Original Article

Awareness of Augmentative and Alternative Communication among Final Semester Students of SLP

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ABSTRACT

The ability to communicate with words is one of a person's distinguishing characteristics. People who have lost their ability to talk are unable to communicate effectively for whatever reason. The acquisition (AAC) approach was implemented as a viable alternative for assisting these individuals. Objective: To find out awareness of augmentative and alternative communication among final semester students of SLP Methods: The cross-sectional study was conducted in seven major institutes of Lahore (University Of Lahore, Riphah International University, King Edward Medical University, School Of Allied Health Sciences, Fatima Memorial Hospital, Punjab University, NUR International University). Final semester students of BS or MS program in SLP were included in the study. The research employed the convenient sampling methodology and standardized questionnaire was used having 26 questions, with responses obtained through an online form and survey. SPSS17 was used to analyze data collected from 50 respondents. Results: Overall awareness was calculated of respondents regarding Augmentative and Alternative communication. Results indicated that 32(65.71%) of final semester students of speech language pathology have adequate knowledge about AAC technology, 10(18.40%) did not significant knowledge about AAC technology while 8(15.89%) totally unfamiliar about AAC technology. Conclusion: After analysis it was concluded that majority of students had awareness of AAC. Most of Lacking was seen in students who did not have good academic exposure and did not practice with patient of AAC.

INTRODUCTION

History of Augmentative and Alternative Communication (AAC) devices proclaimed that older individuals believed in the significance of symbolic competencies to speak with other people who have a variety of communication needs. In the 1960s, the use of sign language for communication became widespread among the deaf. In the 1990s, the best speech creation devices were invented and are known as AAC [1]. AAC is a sort of assistive technology and refers variety of mechanisms that supplement, complement, or substitute speech in people with specific communication needs. When current contact experiences are not conducive to achieving and meeting current communication needs, AAC is used to enhance the capacity to communicate between humans [2]. AAC arrangements are divided into two categories that is either unaided AAC and aided AAC. Unaided AAC is defined as a device in which people do not rely on outside tools or aids whereas aided AAC is defined as a device in which people use external tools and aids for communication. In aided AAC programmers, non-technical support materials such as reference boards, notebooks, and technical items such as speech generating devices, crafts, and so on are used. AAC intervention could result from diverse medical conditions such as Autistic Spectrum Disorders, strokes, Locked-in-Syndrome and also include patients with progressive diseases, such as Parkinson's disease and...
Amyotrophic Lateral Sclerosis (ALS) [3]. AAC provide a future pathway of communication for those who face challenges to communicate with others and key region of SLP clinical practice, wherein speech language pathologists offer appropriate enough statistics in phrases of language development, patterns of contact, and bodily structures and capabilities required for speech [4]. SLPs teach the use of sensitive language techniques that emphasize a person’s verbal and non-verbal communication [5]. SLPs should apply confirmation-based practice and look for skills in all language domains when they are supplying AAC evaluation and interference services [6]. AAC also proceeds speech production without intervening with the development of vocal or verbal transmission [7]. Indeed, assistive communication technology can alter people’s lives. Powerful language skills, flexible software, enhanced features, screen size and access options provide a long-term solution for AAC devices [8]. AAC plan of actions mitigating the amount of strain tolerated by patients, families and healthcare staff due to conveying challenges [9]. However, AAC technology is not a sorcery that will make things automatically by itself and within no time. Hence, AAC alone doesn’t make one a competent, expert and communicator. Those who depend on AAC initiatives as AAC green in field and grow in competence to become AAC proficient with relevant corroborate, instruction, practice, and enhancement. Therefore, AAC options must be given to them in time so that they can become competent and skilled communicators [10]. Furthermore, many people may be unaware of the possible effects of AAC intervention and the extent to which AAC devices provide the necessary supports for full involvement in community and interaction with others [11]. Therefore, the objectives of this study are (a) explore the knowledge about AAC interventions among SLP students (b) determine SLP students learning in this area of practice (c) determine specific factors that SLP students’ perceived were the most and least effective (d) enhance language learning among individuals with disabilities and illustrate how their academic levels and specializations influence their expertise. Khan, Muhammad Sikander Ghayas in 2015, presented the study and according to the findings, therapist should have experience in assessing and operating with individuals using AAC with as small number gadgets as available, and he/she should be concerned with multi-professional teams collaborating with AAC [12]. Leatherman, Elizabeth in 2018, presented a study and this study differentiates the opinions of families of students using speech recognition tools (SGDS) from school linguists (SLPS). Furthermore, there was general disappointment with the AAC services [13]. Malekian, Maryam, Chaleshtory, Marzie Jalalian, Zarifian, Talieh in 2020, presented a study and results indicated that specialists had limited familiarity with AAC services [14]. DeJarnette KM, Wegner JR in 2020, presented a study and according to the findings, there is still a need for more qualified teachers with clinical interactions, funding, and AAC experience [15]. Rashed Aldabas in 2020, presented a study and this study reveals that comprehensive training is required in the AAC sector, and that AAC training varies based on prior training and individual experience[16].

**METHODS**

This cross-sectional study was conducted in seven major institutes of Lahore (University Of Lahore, Riphah International University, King Edward Medical University, School Of Allied Health Sciences, Fatima Memorial Hospital, Punjab University, NUR International University) over a period of six months. Final semester students of BS or MS program in SLP were included in the study. Our sample size was 50 respondents, and it was determined based on the number of enrolled students. Convenient sampling technique was selected to collect the data and used a standardized online questionnaire comprising of 26 questions. Data was collected through online questionnaires and surveys after taking informed consent and distributing among final semester students who were requested to fill the questionnaire mentioning their information. The completion of the questionnaire aimed at answering the objective of this study related to the AAC awareness among final semester students of SLP. Results score were recorded for every respondent. After the collection of data, the data was put into SPSS software version 17.0 where we created tables from statistics and find out the frequency, percent, valid percent, and cumulative frequency as well as the mean and median, to examine the data collected from the questionnaire. Each question and demographic information of participants was analyzed.

**RESULTS**

The current study’s findings indicated that SLP students had sufficient familiarity about AAC, however some features still remained unknown. More research was needed to ensure that SLP students could identify unrevealed features. It appears that a lack of understanding was at the core of the low population in the final semester, as well as a shortage of AAC courses and qualified professionals. Figure 1 depicted the awareness of AAC among final-semester BS or MS students in SLP and purpose of the study was to learn more about AAC’s tactics for improving language learning and increasing impaired people’s engagement in society. Table 1 indicates the
frequency of responses of the SLP students after filling the provided questionnaire.

| Questions                                                                 | Strongly agree | Disagree | Don’t know |
|--------------------------------------------------------------------------|----------------|----------|------------|
| a. Is there any difference between alternative and augmentative communication? | 22(60.0)       | 14(35.0) | 5(10.0)    |
| b. AAC can be used with a client who is able to speak but may not be clear | 26(62.0)       | 14(28.0) | 10(20.0)   |
| c. AAC device should be introduced only when the child is able to understand pictures? | 20(40.0)       | 20(40.0) | 10(20.0)   |
| d. Device placement was not a concern during assessment                   | 22(44.0)       | 18(36.0) | 10(20.0)   |
| e. Family does not need to be a member of assessment team                | 10(20.0)       | 32(64.0) | 8(16.0)    |
| f. Does the use of AAC negatively affect the ability of producing speech? | 16(32.0)       | 33(66.0) | 11(22.0)   |

Table 1: Response of final semester students of speech language pathology

Figure 1: Respondents’ Awareness of The AAC Score Results

**Discussion**

Many people were unaware of how AAC technologies allow persons with complicated communication needs to interact with others and fully communicate with the audience. As a result, the aim of the research was to investigate knowledge of last semester’s SLP students about the AAC approach, assessed actual achievements in this area and identified the particular areas in which SLP students find themselves more competitive. We conducted a survey to better understand AAC’s knowledge, needs, and simplicity among last semester students of SLP. Khan, Muhammad Sikander Ghayas [12] led the primary investigation in 2015, titled “Awareness of AAC Devices in Pakistani Speech Therapists”. The primary exploration study was similar to this one since it was also assumed that there are a number of AAC systems available, including unaided transmission systems and aided transmission systems. In contrast to this study, it does not stress the need of final semester students of SLP having experience in assessing and working with AAC users. Another study was similar to this one in that it provided AAC recognition and evaluate information about AAC. However, it did not specify that this AAC pre-service education be introduced among SLP final semester students. In this regard, another similar research was led by Leatherman in 2018 [13]. Many other researchers have also studied the role of AAC and their awareness among different populations as well as students [17-20]. The findings of current study revealed that SLPs and families were unfamiliar with AAC and that AAC services were generally unsatisfactory. Many studies manifested unfamiliarity of masses about AAC hence the rational of study was to assess awareness of AAC among final year students of SLP and with the help of the study we can find awareness among them about AAC. As a result, it was critical to raise further awareness of these services, thereby enhancing the benefits of AAC across the country. It was expected that the outcomes of the study will act as a spark for extending the use of AAC in speech-language pathology professional training programs.

**Conclusion**

After careful analysis, it was concluded that majority of final semester students of speech language pathology have sufficient knowledge and training regarding AAC. Majority of the lacking was seen in those students who did not have good academic exposure and did not practice with patient of AAC.

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