1 A RATIONALE FOR THE PREVENTION OF COMMUNICATION DISORDERS IN A SOUTH AFRICAN COMMUNITY

The aim of the chapter is to provide the rationale for this study by emphasising the need for specific areas of service delivery. This discussion highlights the need for effective prevention strategies in South Africa and aims to motivate the need for the provision of culturally sensitive and family-centred prevention programmes. These concepts serve as the underpinnings for the focus of this study. Outlines of the chapters that are included in this study as well as relevant definitions are provided.

1.1 INTRODUCTION

Theories on communication development reveal the complexity involved in the acquisition of communication skills (Owens, 2001). Communication development in infants is influenced by a multitude of factors which impact upon the ability of infants to interact with the world around them (Rossetti, 1996). Factors such as the role of the caregivers, caregiver-infant interactions, the social environment, the physical environment as well as the emergence of cognitive skills have been recognised for decades as important influences on infant communication development (Skinner, 1957; Chomsky, 1965; Bloom, 1970; Vygotsky, 1978). The acknowledgement of the complex nature of communication development, and therefore the complexity of communication disorders, necessitates intervention which considers the infant in totality.

Recent literature has highlighted further factors which impact upon the infant in totality and, consequently, also influence communication development. Considerations such as culture and cultural beliefs, multi-lingual language environments, parenting styles, the changing roles of parents within modern families as well as the impact of day care have an important influence on communication development (Louw & Avenant, 2002; Madding, 2000; Zhang & Bennett, 2001; van Rensburg, 2002; Klass, 1999). The provision of speech-language therapy to those

individuals who have communication disorders is, consequently, becoming increasingly demanding and complex.

Besides the knowledge that communication development does not occur in isolation and the need to consider the impact of other areas of development, there is now also an increasing awareness that the child with a communication disorder cannot be treated without first recognising the relationship between communication development and culture (Louw & Avenant, 2002). Speech-language therapists are required to respect the needs of families and to recognise parents as key decision-makers in the process of service delivery (Scheffner Hammer, 1998; Rossetti, 2001), whilst acknowledging that families form part of communities with specific cultural identities and needs (Madding, 2000). This is of particular relevance to South Africa which is characterised by a multi-cultural, multi-lingual population (Pickering, McAllister, Hagler, Whitehill, Penn, Robertson, & McCready, 1998; Fair & Louw, 1999), popularly described as the rainbow nation. Speech-language therapists therefore need to provide effective intervention which is applicable to individual cultural environments.

The study of communication development and the provision of speech-language therapy in South Africa is, furthermore, also impacted by the prevalence of poverty and HIV/AIDS (Kritzinger, 2000; Ebersöhn & Eloff, 2002). These factors are expected to affect children's social and physical environments (Ebersöhn & Eloff, 2002) which have been highlighted as important areas of influence in theories of communication development (Bloom, 1970; Vygotsky, 1978). Speech-language therapists who aim to provide intervention to those with communication disorders must, therefore, adapt their roles and address the issues which impact upon communication development in South Africa. The role of speech-language therapists in South Africa consequently reflects the need to address all factors which may impact upon the acquisition of communication skills.

The changing role of speech-language therapists in the study of communication development and the provision of intervention therefore mirrors the changing world in which infants acquire communication skills. Although there are certain commonalities

in the acquisition of language (Taylor & Clarke, 1994), the importance of cultural-specific knowledge which provides insight into factors which may influence communication development and the prevalence of communication disorders within specific communities, is increasingly important (Madding, 2000; WHO, 1996). Speech-language therapists are increasingly aware of the need to adapt their roles in order to meet the ever-changing needs of specific communities.

Considering the needs of multi-lingual, multi-cultural communities within South Africa there is an increasing demand for the ***empowerment of individual families and communities*** (Mc Conkey, 2002b), the ***provision of culturally appropriate services*** (Madding, 2000), as well as the ***prevention of communication disorders*** (Gerber, 1998). These three topics are discussed in greater detail in this chapter.

1.2 THE NEED FOR FAMILY-CENTRED PREVENTION PRACTICES

Speech-language therapists are increasingly focused on entire families rather than concerning themselves only with individual children (Butera, Matuga & Riley, 1999). The empowerment of families to actively participate in decision-making and become central figures in intervention has become one of the basic tenets of early communication intervention (ECI) service delivery (ASHA, 1991; Billeaud, 1998; Madding, 2000; Rossetti, 2001). This approach is described as being "consumer driven" as the needs and priorities of the family determine the services provided (Dunst, Johanson, Trivette & Hamby, 1991). Family-centred services empower families with knowledge and skills while focusing on family strengths and capabilities (Zhang & Bennett, 2001).

Family-centred practices operate on the assumptions that intervention with the family, family-involvement and family-centred support will influence child outcomes, that the family should be involved in decision-making and that attention should be given to family priorities (Zhang & Bennett, 2001). The principle of involving parents in the decision-making process indicates respect for family values, beliefs and priorities (Madding, 2000; Billeaud, 1998) and is in line with the basic tenets of adult learning which highlight the need for adults to be involved in the decision making process

regarding decisions on which goals to strive for and how goals are to be achieved (Carlson, 1997).

This is not only important during intervention but is equally appropriate to programmes that aim to prevent communication disorders, as parents remain key figures in their children's lives and need to be central to any decisions that are made. Parents should therefore be key figures in the prevention of communication disorders (Gerber, 1998).

In order for speech-language therapists to apply the principle of focusing on the needs and priorities of families they need to be sensitive to the issues with which families are faced on a daily basis (ASHA, 1991). A significant source of concern to many families, and an important factor for consideration in family-centred practice, is the daily childcare arrangements and the involvement of childcare staff in the family-centred process of service delivery (Zhang & Bennett, 2001; Klass, 1999). A large proportion of mothers now work outside the home. International research has indicated that between 50% and 58% of mothers of infants and 69% of mothers of pre-schoolers work outside of the home (Flores Hernandez, Morales, Cuevas & Gallardo, 1999; Klass, 1999).

This concurs with trends in South African families as research which investigated the joint book-reading practices of mothers and their young children (0-2 years) indicated that only 40% of the mothers were at home while 60% were working (Kritzinger & Louw, 1997). This means that increasing numbers of infants in South Africa are being cared for by somebody other than the mother (van Rensburg, 2002).

This has important implications for intervention and prevention programmes that target this population. Because the family situation is pivotal in the planning and implementation of family-centred prevention services, the child or parents cannot be targeted in isolation and caregivers need to be educated and informed (van Rensburg, 2002). In the case of working mothers, the other primary caregivers such as day care staff need to be included in intervention and prevention programmes (Fouché & Naudé, 1999). Properly trained day care staff can make an important difference to the

quality of stimulation provided in day care (van Rensburg, 2002). This need is reflected in South African prevention programmes in Pretoria West, Pretoria central business district and the Hammanskraal area which provide training to day care staff (Naudé, Meyer & Fauché, 1999).

The development of a sensitivity for family needs requires that all information on the child should be seen in the light of the social–cultural environment of the family (Scheffner Hammer, 1998). This means focusing not only on the needs and priorities of families and the concerns that they face on a daily basis but also looking at important people in the child's life and the community within which they function. From an ecological perspective families are viewed as part of a community and cultural issues consequently play an important part in family life (Hughes, 1992). Families should, therefore, be viewed within the broader context of the culture and community within which they live.

1.3 THE NEED FOR CULTURALLY SENSITIVE PREVENTION PRACTICES IN SOUTH AFRICA

There is a continuum of communities in the South African context that range from the developing to the developed (Pickering *et al.*, 1998). The South African population is comprised of 76,7% Black Africans who represent a range of linguistic and cultural groups, 12,4% of Asian descent or of mixed racial heritage and 10,9% of European descent (Census, 1996).

There is a recognised relationship between culture and language (Louw & Avenant, 2002). The development of culture and the acquisition of language have a reciprocal influence on one another (Crago, 1992; Battle, 1998). Professionals who aim to provide intervention or prevent communication disorders must, therefore, be sensitive to the effects of culture as the success of a programme reflects the measure of cultural sensitivity which it incorporates (Madding, 2000). The issue of cultural sensitivity in the treatment and prevention of communication disorders is vital in a multicultural society such as South Africa.

Family-centred programmes are most successful when professionals understand the cultural values and views of the family (Bennett, Zhang & Hojnar, 1998). Professionals not only need to focus on the needs of parents and the active involvement of parents in service delivery but professionals must also be sensitive to cultural and linguistic issues which influence the family (Hughes, 1992; Louw & Avenant, 2002). This also concurs with guidelines on hearing screening which have been issued to speech-language therapists and audiologists by the Health Professions Council of South Africa (Professional Board for Speech, Language and Hearing Professions, 2002).

Parents within each of the population groups and communities in South Africa have specific needs regarding the type and format of information which they require in order to meet the needs of their children (Fetterman, 1998). These parental needs must be identified and met by professionals serving the community. With the current recognition of the cultural and linguistic diversity in South Africa the focus has shifted from studying individual children's communication development and disorders to addressing the needs of individual communities (Fair & Louw, 1999; Pickering, *et al.*, 1998). Communities can, however, also be described in terms of geographical location (Fetterman, 1998). Even though two different areas share the same ethnicity or language does not mean they have similar needs. Factors such as socio-economics play an important part in delineating a community (Fetterman, 1998). It has been found that not all geographical areas have the same needs and services which are targeted at a specific area are more likely to be in accordance with and effective in meeting the needs of the community (Taylor, Carran, Baglin, Von Rembow & Fleming, 2000). Consequently, speech-language therapy services which target specific communities are more likely to meet the needs of those communities.

Considering the large number of South African infants who are at risk of developing communication disorders, and in recognition of the many different communities in the South African context, the need for prevention tools that are developed to meet the needs of specific communities, becomes apparent.

1.4 THE PREVENTION OF COMMUNICATION DISORDERS

The prevention of communication disorders is an important role which all speech-language therapists have been called to fulfil (ASHA, 1991). The importance of the prevention of communication disorders becomes apparent when reflecting upon the impact that communication development has on other areas of development.

Infants develop in totality and development of one domain influences the development of many other domains (Klass, 1999; Hess, Dohrman & Huneck, 1997). The development of communication skills influence, and are influenced, by other areas of development such as cognitive, socio-emotional and physical development (Kritzinger, Louw & Hugo, 1995; Klass, 1999). Consequently there is a reciprocal influence in the development of different skill areas. Research has indicated a correlation between communication development and literacy development, social and emotional development, social cognitive processing, behavioural difficulties and academic success (Lindsay, Dockrell, Letchford & Mackie, 2002; Hess *et al.*, 1997; Lewis, Freebairn & Taylor, 2000; Lockwood, 1994; Scarborough, 1990; Snowling, Adams, Bishop & Stothard, 2001). Early communication development also impacts on eventual vocational achievements (Hess *et al.*, 1997).

A communication disorder or a delay in communication development will impact negatively on all of the before-mentioned areas of development, resulting in long term effects in the child as a totality (Lindsay *et al.*, 2002; Hess *et al.*, 1997). The prevention of communication disorders is, therefore, crucial to the promotion of optimal functioning and wellness in many areas of development (ASHA, 1991), which is in line with the basic tenets of the position statement for the prevention of disabilities in South Africa (White Paper on Integrated National Disability Strategy, 1997).

1.5 THE RATIONALE FOR THIS STUDY

Communication development in the early years is closely linked to and dependent upon the input and stimulation received from parents and other primary caregivers (Karrass, Braungart-Rieker, Mullins & Burke Lefever, 2002; Hess *et al.*, 1997; High,

LaGrasse, Becker, Ahlgren & Gardner, 2000; Markus, Mundy, Morales, Delgado & Yale, 2000; Haynes, 1998). Disturbed interactions between a parent and an infant is one of the factors which may actually place an infant *at risk for a communication disorder* (Rossetti, 2001; Widerstrom, Mowder & Sandall, 1997; Hess *et al.*, 1997). The facilitation of optimal communication development can, consequently, not ignore the important role that parents and other primary caregivers play in development. Any prevention efforts that aim to promote communication development should, therefore, focus on the role of the parent or primary caregiver.

In spite of the pivotal role of parents, not all parents may be equally equipped to facilitate optimal communication development. Research relating to programmes that focus on promoting optimal communication development in children with disabilities has indicated that parents consistently (throughout the phases of the research) reported a need for more information on development (Baxter & Kahn, 1999). Other studies have supported this need for more information to be provided to parents (Kritzinger & Louw, 2000; Jacobs, 2002). This finding is, however, not limited to parents of children with communication disorders. Similar results have been presented regarding the need for information on development for parents of children who do not have specific disorders. Parents of children who are at-risk for communication disorders, but who do not have an established delay, also desire more information on communication development (Guralnick, 1997).

There is a need to educate *all parents* on communication development and the prevention of communication disorders (Gerber, 1998). Clinical experience in South Africa has indicated that parents are not well informed regarding risk factors, such as the effect of repeated otitis media, on communication development (Hugo & Pottas, 1997). Insufficient parental knowledge on the importance of middle ear functioning could result in an increased risk for communication disorders. Parents who are not knowledgeable are, therefore, placing their children at risk for communication delays. Furthermore a lack of knowledge places parents at a disadvantage as they may experience difficulties in articulating their needs (Bennett *et al.*, 1998). It is therefore important to empower parents by providing culturally appropriate education (Louw & Avenant, 2002).

It is also important to note that parental concerns regarding the development of communication skills in their children have been found to be almost as accurate as most screening tools for communication disorders (Early Intervention Update, 1997; Rescorla & Alley, 2001). If parents are such accurate judges of their children's communication skills then it follows that they would be able to judge their own need for more information on communication development. The need to provide more information to parents who express such a need consequently becomes even more apparent.

It is evident that parents play a central role in the development of early communication skills and must, therefore, be the focus in programmes which aim to prevent communication disorders. However, if parents are to fulfil a central role in the early identification and prevention of communication disorders, they need to be well informed and educated. There is a proven link between parents' levels of knowledge and education and outcomes such as the early identification of delays as well as later reading skills (Lequerica, 1997; Catts, Fey, Zhang & Tomblin, 2001). Professionals need, therefore, to focus on increasing parents' knowledge by acting as parent educators and trainers and promoting public awareness regarding communication development and the influence of risk factors on development (Billeaud, 1998).

1.6 THE RESULTING FOCUS OF THIS STUDY

The ***purpose of this study*** is to develop a tool for communication stimulation in infants which meets the needs of parents and professionals in a specific South African community, thereby contributing to the prevention of communication disorders in young children in South Africa. This raises the following research question: Can a tool be developed for communication stimulation in infants which meets the needs of parents and professionals in a specific South African community?

The resulting ***aim of the study*** is to meet the challenge of developing a family-centred, culturally sensitive prevention programme in South Africa. The study proposes to achieve this by exploring the need for a primary prevention tool for

communication development and stimulation in infants in a South African community, and developing a tool that will meet the identified needs.

A tool that is based on sound research and is developed for a specific community has the potential to be of great use in future. Once a validated tool for communication development has been developed through in-depth research, certain adaptations can be made to make it applicable to a variety of South African communities and cultures. Furthermore, the methodology of this study outlines effective procedures for identifying and meeting the needs of individual communities. This provides researchers and clinicians with the protocol for meeting the needs of other communities within South Africa.

1.7 CHAPTER OUTLINES

The following chapters are included in order to reach the above-mentioned objectives of this study:

CHAPTER ONE: A RATIONALE FOR THE PREVENTION OF COMMUNICATION DISORDERS IN A SOUTH AFRICAN COMMUNITY

The first chapter provides the rationale for this study by highlighting the necessity for effective prevention strategies in South Africa, emphasising the need for the provision of culturally sensitive and family-centred services to families with young children at risk for communication disorders.

CHAPTER TWO: COMMUNICATION DEVELOPMENT IN INFANTS

Chapter Two aims to provide a critical review of relevant literature, discussing different perspectives on infant communication development and emphasising important areas of communication development as well as factors that influence it. Issues of particular relevance to the South African context are highlighted and placed within a framework, and suggestions are made for the facilitation of optimal communication development in the South African context.

CHAPTER THREE: THE PREVENTION OF COMMUNICATION DISORDERS

Chapter Three proffers a literature review on the prevention of communication disorders in infants. The link between identification and prevention as well as the role of factors relating to risks for and resilience against the development of communication disorders are emphasised. The influence of legislation on the prevention of communication disorders is discussed and the need for family-centred, culturally sensitive prevention programmes which address the unique needs of the range of South African communities is emphasised. Finally this chapter highlights the value of adult education as a primary prevention strategy.

CHAPTER FOUR: METHODOLOGY

Chapter Four describes the methodology that was used to plan and execute the research. The chapter provides information on the aims, design, participants, materials and apparatus as well as the procedures for data collection and the analysis which allows for the critical review and duplication of the research.

CHAPTER FIVE: RESULTS AND DISCUSSION

In Chapter Five the results of the study are described, displayed by means of graphs and tables, and interpreted. The results are discussed according to the three phases of the research, namely Phase One: the needs analysis, Phase Two: the compilation of the stimulation tool and Phase Three: the tool validation.

CHAPTER SIX: CONCLUSION

Based on the results that are discussed in the results, Chapter Six draws conclusions and highlights the implications of this study. Recommendations are made for future research as well as clinical practice and the researcher's final comments are included in this chapter.

1.8 LIST OF ABREVIATIONS

This section provides explanations for abbreviations which are used in the text.

ASHA: American Speech and Hearing Association

ECI: Early Communication Intervention

FAS: Fetal Alcohol Syndrome

HPCSA: Health Professions Council of South Africa

MRC: Medical Research Council

SASLHA: South African Speech, Language and Hearing Association

SES: Socio-Economic Status

WHO: World Health Organisation

1.9 DEFINITION OF TERMS

This section is used to define important terminology which is employed in this study. The glossary is not exhaustive, but serves to clarify important terms which are referred to in the text.

- *Communication*: Communication is viewed as the active process that involves encoding, transmitting and decoding an intended message in order to exchange information and ideas, needs and desires (Owens, 2001). Communication also implies that participants each have a turn to take or a role to fill as initiator or responder (Warren & Reichle, 1992). Infants can take their turn in the exchange by making use of precursors to speech. Non-verbal contributions such as vocalisations or even non-vocal indications of participation such as facial expressions and gestures can indicate that an infant is actively participating (Rossetti, 2001). During communication infants use these communication functions to request actions and to attract attention (Owens, 2001). In this study communication will be defined as the active process of exchanging information, including both verbal and non-verbal exchanges.

- *The Development of a Tool for the Stimulation of Communication Skills:* As the title suggests, this study looks at the stimulation of communication skills in infants. For the purposes of this study the *stimulation of communication skills* refers to the use of certain methods or techniques to facilitate or promote the optimal development of skills such as turn taking, eye contact and joint attention which contribute to the competence of the infant communicator (Owens, 2001; Rossetti, 2001). The *development of a tool* refers to the decisions, steps and procedures which are included in the process of making a tool (Cybercollege, 2002).

- *Prevention*: Prevention is referred to as the eradication of factors which hinder the normal acquisition and development of communication (Gerber, 1998). Prevention efforts occur in different phases namely; primary prevention, secondary prevention and tertiary prevention. Primary prevention is frequently defined as the inhibition or elimination of the onset and development of a communication disorder (ASHA, 1991). Secondary prevention is defined as the early detection and treatment of a communication disorder (ASHA, 1991) and tertiary prevention is defined as attempts at reducing the effects of the disorder by restoring effective functioning (ASHA, 1991). The definition of these terms is supported in the literature (Gerber, 1998) and also accepted in this study.

- *Risk:* Risk can be defined as the potential in infants and toddlers to develop a communication disorder based on the presence of specific risk factors (Rossetti, 1996). Factors which place infants at risk can be defined as biological, environmental or behavioural (ASHA, 1991). Furthermore risk factors are defined as established risks, with expected repercussions on communication development, or factors which place children at risk, which increase the possibility of a communication disorder (Rossetti, 2001). Factors which can place infants at risk are also divided into biological risks and environmental risks (ASHA, 1991). This study focuses on infant communication development and, consequently, risk is defined as the potential in infants to develop a communication disorder (Rossetti, 1996) while risk factors are viewed as any factor which may affect an infant's ability to interact with the world, thereby impeding communication development (Rossetti, 1996).

- *Resilience:* Resilience can be defined as the ability to adapt successfully and function effectively despite the presence of constant stress or adversity or the exposure to prolonged or acute trauma (Klass, 1999). This is a relatively new focus in service provision and thus there is a shortage of definitions describing resilience. The definition provided by Klass (1999) is, however, succinct for this study.

- *Family-centred:* Family-centred is defined as services which focus on meeting the needs and priorities of families by using the professional to assist families in decision making and competency enhancement, while focussing on family strengths and capabilities (ASHA, 1991; Zhang & Bennett, 2001). This definition highlights the underlying principles of family-centred service provision and is supported in the literature (Klass, 1999). Consequently this definition is also accepted in this study.

- *Culture:* Culture is defined as the specific framework of meanings within a population (Hughes, 1992). Alternatively culture can be described as the beliefs, institutions, norms, traditions and values of different groups (Lowenthal, 1996). Cultural groups can be of racial, ethnic, linguistic, religious or social nature (Lowenthal, 1996). Cultural views shape ideas, beliefs, attitudes and behaviours (Madding, 2000). These definitions can be seen as variations of the same theme. Culture will, consequently, be defined as the framework of meanings, beliefs, institutions, norms, traditions or values which shape ideas, beliefs, attitudes and behaviours within communities (Hughes, 1992; Lowenthal, 1996; Madding, 2000).

- *Culturally Sensitive*: Professionals are increasingly being called upon to provide culturally sensitive services. Speech-language therapists need to acknowledge the cultural values and beliefs of communities and understand the role that culture plays in communication development (Bennett, Zhang & Hojnar, 1998; Madding, 2000). Regardless of the dynamics within communities it remains important for speech-language therapists to acknowledge the needs of all communities. This implies that every community deserves to be approached with sensitivity and respect, including those communities which are more affluent, developed and primarily Caucasian.

- *Parents:* In this study parents are defined as those biological, adoptive or step parents who are involved in providing care to their children (Census, 1996). Another broader term which is used in the literature is the term caregivers (Markus *et al.*, 2000; Ligthelm, 2001) Although caregivers may also be used to

refer to parents (Markus *et al.,* 2000) this term can also be used to refer to day care staff or nannies (Ligthelm, 2001). For the purposes of clarity this study will differentiate between the term parents, defined as biological, adoptive or step parents who are involved in providing care to their infants (Census, 1996) and caregivers, referring to all the adults including parents, grandparents and other family members as well as day care staff and nannies who are involved in the infant's life through nurturing and participating in the infant's upbringing.

- *Infants*: Infants are typically children who are not yet talking or walking. Although children differ in their rate of development the average age at which children take their first step and speak their first word is one year (Owens, 2001). Infants are, therefore, between the ages of zero and twelve months.

1.10 CONCLUSION

The limited number of speech-language therapists in South Africa are not able to meet the demand for services which result from the high prevalence of communication disorders. Consequently there is a need for speech-language therapists to become more involved in the prevention of communication disorders. Prevention initiatives in South Africa should, however, reflect the multi-lingual, multi-cultural language learning environment and attempt to determine and meet the needs of specific communities.

1.11 SUMMARY

This chapter explores the need for an increase in the development of tools for the prevention of communication disorders in South Africa that are sensitive to the specific context for which they are developed. Issues relating to family-centred practices as well as cultural sensitivity are of paramount importance in a country which is earmarked by linguistic and cultural diversity. The importance of promoting infant communication development is further supported by international and local legislation which emphasises a focus on maternal and child health.