter what country you are in.”

As described by another participant, “[Volunteering on a STMM] is a thorough way to experience and learn about different cultures; … and techniques [used by] professionals around the world.” Overall participants noted that volunteering on STMMs was helpful to improve skills in communicating effectively with physicians, health care professionals, and staff from different social and cultural backgrounds.

Professional Skills Development

Fifty-three respondents also reported on professional skills development items on Campbell et al.’s (2011) survey tool (see Table 3). Most participants agreed that volunteering as a CCLS on a STMM positively impacted several aspects of their professional skills development, including the ability to form partnerships with team members, ability to adapt quickly to a new health care setting, and ability to communicate effectively with a team. Other factors such as self-confidence, professionalism, ability as well as desire to become a leader, and familiarity with medical knowledge were also positively impacted. One participant explained, “I felt that I gained a lot of confidence with finding different ways to do medical teaching that would adapt to the needs of different patients/families.”

Child Life Competencies

Forty-nine (92.5%) of 53 participants reported that their STMM experience(s) invigorated them as a CCLS, and 48 (94.1%) of 51 participants reported that they achieved marked personal growth from serving on the STMM. Most participants agreed that volunteering as a CCLS on a STMM contributed toward improving their child life competencies. The top
three competencies impacted by the STMM included implementing child life services within the structure and culture of the work context (n=49 of 53, 92.5%), continuously engaging in self-reflective professional child life practice (n=49 of 53, 92.5%), and representing and communicating child life practice and psychosocial issues of infants, children, youth, and families to others (n=48 of 53, 90.6%). Forty-eight (92.3%) of 52 participants agreed that volunteering on a STMM has been a valuable contribution toward their child life continuing education, and 49 (92.5%) of 53 participants agreed that volunteering on STMMs should potentially be considered for earning professional development unit credit toward CCLS recertification. As reflected by a study participant, “Counting medical mission time toward certification [maintenance PDUs] would be great, and it makes sense. I learned way more on missions than I ever did in a day-long workshop.”

**Barriers to Volunteering on STMMs**

Of the 66 CCLSs who reported never volunteering on a STMM, several stated reasons for not volunteering. Of 53 respondents, 17 (32.1%) cited lack of available days of leave from current employment as their topmost barrier, and 13 (24.5%) cited this as the second highest barrier. Of 51 respondents, 17 (33.3%) cited being unaware of opportunities to serve on STMMs as their topmost or second highest barrier to volunteering. Of 46 respondents, 15 (32.6%) cited financial costs or concerns as their topmost or second highest barrier. The least frequently selected barriers to volunteering were personal safety concerns, visa or passport related logistical procedures, and fear of being unprepared to serve.

**Discussion**

This exploratory study adds to the literature concerning the role of CCLSs on STMMs and the bi-directional impacts of volunteering on STMMs for patients and families in host countries as well as for the CCLSs providing psychosocial care. Children have the right to life, survival, and development; to receive care with their best interests in the forefront; to not be discriminated; and to have their views heard as individuals with their own abilities, culture, and language (United Nations General Assembly, 1989). These rights should be honored in all health care settings including on STMMs by viewing children as a child first and then as a patient. Our findings suggest that integrating the CCLS role on STMMs promotes children’s unique rights in health care settings through their advocacy of having children’s perspectives heard, preparing children for surgery, promoting parental presence for support, and providing children opportunities for play. Delivering psychosocial care to patients as integrated within health care services promotes their dignity and respect, as well as contributes to the patient’s ability to be better informed and to cope with the health care experience (Association of Child Life Professionals, 2020).

**Role of Child Life Specialists and Their Impact on Patients and Families**

Participants most frequently reported providing normalization of the health care environment, therapeutic play, emotional support, and psychological preparation for medical procedures which resulted in observable reduction in anxiety for the patients and family members. Classic literature supports that observed behavioral responses are valid indicators of measuring adaptive and maladaptive coping (Krenenberger et al., 1997; Wolfer & Visintainer, 1975). CCLSs reported that they noted lower stress levels and improved abilities to cope with the medical experience based on their observation of patients’ and families’ verbal and behavioral responses. Children want information about hospital procedures in an engaging, honest manner to help them gain realistic expectations of procedures and be less worried, and their parents have a role as gatekeepers to help them have access to this information (Bray et al., 2019). Observations of CCLSs in the current study align with the classic findings of Koller, (2008), Lynch, (1994), and Melamed and Siegel, (1975) that children who are psychologically prepared for surgery have reduced fear and anxiety and exhibit more cooperative behaviors. While challenges existed in measuring outcomes, the majority of CCLSs reported contributing to reducing patients’ fear of medical procedures and health care providers, increasing cooperation with medical procedures, and enhancing patient engagement throughout the STMM experience. Patient outcomes were also measured by observations verbalized by other health care team members. As one participant stated, “my nursing supervisor said at the end of the mission that these were some of the calmest, most prepared children she had ever worked with.”

Lower stress and anxiety for patients also leads to higher patient satisfaction, which is a commonly
used indicator for measuring the quality of health care (Prakash, 2010). Reeve et al., (2004) explain that one of the primary concerns for parents seeking care on STMMs for their children going into surgery was regarding pain management. Our data suggests that providing children guidance in using pain management coping techniques was not always a priority for CCLSs, as less than a third of the respondents reported providing this intervention always or most of the time. The facilitation of nonpharmacological pain management techniques is an essential component of the CCLS role (Romito et al., 2021) and is recognized in one STMM organization’s Standards of Care (Operation Smile, 2020). Our findings suggest that CCLSs should be consistently informed that coaching and rehearsing of nonpharmacological pain and distress management techniques with patients is an expectation of their role on STMMs and they should more intentionally and routinely provide coping rehearsal for pain management in collaboration with interdisciplinary team members.

Literature supports that a parent or caregiver’s anxiety levels are strongly correlated with how a child will respond to hospitalization (Fortier et al., 2010; Power et al., 2012). Empowering family or caregivers by providing reinforcement education and emotional support is an essential component of family-centered care and the CCLS role (Romito et al., 2021). Our findings reveal that CCLSs on STMMs do provide this intervention, resulting in less stress and anxiety for caregivers who were then better able to support their child throughout the STMM health care experience. A study participant described observing lower anxiety among mothers who received child life services, and stated:

“The parents always seemed incredibly grateful for our care and education. The mothers of young children often expressed that having us there made them feel less fearful of their child having surgery. Many times, the mothers would ask me to go into surgery with the baby/child to hold them until they fell asleep [from receiving anesthesia].”

Reeve et al., (2004) underscore the importance of understanding the belief systems of the family and community, the status of the child in the community, socio-cultural contexts which will determine the future of their patients, and the outcomes envisioned by patients and families from having the surgery. CCLSs have the ethical responsibility for providing care with cultural humility while upholding patient and family autonomy and empowering them to communicate their wishes to the medical providers. When a CCLS provides accurate information with interpreters’ assistance to patients and their caregivers in the language that they understand, they should become more empowered to have their wishes or concerns heard, provide informed consent with more clarity, and better advocate for overall care including pain management after surgery. Some CCLSs reported that language barriers and cultural differences made it more difficult for them to assess how their patients were coping. For example, a participant reported, “the patients were so stoic, it was difficult to decipher if the patients were happy/scared/sad because the children usually just did what they were told.” While communicating across language barriers during a STMM is a challenge for the CCLS, this also is a hurdle for patients and families and creates an extra tier of vulnerability for them (Ho, 2008). All health care workers need training to appropriately collaborate with interpreters and translators (Langdon & Saenz, 2015). CCLSs should be mindful of the tenets of non-maleficence, patient autonomy, and veracity when working with individuals who speak a different language. Harmful misconceptions could be created if CCLSs do not use interpreters when demonstrating use of medical equipment for procedural preparation (Desai, In press). CCLSs should as a best practice consistently use interpreters and refer patients and caregivers to translated patient education materials in the language that is most appropriate for them. Other ethical considerations for providing child life services on STMMs include the necessity for having appropriate current credentials and training toward providing psychosocial services only within the scope of their practice. Being mindful of cultural considerations and cost efficiency in use of any materials (e.g., for play, personal protective equipment) in a resource-limited setting is also necessary.”

Participants reported that they were initially viewed as “the play lady” or “play person” at the beginning of the STMM, but by the end of the STMM, medical team members better understood the versatility of the comprehensive child life role. One participant reported being told by STMM team members, “I didn’t know child life did that. You’ve changed my understanding of the role of child life.” All child life specialists should be knowledgeable of their job description, as well as roles and responsibilities expected of them on a ser-
vice program by the STMM organization. Interdisciplinary team members should also be educated about the child life role, so they can work collaboratively to uphold children's comprehensive rights. Our findings also suggest that working directly with CCLs helps increase role clarity regarding psychosocial care services among international health care providers.

**Capacity Building in Host Countries and Sustainability Efforts**

Sustainability and impact of STMMs and other short-term experiences in global health are directly associated with forming and maintaining collaborative partnerships with host communities (DeCamp, 2011; Loh et al., 2015; Melby et al., 2015). There is an expectation on most STMMs for international volunteers to share knowledge through teaching and mentoring the local health care staff (Dawson et al., 2017). A crucial component of sustainability is capacity building, which involves strengthening local health systems and training of local health care providers (Loh et al., 2015; Melby et al., 2015). Feedback from host communities is necessary to continuously improve international STMM programs (Riviello et al., 2011). Participants in the current study had mixed experiences regarding sustainability efforts for psychosocial care and maintaining collaborative partnerships with host communities. Our findings suggest that less than half of the participants provided formal education regarding psychosocial care in health care settings, thus possibly resulting in a missed opportunity. CCLs did not always realize that they were expected to build psychosocial care capacity with host country counterparts and have requested more information regarding this role expectation. CCLs serving on STMMs should be more consistent and intentional in engaging in a reciprocal process of modeling psychosocial care and mentoring.

Additionally, following the STMM, by maintaining mutually respectful contact with a child life equivalent counterpart or medical team members in the host community, information regarding pediatric psychosocial care can be continuously shared while cultural nuances can be learned by the CCLs. CCLs serving on missions should be made aware of the importance of creating and maintaining sustainable, collaborative partnerships with host communities. Almost half of the CCL participants reported never or rarely maintaining ongoing communication with any host country medical team member after the STMM had concluded. Many participants described that the STMM organization with whom they volunteered created and maintained sustainable partnerships with host communities, rather than them personally. Participants who were more likely to maintain an ongoing, individual, collaborative partnership with a host country team member reported having a designated psychosocial care counterpart from the host country. One participant described, “Some host country [counterparts] follow the CCLS to learn our role and then implement our practices after we leave to better take care of their pediatric patients.” Our findings support that involving CCLs on STMMs raised awareness of local health care providers regarding providing psychosocial care for children receiving care in health care settings. However, more defined and targeted efforts are needed to increase both awareness and capacity to build sustainable psychosocial services on and beyond STMMs.

If long term sustainability of integrating psychosocial care is the STMM organization's goal, then creating a child- and family-centered care environment involves educating not only fellow psychosocial providers, but also educating all medical team members and administrators. Volunteer CCLs should be educated about this goal and provided guidance by the STMM's child life leadership regarding these efforts. Commitment from STMM organization leadership both in the resource and host countries toward these efforts is also necessary for promoting psychosocial care. Many STMM partnerships include the donation of materials and durable medical equipment toward building host country's capacity (Sykes, 2014). Majority of CCLs reported leaving play resources for their child life counterpart or nurses in the host country. Developing new pedagogies through engaging holistic approaches in higher education (Higgins & Thomas, 2016) should also be pursued with host country partners to enhance the status of pediatric psychosocial services.

**Impact on the Volunteer**

As referenced earlier, outcomes in STMM literature also addresses the motivations to volunteer and impact on the volunteer (Sykes, 2014). Like findings from Withers et al. (2013), CCLs were less likely to report spiritual or religious reasons for volunteering and reported career-oriented reasons for volunteering and reported career-oriented reasons for volunteering. Campinha-Bacote’s (2002) cultural compe-
tency model served as one theoretical framework for the current study, which is defined by five cultural constructs including cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. Our findings suggested that CCLSs who served on STMMs reported gains in all five constructs. They reported increased self-awareness regarding their own values, beliefs, and personal biases regarding working with others. Cultural knowledge was enhanced, as they reported increased awareness of global health care disparities. Participants reported increased cultural skills regarding confidence in working and communicating effectively with people from different socioeconomic status, cultures, and working with interpreters. The STMM promoted cultural encounters by providing CCLSs the opportunity to not only work with patients from different socioeconomic and cultural backgrounds, but also with diverse interdisciplinary health care team members and host country community members. Finally, findings indicated that most participants reported they are more likely to volunteer with individuals in underserved communities in the future, suggesting increase in the cultural desire construct. Our findings are consistent with findings of Amerson (2010) and Campbell et al. (2011) suggesting that volunteering with international outreach activities, including STMMs, increased health care providers’ cultural competency.

As proposed by Knowles’ (1984) adult learning theory, which also served as a theoretical framework for the current study, CCLSs acknowledged that volunteering on a STMM positively impacted several aspects of their professional development. CCLSs reported increased professionalism, communication skills, leadership abilities, confidence, medical knowledge, and felt invigorated as a professional. As stated by a study participant, “Real experience is the best teacher.” As lifelong learners, CCLSs who served on STMMs became more familiar with international perspectives of delivering pediatric health care services and gained appreciation for the impact of a person’s culture on their health. This knowledge likely enhances CCLSs’ clinical practices by allowing them to become more sensitive, responsive, and better able to advocate for pediatric patients from a variety of social, economic, and cultural backgrounds both on STMMs and in their home country (Desai et al., 2018). Results from the current study suggest that volunteering on STMMs is a valuable opportunity for CCLSs to gain professional knowledge and development.

Notably, our findings also suggest that volunteering on STMMs contributed toward enhanced child life competencies regarding interdisciplinary teamwork and effective communication as outlined in the ACLP’s official documents (Association of Child Life Professionals, 2016). Specifically, participants reported the highest increases in their abilities to function as a member of the services team, continuously engage in self-reflective professional child life practice, and represent and communicate child life practice and psychosocial issues of patients and families to others. Most of the participants noted that volunteering on an STMM was a valuable contribution toward their child life continuing education and that the experience could potentially be considered a professional development activity toward earning professional development units (PDUs) for CCLS recertification.

**Study Limitations**

Data were collected through self-report methods and relied on perceptions of CCLSs, which could have potential for respondent bias, mainly social desirability. The relatively small sample size limits the ability to generalize findings. While the study addresses an underexamined topic, more in-depth examination of patient and family outcomes must be made. Patient and family coping outcomes relied on perceptions of CCLSs and while useful, other forms of evidence should be collected. Also, since STMMs are varied and range widely in their scope, more research exploring child life role and its outcomes in various types of STMM settings will add to more nuanced findings. For example, Yeager and Bauer-Wu (2013) discuss how with a foundation in cultural humility, nurse researchers and other scholars can initiate meaningful and ethical projects to better address and reduce health disparities. While the current study provides more generic data on perceived coping outcomes, child life specialists serving on STMMs in diverse geographic sites and within varied cultural contexts could collaborate with nursing colleagues to study more defined health and coping outcomes for children and families who are likely to be different from them in various ways including race, ethnicity, religion, or socioeconomic status. Additionally, lack of examination of long-term impact regarding the relationship between serving on STMMs and gaining professional benefits limit conclusions at this point.
Implications for Practice and Research

The current study provides implications for various stakeholders and for future research. The authors reiterate that the need for modifications and training to further enhance safety and minimize risks will be necessary for child life role in STMM settings. STMM organizations are modifying their global strategies with expected seasonal coronavirus trends and the infectious nature of COVID-19. STMM organizations will be working with many governments that will change their restrictions and consent to resume international activities based on epidemiological patterns, response, and treatment outcomes within their countries (Operation Smile, 2020b). Child life services will need to make necessary accommodations such as not expecting to volunteer on large international STMMs for a considerable timeframe and opportunities for engagement with STMM organizations outside of a typical mission service delivery model.

Child Life Specialist Serving on STMMs

With reference to improving direct services, CCLSs should increase guidance for patients and families in using nonpharmacological pain management techniques during STMMs. CCLSs can also educate families and caregivers about taking care of a child with a health care need, child development milestones, and long-term community reintegration efforts. CCLSs should be more consistent and intentional in providing both informal and formal education about promoting psychosocial care. CCLSs should be made aware of the importance of creating and maintaining sustainable, collaborative partnerships with host communities toward psychosocial care capacity-building efforts.

Research Regarding Measuring Effectiveness of CCLSs’ Role on STMMs

While the CCLSs reported generally positive patient outcomes, developing or identifying existing tools to measure the efficacy of CCLS interventions on STMMs to increase evidence-based support for both short- and long-term patient and family coping outcomes is crucial. Evaluating patient and family satisfaction specific to the CCLS role on the team is important. Using external evaluators regarding impact of CCLS role would enhance these findings.

Child Life Managers and Hospital Administrators of Volunteer CCLSs

The most frequently cited barrier toward volunteer-
to get involved. While child life professionals are not readily available in most developing countries, STMM organizations may be on the forefront of pioneering awareness regarding the role of psychosocial service providers for improved patient outcomes. Developing partnerships with the local pediatric health care community to build a relationship with equivalent psychosocial care providers in host countries and reciprocally sharing program development knowledge, skills, and resources is needed. More emphasis should be placed on engaging higher education institutions in host countries with child development, human development, teacher preparation, and psychology departments as they can be a source for identifying appropriate academically trained individuals for providing psychosocial care in pediatric settings and may be positioned to create new curriculum toward promoting sustainability. Lessons can be learned from preservice training of early childhood educators which provided volunteers with historical, social, and cultural contexts of host countries for developing sustainability (Ärlemalm-Hagsér & Elloitt, 2017). By standardizing recruitment, training, and credentialing of psychosocial care providers in host countries, STMM organizations would make an important contribution to holistic well-being of children and families they serve. There is an opportunity for further research into the feasibility of the role of CCLSs or equivalent psychosocial providers in building capacity toward developing sustainable pediatric psychosocial services within host country health systems.

**Conclusion**

This study adds to the STMM literature specific to the participation of CCLSs and their contribution towards promoting psychosocial well-being of pediatric patients and their families receiving medical or surgical care in this setting. This research provides information about the roles fulfilled by CCLSs on STMMs, child life competencies utilized on STMMs, factors which motivate or create barriers to such service, preparation received to serve on medical missions, as well as professional gains achieved by CCLSs serving on STMMs. The current study also informs prospective volunteers regarding this role and offers training considerations for such work. While more research is needed to increase evidence-based support of the CCLS role on STMMs, the current study highlights this role for the wider interdisciplinary international STMM community and the potential this creates towards enhancing child well-being and child rights within this unique health care context.

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