PJAHS

Philippine Journal of Allied Health Sciences

Short Report

A Rapid Literature Review on the Strategies for Collaboration Between Occupational therapists and Speech-Language Therapists in the Field of Augmentative and Alternative Communication

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Abstract

An alternative and augmentative communication (AAC) device replaces or supplements a person's natural speech. Speech-Language Pathologists (SLPs) collaborate with a team of healthcare professionals in the process of identification and use of the right AAC device for a person with complex communication needs (CCN). In the Philippines, occupational therapists (OTs) and SLPs are more likely to collaborate in the treatment of their clients due to their interprofessional education (IPE) experience. However, most Filipino SLPs do not engage in interprofessional collaboration (IPC) when rendering AAC services. Thus, there is a need to identify existing literature that tackles collaborative practices to raise the quality of service and care. Hence, this study aimed to identify and discuss existing literature that documented IPE and IPC strategies between OTs and SLPs in the field of AAC. The structure of this literature review was guided and adapted from the topics outlined in the preferred reporting items for systematic reviews and meta-analyses (PRISMA). Literature archived in two databases (Pubmed and Scopus) were reviewed. Two articles out of five studies were included in this review. Strategies found were "case based learning approach" for post-graduate students and the "Beyond Access model" in supporting practitioners. In conclusion, there is a dearth of literature on IPC practices among OTs and SLPs in the field of AAC. There is a need to report IPE and IPC efforts in the Philippines to provide applicable strategies to the local healthcare landscape.

INTRODUCTION

An alternative and augmentative communication (AAC) device is a type of assistive product that aids an individual with complex communication needs (CCN) to converse and interact with others through replacing or supplementing a person's natural speech.[1] The use of AAC devices are well-identified within the domain of practice of the speech-language pathology (SLP) profession as speech-language pathologists (SLPs) possess adequate knowledge in terms of language development, communication patterns, bodily structures and functions necessary for speech, and AAC devices.[2] To identify and provide an appropriate AAC device, SLPs collaborate with a team of healthcare professionals.[2]

Interprofessional collaboration (IPC) happens when one works with a team of health professionals toward a common goal to improve learning, quality services, team support, and decision-making.[3,4] One of the many health professional SLPs can collaborate with are occupational therapists (OTs). Occupational therapy (OT) is a client-centered health profession concerned with promoting health and

wellbeing through meaningful everyday activities.[5] It has been asserted that OTs possess the competence to adequately provide assistive products by looking at the interplay among person-activity-environment.[6]

In the Philippines, OTs and SLPs tend to have more opportunities to collaborate in rendering intervention primarily due to the mandatory exposure of most OTs and SLPs to interprofessional education (IPE) over a longer period.[7] However, when it comes to assessing and providing AAC for individuals with CCN to achieve communication-related goals, 80-90% of Filipino SLPs rarely or never collaborated with other health professionals due to difficulties in identifying the role of others in the assessment process.[8,9]

SLPs specializing in AAC-related services observe four communicative competencies namely: linguistic competence, operational competence, strategic competence, and social competence.[10] All these competencies entail collaborative effort. For instance, operational competence requires the need for OTs in providing a professional appraisal of the AAC user's performance skills. Additionally, SLPs and OTs could collaboratively assess an individual's social interaction skills needed for developing strategic and social competence.

Concretizing the collaborative practice done between both professions is a viable first step towards raising the quality of service and care. At present, there is a need to identify literature that examines the collaboration between the two professions on a global scale to jumpstart such collaboration in the Philippines. Hence, this study aimed to identify and discuss existing literature that documented IPE and IPC strategies between OTs and SLPs in the field of AAC.

METHODOLOGY

The structure of this rapid literature review was guided and adapted from the topics outlined in the preferred reporting items for systematic reviews and meta-analyses (PRISMA). Several steps were omitted to access information promptly and without compromising clinical decision-making despite the limited resources.[11]

Eligibility Criteria. Included articles are those that discuss strategies for collaboration in the field of AAC. The team should include at least an OT and an SLP practitioner. Only articles published from January 2000 to September 2019 written in the English language were gathered.

Search Strategy. An electronic search was done in the final week of October 2019. Articles archived in PubMed and Scopus were reviewed. The following keywords were used for the search: alternative or augmentative communication, collaboration, occupational therapy, and speech or speech-language pathology. The use of wild cards to include other associated variants and alternative terms, which are connected via Boolean operations, was done.

Study Selection. A total of five articles were obtained and screened. Of the five articles, only two articles were included in this study (see Figure 1). The articles were excluded for the following reasons: a book chapter tackling AAC in general (n=1) and articles focusing on AAC without discussing strategies for IPC (n=2).

Data Collection and Synthesis. The following information was extracted and tabulated: title, author(s), year published, country, type of research, IPC strategy used, and features of the strategy. The finding was then summarized and described in the next section. The finding was then appraised using the Critical Appraisal of a Case Study checklist.[12] Studies were summarized and synthesized through the critical analysis of the tabulated information.

RESULTS

In this review, we discussed the retrieved literature used to enable an interprofessional collaborative practice between OTs and SLPs in the field of AAC. A summary of the included articles can be found in Table 1.
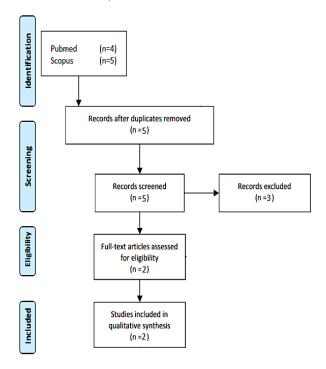
Figure 1. Search Process

Case Based Learning (CBL) Approach. CBL is defined as a form of learning through solving authentic clinical scenarios geared towards attaining a stated set of learning objectives and outcomes.[15] Not all information was initially provided to facilitate inquiry and discovery. The CBL approach was utilized by Wallace and Benson.[13] The formulated case scenarios were discussed by post-graduate OT and SLP students as part of formal coursework between the OT and SLP departments. Participants were arranged to communicate through face-to-face team meetings and online interactions spanning 25 to 45 minutes.

The strategy brought about an increase in one's understanding of the role and importance of others. The approach identified the value of professional communication in successful collaboration. Professional communication facilitated mutual respect and increased cooperation and collaboration among team members.

Table 1. Summary of included studies

Title	Bringing Interprofessional Case-Based Learning into the Classroom for Occupational Therapy and Speech-Language Pathology Students[13]	A Case Study of Team Supports for a Student with Autism's Communication and Engagement within the General Education Curriculum: Preliminary Report of the Beyond Access Model[14]
Author(s)	Wallace SE, Benson JD	Sonnenmeier RM, McSheehan M, Jorgensen CM
Year Published	2018	2005
Country	USA	USA
Type of Research	one group pretest posttest	Case Study (observational)
Critical Appraisal	6/10	8/10
IPC Strategy used	Case based Learning Approach	Beyond Access Model
Features of the strategy	two-part IPE activity with out-of-class online meeting and a 2-hour class was done among graduate students of the OT and SLP departments. Worksheets and instructions were provided to structure the meetings.	Four-phase model provided a framework to the team to enhance their capacity in planning, evaluating, and implementing student and team support for an inclusive classroom setting.

Beyond Access (BA) Model. The BA model was created as an attempt to include students with disabilities in the general education system through the provision of support like AAC. The model was devised by Jorgensen and colleagues to provide an intervention with an appropriate and individualized set of goals that were designed collaboratively by the intervention team.[16] The case study was done within a general education classroom to meet the communication needs of a child with Autism.[14] The team comprised of the following: the student's parents, an SLP practitioner, an OT practitioner, an AAC consultant, a classroom teacher, an instructional assistant, and a special educator.

The BA model identified four phases. The first phase is a "comprehensive assessment of the student and team supports," which includes determining the goal, the student's strengths and weaknesses, and the team's perspective on their overall functioning. The second phase explores and describes the student's support needs for learning the general education content through a trial-and-error-like approach. The third phase involves observing and documenting performance. The last phase entails reviewing and reflecting on student and team performance data. The educational team established a 45-minute meeting on a weekly basis with a mentor, skilled with the BA model, guiding the team throughout the process.[14] These phases juxtapose the process done by health professionals, which include: evaluation, planning, intervention, and revaluation.

The intervention team deemed that the use of the BA model was able to improve the student's participation through communication, as well as increase the quality of the team's service delivery. This model may be considered for evidence-based practice IPC on AAC provision and intervention in the school setting. Furthermore, a model that considers both student and team factors in intervention planning provides a wider view for appropriate goal setting on both parties.[14]

DISCUSSION

This rapid literature review sought strategies for incorporating IPC into AAC practice. However, limited literature exists to tackle strategies applicable to a clinician's busy day. Regardless, both analyzed studies can be adapted and applied to the Philippine setting to create a better model for AAC service delivery. Adapting the models can provide a structure to promote competency, especially for practitioners new to the concept of collaboration.

IPE as a Springboard to an AAC-Ready IPC. The general concept of having a collaboration ready workforce is through starting in the classroom IPE.[17] Engaging in IPE increases the likelihood and advancement of IPC in the Philippines.[9,18] Discussing AAC-related cases in the classroom may address the lack of understanding and importance of the non-AAC specialist's role in the AAC service delivery process.[9] Wallace and Benson explored the use of a CBL approach with OT and SLP students to establish a sense of collaboration in the field of AAC.[13] This approach provided a clear delineation of roles in AAC assessment and intervention as it required the SLP and OT students to have a professional discourse, encouraging the students to know and define their specific roles within the team. While both professionals can address the social competency, OTs have a clear role when relating to operational competency (access and positioning) and SLPs have a distinct role in relating to linguistic competency. However, there is much to know as to whether the participants were able to translate this learning experience into AAC practice as educational and practice demands differ when it comes to overall logistics. It would be interesting to see the application of CBL in actual practice. Moreover, there is a need to explore the transference of learning from the classroom to the workplace in terms of IPC within the AAC practice. This could bridge or identify the gaps in the disparity between pre-professional training and professional practice necessary to strengthen IPE programs within the country.

Regardless, the study of Sonnenmeier and associates suggest that establishing a clear understanding of one's professional role, as well as the others, paved the way for IPC within clinical practice.[14] In fact, they asserted that the BA model is an effective tool in IPC due to the

effective communication and understanding of the professionals' role within the intervention team.[14] The use of a BA model revealed significant progress in the four AAC competencies and participation in the general curriculum, suggesting an improved interaction with the AAC user's environment. Hence, the BA model allows for effective IPC that may impact an AAC user's participation in daily life.

Having said this, structuring the CBL approach through the BA model can be adapted by SLPs and OTs in the Philippine setting to discuss AAC-related cases during educational activities to springboard a better quality of service and a more effective service delivery model to individuals with CCN. The CBL approach allows the OTs and SLPs to address typical concerns of an AAC user to achieve specific AAC-related goals. It also paved the way for increased awareness of the OTs' and SLPs' roles in AAC service provision and theoretical discussions during IPE. The BA model may be used for theoretical intervention planning and goal-setting. Furthermore, as there are few opportunities for IPC during laboratory classes and practical clinic exercises, including the BA model in clinical experience during IPE may be a beneficial framework for effective collaboration for AAC-related cases.[19]

Barriers for AAC Collaborative Practice in the Philippines. In the application of the strategies identified to prepare and exercise IPE and IPC, logistics issues such as schedule and time allotment proved to be a problem. The issue of logistics is a common challenge, especially in the Philippines, wherein health professionals are scarce.[20] Less than 10% of the total registered SLPs in the Philippines are certified to provide a comprehensive evaluation and in-depth intervention for individuals with CCN.[21,22] This implies a shortage of manpower needed for the provision, assessment, and intervention for Filipinos with CCN. Hence, the adaptation of such strategies to the Philippine context may be a challenge as the integration of the identified IPC strategies into everyday practice may mean allocating time for collaborative meetings. Precious time that can instead be used to work with other clients in need of professional services.[12] This perspective has been well

reflected in the survey conducted by Sy wherein while OTs and SLPs agree to IPC fostering a better quality of service to clients, they are surprisingly neutral to the statements that describe IPC as "time-consuming," "unnecessarily complicating things," and "using time that is better spent for other case-related matters."[18] Furthermore, difficulties in identifying the roles of the OTs in direct AAC service provision may discourage SLPs from having case discussions with OTs specific to AAC, rationalizing why SLPs do not consult OTs and other professionals in AAC assessment.[9] These attitudes may be credited to a lack of a context-based intervention-focused collaboration model or framework in the Philippines.

The inclusion of approaches, models, and frameworks of AAC into the IPE curriculum can provide OTs and SLPs a guide on how to collaborate in clinical practice. Effective IPC comes from a strong IPE foundation, as OTs and SLPs who have had mandatory and/or voluntary IPE are more likely to collaborate.[18] Students apply what they learn in their educational experience; hence, introducing collaborative practices specific to AAC may inspire them to adopt these practices in clinical cases. Adapting the BA model to be more logistically feasible or creating one inspired by it can guide the collaborative practice in AAC-related cases. This will be extremely beneficial for individuals with CCN, as well as for the advancement of the OT-SLP collaborative practice in the Philippine setting.

Recommendation for Research. Due to the scarcity of data, there is a need to report practices and strategies employed in other settings. As there are no studies in the Philippines that reports the benefits and translation of IPE into IPC, there is a need to document and create evidence-based approaches and models in AAC collaboration. Additionally, there is a need to create a context-specific strategy/ protocol for promoting IPC in AAC practice. Lastly, conducting a review with a broadened search, such as the use of more databases and including more health professionals, may yield more information and models, which may be more adaptable and

applicable to the Philippine healthcare landscape.

Limitations. Due to temporal constraints and limited manpower and resources, only two databases were searched. Broadening the search to more databases and broadening the search terms, as well as considering collaboration done with other health professionals, may yield more studies.

CONCLUSION

Existing literature on the IPE and IPC between OTs and SLPs in the field of AAC exists but remains scarce. Two specific strategies to facilitate collaboration namely: "case based learning approach" and "beyond access model" were identified. There is a need to report IPE and IPC efforts in the Philippines to provide applicable strategies to the local healthcare landscape and to create a context-specific strategy/ protocol for promoting IPC in AAC practice.

Individual author's contributions

DPG Yao; conceptualized, searched, analyzed, and wrote the paper.

GD Andaya; conceptualized, searched, analyzed, and co-wrote the paper.

K Inoue; Supervised the research by providing critical discourse and arguments during analysis process.

Disclosure Statement

The authors have nothing to disclose. This work was not funded by any agencies/ organizations.

Conflicts of interest

All authors declare no conflict of interest.

Acknowledgment

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