Awareness About Communication Options in Parents of Children with Hearing Impairment and Factors Affecting Their Decision

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DOI: https://dx.doi.org/10.47772/IJRISS.2025.91200150

Received: 19 December 2025; Accepted: 26 December 2025; Published: 03 January 2026

ABSTRACT

Effective communication is fundamental to human development, social interaction, and learning (Manolson, 1975). For children with hearing impairment, the selection of an appropriate communication option plays a pivotal role in shaping language outcomes, academic progress, and psychosocial well-being. Parents, particularly hearing parents who form the majority of this population, often experience uncertainty and limited awareness when making communication-related decisions for their child. This study investigates parental awareness of four major communication options—Aural–Oral Method, Total Communication, Educational Bilingualism, and Cued Speech—and explores the factors influencing parental decision-making. Data collected from parents of children with hearing impairment in suburban Mumbai reveal significant gaps in knowledge, partial understanding of communication philosophies, and reliance on external recommendations when choosing educational pathways. These findings underscore the need for systematic parent education, professional counselling, and strengthened early intervention frameworks to promote informed, child-centered decision-making.

Keywords: hearing impairment, communication options, aural–oral method, total communication, bilingual education, cued speech, parental decision-making, early intervention

INTRODUCTION

Communication is an essential human capability that forms the foundation for cognitive development, emotional expression, social participation, and academic achievement (Manolson, 1975). For children with hearing impairment, however, access to language is disrupted, often requiring alternative modes of communication, specialized services, and informed parental choices. The selection of an appropriate communication approach is one of the earliest and most consequential decisions made by parents of deaf and hard-of-hearing (DHH) children, influencing not only language acquisition but also educational pathways, cultural affiliation, and long-term developmental outcomes.

Globally, approximately 90–95% of children with hearing impairment are born to hearing parents (Johnson, 2001).). These parents often have limited prior exposure to deafness, communication options, or the sociocultural contexts of Deaf communities. As a result, the diagnosis of hearing impairment often triggers emotional distress, confusion, and a pressing need for information to guide decision-making (Young et al., 2006). In many cases, parents lack sufficient understanding of the communication modalities available, their philosophical underpinnings, and the implications for their child's long-term development.

The field of deaf education has historically been shaped by debate and controversy, particularly between oralist and manualist approaches. These debates concern not only *how* children should be taught, but also *where* they should be educated and *what* constitutes optimal linguistic access (Moores, 1991). Oralist approaches emphasize speech, listening skills, and auditory training, while manualist approaches prioritize sign language as a fully accessible visual language. Hybrid models, such as Total Communication, attempt to integrate multiple

modalities, whereas Educational Bilingualism (bimodal–bilingual approaches) advocate for the use of sign language as a first language (L1) and spoken/written language as a second language (L2) (McILROY, 2017).

These divergent approaches create a complex decision landscape for parents, who must navigate inconsistent information, professional biases, cultural values, and their own expectations for their child's future (Lederberg et al., 2013).

Communication Options for Children with Hearing Impairment

Several communication approaches are available for children with hearing impairment, each with distinct philosophies and implementation requirements:

- **Aural–Oral Method** emphasizes residual hearing, speech production, and lip reading (Dictionary.com, 2014).
- **Total Communication (TC)** combines speech, sign, and other visual cues to maximize communicative access (Dictionary.com, 2014).
- **Educational Bilingualism** positions sign language as the natural first language and spoken/written language as the second (Gregory, 1997).
- **Cued Speech**, a phonemically based visual system, supports visual differentiation of speech sounds (Fleetwood, 1995).

Understanding these approaches requires professional guidance and systematic parent education—yet research indicates that parents often lack comprehensive knowledge of such options (DesJardin & Eisenberg, 2007).

Role of Early Intervention and Informed Choice

Early intervention programs emphasize informed choice, a process through which parents receive unbiased information, develop knowledge, and make voluntary decisions aligned with their values and the child's needs (Medical Dictionary, 2014). However, when parents lack accurate information, they may rely heavily on non-professional influences, such as extended family members, other parents, or community beliefs. Such influences may contribute to misinformed or non-optimal decisions, further highlighting the need for structured counselling and parental empowerment.

Need for the Study

There is an urgent need for research that evaluates the extent of parental awareness about communication options for children with hearing impairment. Parents play a pivotal role in early intervention and educational planning, yet many may have limited exposure to or understanding of available communication approaches. Findings from this study are expected to provide insights into current awareness levels among parents, identify gaps in knowledge and decision-support, and offer actionable recommendations for school administrators, early intervention professionals, and policymakers to strengthen parental empowerment and informed choice in communication planning. Given the increasing emphasis on early identification, intervention, and family-centered practices, such a study is both timely and essential.

Aim of the Study

The primary aim of the present study is to examine parents' awareness of available communication options for children with hearing impairment and to identify the factors influencing parental decision-making regarding the selection of an appropriate communication modality for their child.

Research Questions

1. To what extent are parents aware of the communication options available for children who are deaf or hard of hearing?

2. What factors influence parents' decision-making when selecting a communication option for their child with hearing impairment?

METHODOLOGY

Research Design

This study adopted a descriptive survey design, which is well-suited for examining existing levels of awareness, attitudes, and decision-making processes within a defined population. Descriptive surveys are commonly used in educational and social science research to gather factual information, identify patterns, and capture perceptions regarding a specific phenomenon. In this study, the design allowed the researcher to systematically document parents' awareness of communication options for children with hearing impairment and the factors influencing their choices.

Participants

A total of 30 parents of children with hearing impairment participated in the study. The participants were recruited from multiple educational and clinical settings within the suburban regions of Mumbai, including:

- Special schools for children with hearing impairment
- Inclusive schools
- Early identification and intervention centers
- Hearing and speech clinics

The sample included parents of children representing a range of ages, degrees of hearing loss (mild to profound), and communication needs. This diversity helped capture a broad understanding of parental awareness across different contexts.

Sampling Method

The study employed a **convenience sampling technique**, selected primarily due to its practicality and accessibility. This approach allowed the researcher to collect data from parents who were readily available and willing to participate within the time constraints of the study. Although convenience sampling may limit the generalizability of the findings, it is widely accepted in exploratory research aimed at identifying trends, establishing baseline awareness levels, and generating hypotheses for future, more rigorous investigations.

Instrument

Data collection was conducted using a **structured questionnaire** designed by the researcher. The instrument was developed based on existing literature, communication frameworks, and expert input. It comprised four major sections:

1. Demographic Information

This section gathered essential background details, including:

- Parent's age, gender, and educational qualifications
- Socioeconomic status
- Child's age, type of hearing impairment, and degree of hearing loss

These variables were included to explore potential associations between demographic characteristics and awareness levels.

2. Awareness of Communication Options

This section assessed parents' knowledge and understanding of four commonly used communication approaches for children with hearing impairment:

- Aural–oral method
- Total communication
- Educational bilingualism
- Cued speech

Items evaluated parents' comprehension of the **philosophy**, **key features**, **practical applications**, and **expected outcomes** associated with each communication option.

3. Decision-Making Factors

This section measured the influence of various factors that may shape parental decision-making, including:

- Medical or professional advice
- Family values and preferences
- Cultural or linguistic identity
- School or institutional recommendations
- Availability of local resources and services
- Perceived effectiveness or suitability of communication modes

Responses provided insights into the complexities of parental choice.

4. Open-Ended Questions

To enrich the quantitative findings, parents were asked to elaborate on:

- Challenges faced during decision-making
- Concerns regarding communication options
- Personal experiences that shaped their final choice

These responses offered qualitative depth and context to the data.

Validity

To ensure **content validity**, the questionnaire was reviewed by specialists in the fields of audiology, deaf education, and special education. Their feedback was incorporated to refine item clarity, relevance, and comprehensiveness.

Procedure

Distribution

The questionnaire was distributed using two methods:

1. **Email**, to parents whose contact information was available through schools and intervention centers.
2. **In-person distribution**, facilitated through school administrators and early intervention service providers.

This dual approach ensured greater reach and timely data collection.

Response Collection

All **30 questionnaires were completed and returned**, resulting in a **100% response rate**. Parents were provided sufficient time to complete the instrument, ensuring thoughtful and accurate responses.

Anonymity and Confidentiality

To uphold ethical research standards, the study maintained strict anonymity. No identifying information was collected, and all responses were treated with complete confidentiality. Participants were informed that:

- Participation was voluntary
- They could withdraw at any time
- Responses would be used exclusively for academic research purposes

Ethical Considerations

The study adhered to ethical guidelines for research involving human participants. Prior to data collection, the purpose of the study was explained, and **informed consent** was obtained from all participants. The research posed **no physical, emotional, or psychological risk**, and confidentiality was rigorously maintained. Data were stored securely and used only for the intended research objectives.

RESULTS

The purpose of this study was to examine (a) parents' awareness regarding communication options available for children with hearing impairment and (b) the factors influencing their decision in selecting a communication method or school.

Awareness of Communication Options

All participating parents (100%) reported that they were aware of communication options available for children with hearing impairment. However, when asked to identify or enumerate the options, **none of the parents** could correctly specify how many communication options exist. A majority of the parents (**86.66%**) demonstrated only **partial awareness**, indicating incomplete or limited knowledge about the philosophical and instructional differences among the major communication approaches.

Table 1: Awareness Level of Parents Regarding Communication Options (N = 30)

Awareness Category	Frequency	Percentage
Fully aware	0	0%
Partially aware	26	86.66%
Unaware	4	13.33%

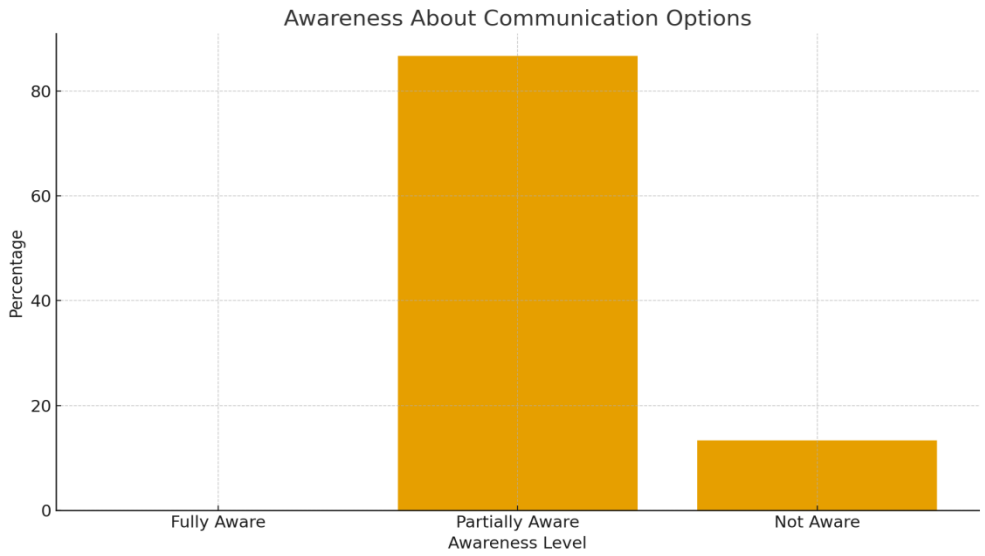


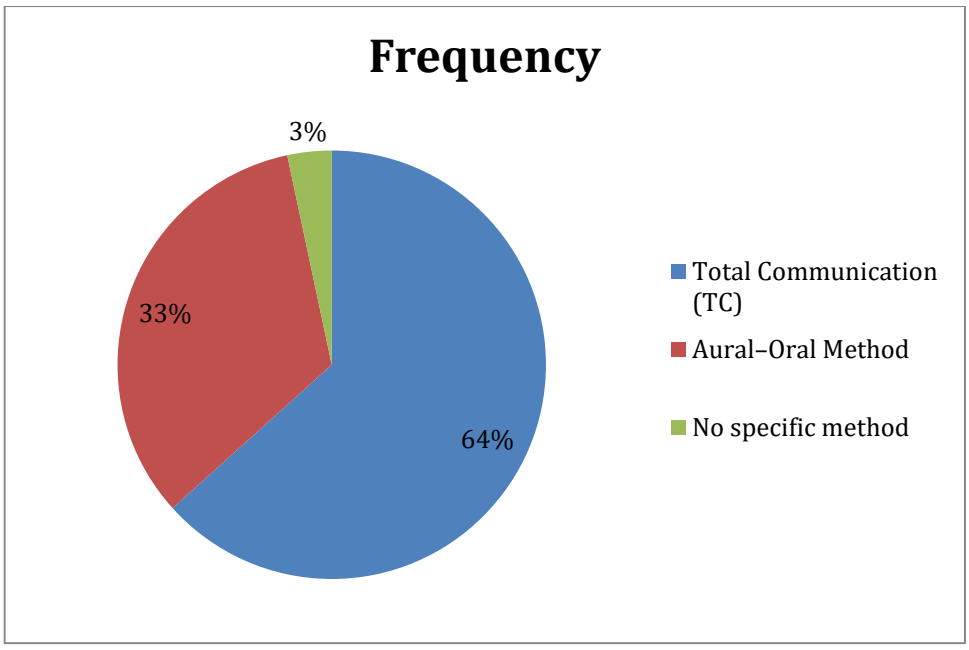
Figure 1. Awareness About Communication Options

Exposure of Children to Communication Methods

Parents were asked which communication method their child had been predominantly exposed to. As shown in Table 2, the majority (**63.33%**) reported exposure to **Total Communication (TC)**, whereas **33.33%** indicated exposure to the **Aural–Oral method**. Only **3.33%** reported no structured exposure to any communication method.

Table 2: Child's Exposure to Communication Methods

Communication Method	Frequency	Percentage
Total Communication (TC)	19	63.33%
Aural–Oral Method	10	33.33%
No specific method	1	3.33%



Understanding of Aural–Oral and Total Communication Approaches

When asked whether the **aural–oral method allows the use of gestures/signs**, **86.66%** incorrectly responded "Yes," suggesting a misunderstanding of the method. Only **13.33%** accurately indicated that signs and gestures are *not* used in the aural–oral approach.

Similarly, **66.66%** of parents reported having "no idea" whether the **Total Communication** approach includes signing and gestures. Only **33.33%** correctly identified that signs/gestures *are* allowed in Total Communication.

These results indicate substantial conceptual confusion among parents regarding the characteristics of communication approaches.

Table 3 Parents' Understanding of Communication Approaches

Question	Correct Response	% Correct	% Incorrect /No Idea
Does aural–oral method allow signs/gestures?	No	13.33%	86.66%
Does Total Communication allow signs/gestures?	Yes	33.33%	66.66%

Factors Influencing School or Method Selection

Parents were asked whether they selected their child's school because it offered the communication option of their choice. Only **30%** answered "Yes." The remaining **70%** reported that they had **no prior knowledge** of the school's communication philosophy and enrolled their child based on recommendations/referrals.

Table 4: Factors Influencing Parents' Selection of School or Communication Option

Influencing Factor	Percentage
School offered preferred communication option	30%
Referred by another parent	6.66%
Referred by special educator	3.33%
Referred by government institute	10%
Referred by early intervention center	6.66%
Own decision (independent choice)	3.33%
Community recommendation	26.66%
Decision made by head of the family	10%
Doctor's recommendation	13.33%
School recommendation	6.66%
Referred by social worker	3.33%
Own choice believing school is better	6.66%

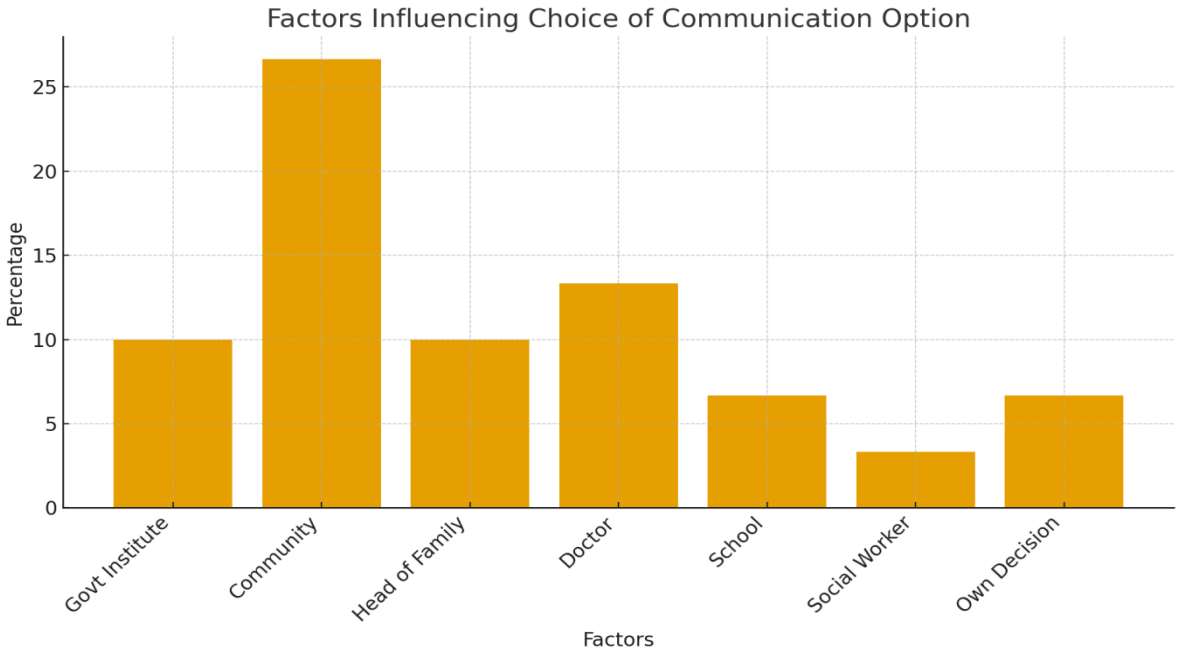


Figure 3. Factors Influencing Parents' Choice of Communication Option

Preferred Mode of Communication for the Child

Parents were also asked how they would prefer their child to communicate. A majority (**70%**) expressed a preference for **oral communication**, whereas **30%** supported a flexible or multimodal communication approach including sign language, gestures, lip reading, or mixed methods.

Table 5: Parents' Preferred Communication Mode for Their Child

Preferred Mode	**Percentage**
Oral communication only	70%
Multimodal communication (signs, gestures, lip-read, oral)	30%

DISCUSSION

The present study examined (a) the extent to which parents of children with hearing impairment are aware of various communication options, and (b) the factors that influence their decision-making while selecting communication methods and school placements. Findings revealed several important patterns that align with previous research and highlight persistent gaps in parental knowledge and systemic support.

Awareness of Communication Options

Although all parents reported being "aware" of communication options, deeper analysis demonstrated that this awareness was largely superficial. A substantial majority (86.66%) displayed only partial knowledge, and no parent was able to correctly identify the total number of available communication options. This trend reflects similar findings in international research, which suggests that parents often lack comprehensive, unbiased information regarding communication philosophies for deaf children (Lederberg et al., 2022; Spencer & Marschark, 2010).

The misconceptions identified in the study—particularly regarding the aural–oral and Total Communication approaches—are noteworthy. For example, most parents incorrectly believed that the aural–oral method includes signing, indicating significant conceptual confusion. Previous studies highlight that such misunderstandings typically arise from inconsistent counselling, limited access to specialized information, and parents' reliance on informal networks rather than professional sources (Obondo, 2008; Knoors & Marschark, 2015).

Exposure to Communication Methods

Most children in the sample were exposed to Total Communication (63.33%), with fewer exposed to the aural–oral method. This distribution may reflect the availability of services in the Mumbai suburban region, where many schools and intervention centers adopt Total Communication as a flexible and accessible approach. However, the high percentage of parents who were unaware of the core features of both methods indicates that method selection may not have been based on informed choice but rather on default practices of institutions.

Decision-Making Factors

Only 30% of parents selected their child's school based on its communication philosophy. The remaining 70% relied on external referrals—including community members, doctors, government institutions, and social workers—which suggests that decisions were influenced more by social networks than by informed evaluation. This finding is consistent with literature indicating that families of children with hearing impairment often experience significant pressure, confusion, and vulnerability at the time of diagnosis, leading them to follow recommendations without fully understanding the implications (Young et al., 2005)

Sociocultural factors, such as family hierarchy and community influence, played a major role. A notable proportion (10%) reported that the head of the family made the decision, reflecting cultural norms in many Indian households regarding parental authority and decision-making. Additionally, several parents attributed their choices to limited access, socioeconomic constraints, and lack of available schooling options in their locality. Such structural barriers have been widely documented as determinants of educational placement among children with hearing impairment (Marschark & Hauser, 2012).

Parental Preferences for Communication Mode

Despite limited understanding of communication options, 70% of parents expressed a preference for oral communication for their child. This preference aligns with broader parental aspirations for mainstream inclusion, social integration, and perceived greater opportunities for children who use spoken language (Luckner & Howell, 2002). However, the mismatch between parental preferences and their actual comprehension of communication methods underscores the need for enhanced counselling, transparent communication from schools, and standardized informational support systems.

Interpretation in Light of Existing Literature

The findings reinforce the argument that **informed choice**, as conceptualized by Gregory (1997) and the requires accurate information, comprehension, and the ability to deliberate. The current study indicates that many parents lacked the essential components required for informed decision-making.

International frameworks for early intervention emphasize that parents must receive balanced, linguistically diverse, and unbiased information to make decisions that align with their values, cultural identity, and their child's developmental needs (Joint Committee on Infant Hearing, 2013). The present study suggests that such frameworks are not being fully implemented in the research context.

Implications of the Study

Implications for Practice

Need for Systematic Parent Counselling: Schools and intervention centers must offer structured orientation programs to explain communication philosophies, their benefits and limitations, and their developmental implications.

1. Improved Transparency from Educational Institutions: Schools should clearly communicate their primary communication mode before admission to enable informed school choice.
2. Strengthening Early Intervention Systems: Early identification centers should adopt standardized protocols for parent education, ensuring that families receive accurate and comprehensive information at diagnosis.
3. Promotion of Family-Centered Decision-Making: Family literacy regarding communication options must be enhanced to prevent unilateral decision-making by extended family members who may not understand developmental implications.

Implications for Research

1. Future research should examine differences in awareness between rural and urban parents to understand geographic disparities.
2. Studies can compare awareness among educated and uneducated parents to identify specific knowledge gaps.
3. Larger, more representative samples should be used to increase generalizability.
4. Qualitative studies exploring parental emotions, values, and cultural influences may provide deeper insight into decision-making processes.

CONCLUSION

The study aimed to explore parental awareness of communication options for children with hearing impairment and the factors influencing communication-related decisions. Results reveal that although parents believe they are aware, their knowledge is largely incomplete and characterized by significant misconceptions. Decision-making is heavily influenced by external referrals, socio-cultural pressures, and systemic constraints rather than informed, autonomous choice.

Despite these limitations, parents overwhelmingly aspire for their children to communicate orally, reflecting broader societal expectations and hopes for integration. The findings highlight the urgent need for systematic, unbiased, and accessible information dissemination to parents—starting from diagnosis and continuing through early intervention and schooling.

Ensuring that parents make informed choices is crucial, as communication decisions have long-term implications for language development, academic achievement, social integration, and identity formation of children with hearing impairment. The study underscores the collective responsibility of schools, clinicians, policymakers, and researchers to build systems that empower families and promote equitable opportunities for all children.

REFERENCE

1. DesJardin, J. L., & Eisenberg, L. S. (2007). Maternal contributions: Supporting language development in young children with cochlear implants. *Ear and Hearing*, *28*(4), 456–469. https://doi.org/10.1097/AUD.0b013e31806dc1ab
2. Dictionary.com. (2014). Aural–oral method. In Dictionary.com Unabridged. Retrieved from https://www.dictionary.com

3. Dictionary.com. (2014). Total communication. In Dictionary.com Unabridged. Retrieved from https://www.dictionary.com
4. Fleetwood, B. (1995). Cued Speech and the development of spoken language skills. National Cued Speech Association.
5. Gregory, S. (1997). Education: Developing bilingualism. In S. Gregory, Deaf children and their families (pp. 111–128). Cambridge University Press.
6. Johnson, R. C. (2001). Research at Gallaudet. Retrieved October, 25, 2018.
7. Knoors, H., & Marschark, M. (Eds.). (2015). Educating deaf learners: Creating a global evidence base. Oxford University Press.
8. Lederberg, A. R., Easterbrooks, S., Branum-Martin, L., Burke, V., & Tucci, S. (2025). A Randomized Controlled Trial of Foundations for Literacy With Children Who Are Deaf or Hard of Hearing. Scientific Studies of Reading, 1-22.
9. Lederberg, A. R., Schick, B., & Spencer, P. E. (2013). Language and literacy development of deaf and hard-of-hearing children: successes and challenges. Developmental psychology, 49(1), 15.
10. Luckner, J. L., & Howell, J. (2002). Suggestions for preparing itinerant teachers: A qualitative analysis. American Annals of the Deaf, 147(3), 54-61.
11. Manolson, A. (1975). It Takes Two to Talk: A Parent's Guide to Helping Children Communicate. Toronto, Ontario: The Hanen Centre.
12. Marschark, M., & Hauser, P. C. (2012). How deaf children learn: What parents and teachers need to know. OUP USA.
13. McILROY, G. W. (2017). The implementation of South African Sign Language (SASL) and Sign Bilingualism in a school for the Deaf interpreted through the identity metaphors used by school leadership (SMT) and teachers (Doctoral dissertation, University of the Witwatersrand, Faculty of Humanities, School of Education).
14. Medical Dictionary. (2014). Informed choice. In Medical Dictionary Online. Retrieved from https://medical-dictionary.thefreedictionary.com
15. Moores, D. F. (1991). The great debates: Where, how, and what to teach deaf children. American Annals of the Deaf, 136(1), 35-37.
16. Obondo, M. A. (2008). Bilingual education in Africa: An overview. Encyclopedia of language and education, 1606-1616.
17. Spencer, P. E., & Marschark, M. (2010). Evidence-based practice in educating deaf and hard-of-hearing students. Oxford University Press.
18. Young, J. E., Klosko, J. S., & Weishaar, M. E. (2006). Schema therapy: A practitioner's guide. guilford press.