An Exploration of Audiologist and Patient Communication during Adult Tinnitus Management Sessions in Gauteng, South Africa

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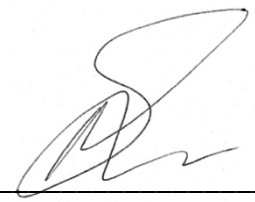
Declaration

I, Micaela Ruth Stonestreet, hereby declare that this research report is my own, unaided work, except where I have explicitly indicated otherwise. I have followed the required conventions in referencing the thoughts and ideas of others. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing. This work is submitted for degree purposes at the University of the Witwatersrand. No part of this research dissertation has previously been submitted to another university on any other occasion for any other degree or examination.



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Abstract

Introduction: Tinnitus is a prevalent symptom of hearing loss and can have a significant impact on quality of life. Recently a large body of research exploring patient-centred care and communication practices in audiology has emerged. However, there remains a paucity of research on communication in tinnitus management consultations.

Aims: The aim of this study was to explore interactions between audiologists and patients in initial adult tinnitus management sessions. The objectives of this study were to observe the communication processes of audiologists in this setting, as well as explore how audiologists negotiate complexities such as patient expectations, emotions, decision-making and goal setting with patients.

Methodology: This study implemented a multimethod exploratory qualitative design incorporating interactional analysis of video recorded audiological initial tinnitus consultations, triangulated with participant interviews. The research was conducted at two hospitals in the public healthcare sector of Gauteng, South Africa. The data comprised of seven video-recorded interactions between five audiologists and seven patients, supplemented with interviews with all 12 participants after the tinnitus consultations. The video-recorded interactions were analysed by means of a hybrid sociolinguistic analysis approach with principles of interactional sociolinguistics and theme-oriented discourse analysis. The video-recorded data was triangulated with the interview data in order to strengthen the analysis and overall confirmability of the study.

Results: The findings of this study highlight six communicative actions that contribute to patient-centred communication in initial adult tinnitus management sessions, namely: agenda setting, breaking from a scripted approach, prioritisation of patient concerns, engaging in emotional and psychosocial topics, shared decision-making and expectation setting. The results of this study show that audiologists are not consistently implementing these

communicative actions within their adult tinnitus management consultations, which has implications for patient-centred care.

Conclusions: The study provides insights into the current communication practices of audiologists in adult tinnitus management sessions in South Africa. The research highlights both the strengths and weaknesses of audiologists in their use of effective communication strategies and patient-centred care, specifically in information exchange, responsiveness to patients' emotions and psychosocial stressors, and shared decision-making. Audiologists need to consider how they can transform the concepts of patient-centred care and effective communication into practical actions within their tinnitus management. These findings can raise awareness among audiologists about their communication practices in tinnitus management consultations. Additionally, they offer insights into practical communication strategies that can be implemented into tinnitus management consultations and provide valuable insights for future researchers, educators and policymakers.

Keywords: Audiologists, tinnitus, audiology, communication, patient-centred care, shared decision-making, quality of life, South Africa

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List of Abbreviations

AAC	Augmentative and Alternative Communication
CBT	Cognitive Behavioural Therapy
ENT	Ear Nose and Throat Specialist
HREC	Human Research Ethics Committee
IS	Interactional Sociolinguistics
R-IE-SDM	Rapport, Information Exchange and Shared Decision-Making
THI	Tinnitus Handicap Inventory
TODA	Theme-Oriented Discourse Analysis
TRT	Tinnitus Retraining Therapy
PCC	Patient-Centred Care
PCCMC	Person-Centred Communication Model of Care

List of Terms

Agenda setting:	Agenda setting refers to introducing and orientating a patient to the role of the audiologist, negotiating the purpose and intended outcome of the consultation from both the audiologist and patient's perspective, and discussing the intended sequence of events that will occur in the consultation.
Cognitive Behavioural Therapy:	CBT is a structured psychotherapy aimed at solving specific problems by modifying dysfunctional behavioural and maladaptive thoughts, attitudes, and beliefs to bring about long-lasting emotional and behavioural changes (Grewal et al., 2014; Phillips & McFerran, 2010).
Confirmability:	Confirmability can be described as the neutrality of the data, without bias in the form of the researcher's particular preferences and viewpoints (Korstjens & Moser, 2018).
Credibility:	Credibility establishes whether the research findings represent accurate information and correct interpretation of the participants' data (Korstjens & Moser 2018).

Dependability:	Dependability refers to the use of appropriate and accepted standards in the research processes (Korstjens & Moser, 2018).
Hawthorne Effect:	The Hawthorne Effect refers to participants altering their behaviour as a result of being observed (James & Vo, 2010).
Informed consent:	Informed consent ensures that participants are provided with clear information regarding what is involved when participating in a particular research project, and in doing so, allowing the participants to decide if they would like to participate (Wiles, 2013).
Interactional Sociolinguistics:	An approach to discourse analysis that examines how people use language when interacting face-to-face and analyses how meaning is interpreted and created during these interactions accounting for intention conveyed in participant communication practices (Crease, & Copland, 2017; Gumperz, 2015).
Non-probability sampling:	Non-probability sampling involves selecting a sample from a population of interest as opposed to randomised selection (Etikan et al., 2016).

Purposive sampling:	Purposive sampling involves a selected group of participants that are typical of the study phenomenon and have experience in the phenomena being studied (Brink et al., 2018).
Patient-centred care:	Patient-centred care is a theoretical framework that encompasses responsiveness to patient's values and needs and allowing patient preferences to guide decision-making in their healthcare (Institute of Medicine, 2001).
Scripted approach:	A scripted approach refers to providing information in a rigid, rote or generic format (Kanji et al., 2021; Watermeyer & Kanji, 2022).
Theme-Oriented Discourse Analysis:	Analytic themes from linguistics and sociology are linked to focal themes relevant to the professional domain, to examine how language shapes professional practice (Roberts & Sarangi, 2005)
Tinnitus	Tinnitus is an auditory perception of sound in the "absence of an external acoustic stimulus" (Esmaili & Renton, 2018, p. 205).

Tinnitus Handicap Inventory	The THI, developed by Newman et al. (1996), evaluates the functional and emotional impact of tinnitus as well as probing catastrophic responses to symptoms of tinnitus by means of a self-assessment questionnaire.
Tinnitus Retraining Therapy	Tinnitus retraining therapy is a tinnitus management strategy that aims to enable habituation of the tinnitus signal through the combined use of informational counselling and sound therapy (Grewal et al., 2014; Phillips & McFerran, 2010).
Transferability	Transferability refers to the applicability of the results of the study to other contexts (Korstjens & Moser, 2018).
Triangulation of data	Triangulation involves utilising multiple research methods within the same framework to gather data and provide a complete view of the results (Holloway & Galvin, 2017).

Chapter 1: Background and Rationale

This study examines interactions between audiologists and adult patients in initial tinnitus management sessions. This study aimed to explore the manner in which audiologists communicate with patients presenting with tinnitus and how they navigate the complexities of information sharing, emotional distress and psychosocial stressors, and decision-making processes. This dissertation describes several communicative actions that were observed across recorded interactions between patients and audiologists in addressing these research aims.

1.1. Motivation

The motivation for this study stems from my experience as a clinical audiologist. Following my undergraduate degree, I worked as a speech pathologist and audiologist at a state hospital. Herein, I had first-hand experience of the complexity of the speech pathologist and audiologist's role in a multilingual setting such as South Africa as my first language was often the third language spoken by my patients. I became acutely aware of the importance of effective communication and information sharing, particularly with regards to non-verbal features of communication and communication-repair.

Following my time spent in the state-run hospital, I gained valuable experience in clinical audiology in private practice developing a special interest in tinnitus management under the guidance of my mentor. Through conversations with colleagues and friends in the field I came to realise that audiologists often demonstrate hesitancy or aversion to offering or engaging in tinnitus management, due to uncertainty regarding how to appropriately manage patients presenting with tinnitus and for fear of managing these patients incorrectly. I subsequently attended an international course on Cognitive Behavioural Therapy (CBT) in

the management of tinnitus, hyperacusis, and misophonia. In using these newly developed skills with patients presenting with tinnitus, I witnessed that patients' responsivity to their tinnitus often improved significantly after one or two sessions which focused on listening to the patient's concerns, showing empathy for their symptoms and the subsequent effect on their lives, and making a shared decision for a plan of action in managing their tinnitus. This improvement in responsivity often occurred prior to any changes to the patient's lifestyle, sound therapy, or specific therapeutic interventions such as CBT practices. This led me to hypothesise that patient-centred care (PCC) and effective communication are pivotal in the management of patients with tinnitus.

There are various models of counselling that have been suggested as best practice in clinical counselling in audiology and there are several evidenced management techniques for tinnitus. Further, there is an emerging body of literature investigating communication practices in audiology through interactional analysis. However, there is little evidence investigating the role of communication in tinnitus management. As such, research into the communication practices of audiologists specifically within tinnitus management sessions could contribute to an emerging body of literature on communication practices within the field of audiology. Thus, providing practicing audiologists and training institutions with valuable information on the importance of communication within tinnitus management as well as real-life examples of effective communication in practice.

1.2. Background

Tinnitus is an auditory perception of sound in the "absence of an external acoustic stimulus" (Esmaili & Renton, 2018, p. 205). For both classification and research purposes, bothersome tinnitus should be distinguished from tinnitus that is not bothersome or impacting on quality of life. The number of people who seek help for their tinnitus is not reflective of its

pervasiveness, suggesting that there are individuals who have tinnitus but do not perceive it as dangerous or bothersome (Henry et al., 2005). Thus, the way in which tinnitus is classified and described has a direct impact on gauging the prevalence of the condition and how it impacts the population.

There is wide variation between prevalence estimates, however the majority of data falls between 10% and 15% of the adult population (Baguley et al., 2013). Most prevalence studies of tinnitus have been conducted in Europe and the United States of America (Baguley et al., 2013). Recently, a tinnitus prevalence study in the United States evaluated 75,764 adult responses to the household-based 2007 National Health Interview Survey and indicated that 9.6% had experienced tinnitus in the past 12 months, with prevalence and severity shown to increase with age and regular exposure to damaging noise levels (Bhatt et al., 2016). Of those that responded to having tinnitus, 56.1% experienced the problem for longer than 5 years, 27.0% had symptoms for longer than 15 years, and 36% had nearly constant tinnitus (Bhatt et al., 2016). Most participants that responded to having tinnitus identified their tinnitus as being a small problem, with 7.2% identifying it as a significant problem in their lives, 41.6% reporting it as a small problem, and 31% of participants reporting that they were not bothered by their tinnitus (Bhatt et al., 2016). Of these participants, 49.4% had discussed their tinnitus with a physician (Bhatt et al, 2016).

Similarly, in a smaller study of 3,267 participants in the USA, Nondahl et al. (2011) found the prevalence of tinnitus to be 10.6% with hearing loss being the most common risk factor. Hearing impairment, often related to ageing or noise exposure, has thus been shown to place individuals at the greatest risk for developing tinnitus (Bhatt et al., 2016; Nondahl et al., 2011). Considering the widespread prevalence of tinnitus, the possibility of increasing severity, and the variable degree to which tinnitus affects an individual's quality of life, it is crucial for healthcare providers to understand the appropriate assessment, management, and

referral protocols. With just under half of those presenting with tinnitus seeking medical assistance, healthcare providers are regularly interacting and engaging with their patients on this topic thus underscoring the importance of effective communication and patient education in this area.

Apart from hearing impairment, tinnitus is known to be associated with a range of psychosocial and emotional comorbidities. These comorbidities are more likely to be present with higher levels of tinnitus-related distress (Zenner et al., 2017). Tinnitus has shown to be closely related to anxiety and depression (Bhatt et al., 2017; Martz et al., 2018). Individuals with bothersome tinnitus have been shown to be more likely to report symptoms of anxiety and depression than those without (McCormack et al., 2015). Through a combination of brain imaging and EEGs, Venneste et al. (2010) demonstrated the involvement of non-auditory structures of the brain in tinnitus with more synchronised activity in the attentional and emotional areas of the brain in highly distressed patients with tinnitus. The study suggests that whilst the perception of tinnitus could be related to activation of the auditory pathways, the distress associated with tinnitus is possibly linked to the emotional and attentional distress networks of the prefrontal cortex and limbic system (Venneste et al., 2010). Furthermore, it indicates the link between severe tinnitus and the associated psychosocial disturbances such as depression and anxiety which contribute to a progressive deterioration in the quality of life of patients with tinnitus (Martinez-Devesa et al., 2010). Tinnitus is thus a common problem that can have a significant impact on quality of life for some, whether related to hearing loss or other comorbid conditions.

The impact that bothersome tinnitus and the associated psychosocial disturbances have on an individual's quality of life is often described as a tinnitus handicap. Most studies on the effect of tinnitus on quality of life are based on existing questionnaires, such as the Tinnitus Handicap Inventory (THI). The THI, developed by Newman et al. (1996), evaluates

the functional and emotional impact of tinnitus as well as probing catastrophic responses to symptoms of tinnitus by means of a self-assessment questionnaire. Watts et al. (2018), however, explored the impact of tinnitus on a large population through an open-ended questionnaire instead of the THI. They highlighted 18 domains of tinnitus-related problems; the most common being a reduced quality of life due to the interference of tinnitus, fear of tinnitus, constant awareness of tinnitus, annoyance, and an inability to concentrate (Watts et al., 2018). Patients with greater levels of acceptance of their tinnitus demonstrate lower levels of tinnitus distress and higher quality of life scores (Riedl et al., 2015).

In conclusion, tinnitus is a common condition that affects a significant portion of the population. Whilst hearing loss is the most common risk factor for tinnitus, it is also closely related to psychosocial comorbidities such as anxiety and depression. Acceptance of tinnitus has been shown to lead to lower levels of tinnitus distress and improved quality of life. It is thus important for audiologists and healthcare providers alike to effectively counsel, educate, and support these patients presenting with tinnitus.

1.3. Rationale

The psychosocial and emotional comorbidities associated with tinnitus require audiologists to address the patient holistically and with a patient-centred approach. Furthermore, they highlight the need for audiologists to address these emotional and psychosocial aspects within tinnitus management modalities. Existing tinnitus research indicates client-centred counselling as highly effective and recommended in tinnitus management, however there is a lack of research and guidelines regarding how this counselling should be implemented.

Despite the prevalence of tinnitus, there remains a paucity of tinnitus specific literature examining either tinnitus assessment or tinnitus management within the South

African context. South Africa represents a challenging context for the provision of hearing healthcare services and tinnitus management in particular that is exacerbated by inadequate linguistic and cultural representation within the field of audiology. Thus, South Africa provides a unique setting for the exploration of communication barriers and facilitators in healthcare interactions. Dawood et al. (2019) reported that 33.7% of surveyed participants identified language barriers as being an area of great concern in tinnitus management. Considering counselling as the primary intervention tool implemented by South African audiologists (Dawood et al., 2019), language barriers would greatly impact the audiologist's ability to provide elements of PCC such as empathy and shared decision-making.

Within the multicultural population of South Africa, there are different beliefs related to health and healthcare. Whilst there is no literature evaluating the specific beliefs surrounding tinnitus in the context of South Africa, audiologists have indicated that there are patients who believe tinnitus to be a spiritual condition, as opposed to a physiological one (Dawood et al., 2019). In considering the patient holistically, the audiologist needs to consider that psychosocial-spiritual factors play a role in the adherence of patients to hearing healthcare management (Pillay & Moonsamy, 2018). In providing PCC, particularly with regards to sharing of information and shared decision-making, audiologists need to be able to respect patient beliefs and accept that patients may choose to seek help from traditional healers or religious organisations. Furthermore, audiologists can provide holistic, PCC within the multicultural context of South Africa by engaging with a multidisciplinary team that includes religious leaders or community leaders (Pillay & Moonsamy, 2018).

Effective communication is intrinsic to PCC and counselling in tinnitus management as it forms the foundation interpersonal relationships, effective information exchange, shared decision-making, empathetic listening, and acknowledgement of the psychosocial elements contributing to tinnitus distress. A large body of research identifying the positive outcomes of

patient-centredness in healthcare has been produced (Grenness et al., 2014; Laplante-Lévesque et al., 2012; Stewart et al., 2000; Swenson et al., 2004). More recently, there has been increasing research in the field of communication practices in audiology using interactional analysis methods. However, there remains a gap in the research on communication in tinnitus management in consultations.

In light of the information presented above, further investigation into communication in tinnitus management is warranted. Tinnitus management presents unique interactional and communication challenges. Audiologists need to be able to balance the provision of informational counselling targeting the uncertainty related to tinnitus with patient-centred communication to empathetically address the psychosocial comorbidities associated with tinnitus and elicit shared decision-making to promote the self-management and treatment adherence required for a chronic condition. In order for audiologists to implement patient-centred communication strategies in such a challenging setting, the intricacies of these communication behaviours need to be explored and described.

Chapter 2: Literature Review

This chapter will explore the complexities of tinnitus intervention and expand on current tinnitus management practices both internationally and in the context of South Africa. Literature investigating interactional practices in healthcare and specifically in the field of audiology will be discussed in relation to the PCC Framework and communication.

2.1. Complexities of Tinnitus Intervention

Despite tinnitus being a prevalent concern for so many individuals, with potentially significant effects on psychosocial functioning and quality of life, standardisation of practice in assessing and managing patients with tinnitus continues to face limitations. Much of the current literature in tinnitus continues to call for clear guidelines and a standardisation of care (Bhojraj & Peter, 2022; Swart, 2018). A clear standardisation of care is difficult to obtain as there is no definitive aetiology to tinnitus, an objective assessment cannot be performed due to the intrinsic subjectivity of tinnitus, and there is a paucity of high-level evidence for the various treatment options available (Hoare & Hall, 2011). Hoare and Hall (2011) suggest the focus should be on establishing basic elements of practice that can be standardised to measure efficacy, rather than striving for an all-inclusive model of tinnitus care that may be subject to therapeutic uncertainties.

Further complicating tinnitus intervention is the concept of a ‘cure’ or ‘effective’ management outcomes with little research indicating what patients expect to achieve through tinnitus management (Mcferran et al., 2019). Husain et al. (2018) conducted a survey of audiologists and patients presenting with tinnitus by means of a questionnaire. Of the 68 audiologists, 77% defined decreased awareness and 63% defined stress and anxiety relief as treatment success. Of the 230 adult patients with tinnitus, 63% defined treatment success as a

reduction in loudness and 57% aimed for an elimination of tinnitus in successful treatment (Husain et al., 2018). The absence of appropriate standardised outcome measures makes it challenging to define what constitutes a cure. Although tinnitus patients might propose the elimination of the tinnitus as the response to defining a cure, several studies have shown that even individuals who have hearing within normal limits and without auditory related pathologies or tinnitus become aware of phantom auditory perceptions when they are placed in anechoic chambers (Mcferran et al., 2019). Therefore, it might be impractical to set the total elimination of the tinnitus as the primary goal. More research is thus necessary to determine what healthcare providers and patients will acknowledge as a clinically significant improvement (Mcferran et al., 2019). Although the term "cure" sounds optimistic, it might be preferable to utilise different phrasing and establish the objective as remission from tinnitus instead of the potentially confusing concept of a "cure" (Mcferran et al., 2019).

With a lack of standardisation for assessment and management of tinnitus and standardised outcome measurements, coupled with differing views from audiologists and patients as to what successful intervention entails, tinnitus intervention presents as a complex, possibly daunting role for the audiologist.

2.2. Management and Treatment of Tinnitus

Tinnitus management modalities focus on improving quality of life and reducing the awareness of and reaction to the tinnitus (Baguley et al., 2013) and are mostly implemented by audiologists. The management modalities include but are not limited to Sound Therapy, Tinnitus Retraining Therapy (TRT), CBT, and counselling.

2.2.1. Sound Therapy and Hearing Devices

Despite sound therapy being such a widely used tinnitus management tool, there is a lack of conclusive evidence supporting the use of sound generating devices, in the absence of any additional counselling (Hobson et al., 2012). In a review of six trials, Hobson et al. (2012) found no significant changes to the participants' perceived loudness of tinnitus, or to the overall severity of their tinnitus, compared to other interventions such as patient education and counselling. A more recent study evaluating the effectiveness of sound therapy for tinnitus without counselling found that 33% of patients experienced benefit from an open-fit over-the-ear tinnitus masker (Tyler et al., 2020). The study provided no control group but rather had participants act as their own control, creating the risk of placebo. Most studies on sound management also make use of counselling.

The general trend in the literature over the years indicates that hearing devices benefit tinnitus in patients with co-occurring tinnitus and aidable hearing loss (Folmer & Carroll, 2006; Searchfield et al., 2010; Surr et al., 1999). Searchfield et al. (2010) compared the effect of hearing aids and counselling on tinnitus handicap and found that the effect of hearing aids combined with counselling was more effective than counselling alone. Hearing devices are thought to benefit tinnitus by compensating for the sensory deprivation at the pathophysiological level (Schaette et al., 2010). However, people presenting with tinnitus often attribute their communication difficulties to their tinnitus instead of their hearing loss (Noreña, 2012). Therefore, another possible reason for the improvement in tinnitus handicap with the use of hearing devices is that hearing aids will provide those with co-occurring tinnitus and hearing loss an overall improvement in quality of life through improving speech discrimination and participation in activities of daily living. Whilst hearing devices are shown to be a valuable management tool for patients with hearing loss and co-occurring tinnitus, counselling remains central to this management modality.

2.2.2. Tinnitus Retraining Therapy

The goal of TRT is the habituation of the tinnitus signal through the combined use of informational counselling and sound therapy (Grewal et al., 2014; Phillips & McFerran, 2010). TRT was developed by Jastreboff and Jastreboff (2000). Informational counselling aims to help the patient accept the benign nature of the tinnitus, allowing the brain to categorise the sound as neutral and allow for habituation (Jastreboff & Jastreboff, 2000). Sound therapy aims to aid in the habituation process, as it makes the tinnitus signal more difficult to perceive, while integrating the tinnitus-related neuronal activity with the previously contrasting background neuronal activity (Jastreboff & Jastreboff, 2000). Only one randomised controlled trial of unmodified TRT by Henry et al. (2006) has been identified by two different systematic reviews (Phillips & McFerran, 2010). In their meta-analysis, Phillips and McFerran (2010) argue that no conclusions on the efficacy of TRT can be drawn in the absence of high quality randomised clinical trials. A recent randomised clinical trial evaluated the effect of TRT compared to 'standard of care' on tinnitus related quality of life in a functionally normal-hearing population (Scherer et al., 2019). The standard of care protocol followed professional guidelines for tinnitus management described by the American Speech-Language-Hearing Association, using a patient-centred approach to tinnitus counselling and focused on reducing the participants' reactions to tinnitus and encouraging environmental sound enrichment (Scherer et al., 2019). The result of this study suggested that tinnitus counselling alone is sufficient for achieving TRT treatment efficacy when an enriched sound background is encouraged throughout treatment for individuals with tinnitus but functionally normal hearing (Scherer et al., 2019). These results suggest that counselling is a critical component in the efficacy of TRT, as with other tinnitus management modalities.

2.2.3. Cognitive Behavioural Therapy.

CBT is a structured psychotherapy aimed at solving specific problems by modifying dysfunctional behavioural and maladaptive thoughts, attitudes, and beliefs to bring about long-lasting emotional and behavioural changes (Grewal et al., 2014; Phillips & McFerran, 2010). Tinnitus specific CBT intervention is typically aimed at providing coping strategies, re-examining the effect of tinnitus and removing anxiety related to its consequences, as well as diverting attention away from the tinnitus (Grewal et al., 2014; Phillips & McFerran, 2010). The literature has consistently shown CBT to be effective in managing the impact of tinnitus on quality of life and reactions to tinnitus, when compared against control groups. (Aazh et al., 2019; Zenner et al., 2017).

2.2.4. Tinnitus Management in South Africa

Despite the high prevalence of tinnitus and its known impact on quality of life, tinnitus management practice in South Africa remains limited. In one of the few evaluations of audiological practice and service delivery in South Africa, Naidoo (2006) found that tinnitus management was carried out far more frequently in the private sector. In a survey of 243 South African audiologists providing tinnitus intervention, Dawood et al. (2019) found that a relative majority of 33.2% provided counselling, however, no further explanation of the type of counselling or techniques involved were provided. A further 23.6% incorporated sound generators and tinnitus maskers, 22.5% provided TRT, 18.9% provided educational support and awareness, and 1.5% provided other interventions including CBT (Dawood et al., 2019).

Naidoo (2006) found that insufficient training and insufficient caseload were the primary reasons for tinnitus management not being carried out in the public sector. Only five of the 243 audiologists surveyed by Dawood et al. (2019) indicated receiving specialised

training for tinnitus intervention, which was attended internationally. The reportedly limited caseload could potentially be contributed to by a general lack of awareness of tinnitus in South Africa (Bagwandin & Joseph, 2017). Dawood et al. (2019) identified that a lack of confidence and limited preparedness, as well as a lack of guidelines and resources, contributed to inadequate tinnitus service provision in South Africa.

Audiology in South Africa is inadequately represented, both linguistically and culturally (Swanepoel, 2006). Thus, South Africa provides a unique setting for the exploration of communication barriers and facilitators in healthcare interactions. Dawood et al. (2019) reported that 33.7% of surveyed participants identified language barriers as being an area of great concern in tinnitus management. Considering counselling as the primary intervention tool implemented by South African audiologists (Dawood et al., 2019), language barriers would greatly impact the audiologist's ability to provide elements of PCC such as empathy and shared decision-making.

A recent study by Bhojraj and Peter (2022) reported on audiologists' presbycusis and tinnitus counselling practices, as guided by the PCC framework, within KwaZulu-Natal, South Africa. The results of this study indicated that whilst audiologists report implementing PCC into some areas of their counselling, there is a need for improvement. However, these results were based off self-reporting from the audiologists and not interactional observations. The audiologists in this study reported on the need to improve training in counselling their patients (Bhojraj & Peter, 2022). In order to help practicing audiologists, and those training at an undergraduate level improve on their counselling ability, there is a need for research exploring how audiologists are counselling their patients and how they are implementing patient-centredness in their intervention.

2.2.5. Counselling and Communication in Tinnitus Management

Counselling and communication are central to most tinnitus management modalities. Whilst literature regularly recommends counselling as standard practice for tinnitus treatment, it is rarely described in more detail (Aazh et al., 2016). Aazh et al. (2016) investigated patients' evaluations on the effectiveness of tinnitus and hyperacusis treatments through a service evaluation survey. From the patients' perspectives, client-centred counselling (described as the therapist listening empathetically to the patient's concerns and story) was the most effective treatment, followed by education and CBT (Aazh et al., 2016). This finding indicates that the manner of communication in tinnitus counselling may be fundamental to the effectiveness of tinnitus management strategies.

Communication and counselling are crucial to tinnitus management outcomes, highlighted in the literature evaluating different tinnitus management modalities. Thus, audiologists may need to focus more on *how* they are communicating, as opposed to *what* they are communicating, in their tinnitus interventions. This shift in focus aligns closely with the theoretical framework of PCC.

2.3. Patient-Centred Care as a Theoretical Framework

The concept of PCC emerged in the 1970s with the understanding of the limitations of the traditional biomedical model of healthcare (Montgomery, 2016). With a growing body of literature, greater attention is being focused on the patient as an active participant in healthcare related decision-making process rather than being a passive recipient of the doctor's judgement of what is best for the patient (Montgomery, 2016).

According to Montgomery (2016), two breakthrough studies served as the foundation for the current and extensive literature on PCC today. In their report, Gerteis et al. (1993) described several principles of PCC, namely, (1) respect for patients' values, preferences and expressed needs, (2) coordination and integration of care, (3) information, communication

and education, (4) physical comfort, (5) emotional support and alleviation of fear and anxiety, (6) involvement of family and friends and (7) transition and continuity of care. These principles shifted the focus away from the doctor and onto the patient's best interests and highlighted education and counselling for patients in healthcare settings (Montgomery, 2016).

In 2001, the Institute of Medicine published a report in an effort to improve the quality of healthcare in the United States. The report indicated patient-centredness as one of six aims in improving healthcare quality, which it described as "providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions" (Institute of Medicine, 2001, p. 3). The report further states that patient-centredness identifies "the patient [as] the source of control" in decisions about his or her healthcare (Institute of Medicine, 2001, p. 304).

Similar reports were also published in the United Kingdom with the aim of improving the quality of healthcare provided by the National Health Service through PCC (Darzi & Department of Health, 2008). Darzi & Department of Health (2008) refer to PCC as being safe, effective, and reflective of positive patient experiences, which are associated with individualised care that is compassionate, dignified and respectful. As demonstrated, PCC has become a prominent framework for healthcare providers and policymakers internationally (Montgomery, 2016).

In audiological practice, PCC focuses on the interactions between patients and clinicians, promoting a greater power-balance between the patient and clinician, emphasising the therapeutic relationship and shared decision-making (Boisvert et al., 2017; Grenness et al., 2014). PCC has been shown to improve patient satisfaction, health status, and adherence to treatment strategies (Grenness et al., 2014). Practitioners actively implementing PCC have also been shown to have greater job satisfaction while facing fewer malpractice lawsuits (Grenness et al., 2014). Furthermore, patient-centredness has been shown to improve the

outcome of audiological interventions, specifically in the use of hearing aid technology (Laplante-Lévesque et al., 2012).

Key components of PCC extrapolated from research and reviews in the field of audiology include (1) building a therapeutic relationship, (2) information exchange to ensure mutual understanding, (3) shared decision-making in which the patient is actively involved, and (4) acknowledging the patient's psychosocial and emotional concerns throughout the hearing healthcare experience (Tai et al., 2018).

Erdman et al. (2019) developed a strategy to account for patient-centred variations in tinnitus management, while maintaining a standard of care, utilising different elements of widely recognised PCC models:

- Eliciting the patient's narrative to understand the impact of tinnitus on the patient's life in the broader context but highly specific to the patient;
- Providing empathetic responses to allow the patient to realise that they have been heard and understood and provide them with a sense of validation regarding their feelings and experiences of tinnitus;
- Developing an interactive therapeutic relationship by gaining a mutual understanding of the patient's concerns and worries regarding their tinnitus and by ensuring that their understanding of their tinnitus is accurate;
- Engaging in shared decision-making by agreeing on a treatment goal that best addresses the patient's tinnitus and can be adopted into the patient's values, priorities, and lifestyle;
- Promoting self-efficacy by enabling the patient's belief in their ability to implement adaptive coping behaviours in the management of their tinnitus.

Effective communication is intrinsic to all elements of PCC and counselling as it forms the foundation and means of developing patient-professional relationships.

Communication is required to show support, provide empathy and demonstrate understanding and collaborate on decisions (Zolnierek & DiMatteo, 2009). Thus, in order to practice PCC and provide health care that is respectful, dignified and responsive, professionals need to communicate effectively.

2.4. Communication Practices in Audiology

Communication is essential in healthcare. Patients trust healthcare providers who communicate professionally, who show concern for their patients, and who listen effectively (Preminger et al., 2015). Furthermore, communication is paramount to patient recall, adherence to healthcare recommendations, healthcare status, and patient empowerment and satisfaction (Epstein & Street, 2011; Poost-Foroosh et al., 2015; Zolnierek & DiMatteo, 2009).

In a meta-analysis, Zolnierek and DiMatteo (2009) demonstrated that the patients of physicians that communicate effectively are 19% more adherent to treatment regimens and patient adherence can be improved by 12% by training physicians in communication skills. This is because effective communication aids the sharing of clinical and psychosocial information, enables patient participation in the decision-making process, allows for discussions on benefits, risks and barriers to treatment adherence, builds on the patient-professional relationship and trust, and shows the patient support and encouragement – both verbally and non-verbally (Zolnierek & DiMatteo, 2009).

Whilst communication has a clear impact on healthcare outcomes, the skills involved in achieving patient-centred communication need to be better described and behaviourally defined (King & Hoppe, 2013). In a review of eight studies investigating the communication between audiologists, patients, and their family members during initial audiology

consultations and rehabilitation planning sessions, Manchaiah et al. (2019) identified 5 key communication themes:

- Audiologists tended to dominate the conversation with regards to the number and length of communicative turns;
- Audiologists asked more closed-ended questions, limiting the amount of information that the patient and family members were able to share;
- Audiologists did not always address differences of opinion between the patient and the family members;
- Audiologists tended to use complex language and jargon, inhibiting hearing aid acceptance;
- Audiologists were found to focus more on informational and technological components of rehabilitation, than on addressing the emotional and psychological concerns brought up by the patients and family members.

Other articles have similarly indicated that audiologists regularly fail to address the emotional and psychosocial concerns communicated by the patient (Muñoz et al., 2017; Watermeyer et al., 2015) and that audiologists may have difficulty balancing speaking time, particularly when providing informational counselling for the use of technological hearing devices (Watermeyer et al., 2015). These unbalanced interactional patterns limit open communication and information sharing from the patient (Muñoz et al., 2017). Student audiologists have also been shown to regularly make use of a scripted approach to information giving, providing information in a generic format, instead of tailoring information to the patient's individual communicative needs (Kanji et al., 2021; Watermeyer & Kanji, 2022).

There has been a recent body of research exploring communication practices in audiology using interactional or observational methods of analysis. The Health Communication Research Unit at the University of Witwatersrand has made contributions to

the field of interactional studies in healthcare and more specifically audiology, with recent works examining communication processes between caregivers and audiologists in paediatric cochlear implant appointments (Hugill, 2021); information giving practices during initial consultations (Kanji et al., 2021); communication in follow-up audiological consultations (Watermeyer et al., 2020); communication in paediatric hearing aid orientation sessions (Watermeyer et al., 2017); and caregiver recall and understanding of paediatric diagnostic information and assessment feedback (Watermeyer et al., 2012). Other notable contributions have been made by Tai et al. (2019) in observational studies of supervised audiology student-patient hearing assessments and by Eckberg et al. (2014) in initial audiology appointments with older adults with hearing impairment. The findings of these studies highlight gaps in current practice related to patient-centred principles of information exchange and shared decision-making and, furthermore, indicate the need for communication training amongst audiologists.

Effective clinical communication is recognised as an essential component of quality PCC, underpinning empathetic responses to emotion and psychosocial concerns, information sharing and shared decision making. The literature on communication specific to the field of audiology is consistent with other health-care research demonstrating that patient-clinician communication significantly influences decision-making and outcomes for hearing health care (Manchaiah et al., 2019). However, the evidence indicates that audiologists may not be implementing communication behaviours reflective of PCC (Manchaiah et al., 2019).

Communication, psychosocial and behavioural difficulties related to hearing impairment cannot be predicted from the audiogram alone (Erdman et al., 2019). Similarly, reactions to tinnitus vary widely and an audiologist cannot gauge the full extent of psychosocial comorbidities and reduced quality of life through an audiogram or tinnitus masking and matching. The audiologist providing management for tinnitus must

acknowledge and account for the unpredictability of patients' reactions or responses to tinnitus and provide management accordingly (Erdman et al., 2019). With counselling providing the basis of most effective tinnitus interventions, such as TRT and CBT, tinnitus management is uniquely founded in communication, as opposed to purely informational counselling, when compared to other audiological interventions. This is likely due to the prevalent psychosocial comorbidities associated with tinnitus and the uncertainty surrounding the cause and treatment of tinnitus. However, there remains an absence of research on communication specific to tinnitus management.

The growing body of literature exploring communication in audiology has shown interactional and observational analysis to provide valuable insights into the communication processes and PCC. In order for audiologists to practice patient-centred communication in tinnitus management sessions, the skills and behaviours associated with patient-centred communication specific to tinnitus management first need to be explored and understood.

2.5. Integrating Communication and Patient-Centred Care

The literature on health communication depicts two modern approaches to the provision of healthcare services, with earlier studies focusing more on effective communication and more recent studies supporting a patient-centred approach (Tran, 2020). However, in both approaches there remains ambiguity in the definition, conception and concrete operationalisation within healthcare practice (Tran, 2020).

Early yet important research by Ong et al. (1995) indicates that effective communication in healthcare must meet three main objectives: developing strong interpersonal relationships between healthcare provider and patient, exchanging information between both parties, and the healthcare provider assisting the patient in making treatment related decisions. Elaborating on this theory, Arora (2003), suggests that the three objectives

of rapport, information exchange and shared decision-making are intrinsic features of effective provide communication behaviours, referred to by Tran (2020) as the R-IE-SDM model. The R-IE-SDM model highlights the interdependency of these communication objectives, as a set of processes occurring over a period of time (Arora, 2003, Tran 2020). However, the R-IE-SDM model has limited practical applications, as it only outlines defining features of effective health communication but does not provide guidance on how to achieve these goals (Tran, 2020).

Conversely, the PCC approaches provide a framework with concrete principles for enabling effective communication within the evolving shift of power to the patient within the patient-provider relationship (Tran, 2020). However, these approaches are often limited to a set of specific actions for clinicians to follow during medical interactions, neglecting the fact that effective health communication is a complex and evolving process. Thus, the current approach of focusing solely on specific behaviours or tasks misses the changing context in which health communication takes place.

A framework that integrates these two approaches and clarifies the connections and mechanisms between health communication and care outcomes could have significant practical applications (Tran, 2020). Thus, Tran (2020) proposed a novel framework, the Person-Centred Communication Model of Care (PCCMC), in an attempt to integrate the two approaches to health communication in modern healthcare delivery. The PCCMC is a three-step consecutive process of rapport, information exchange, and shared decision-making, which views health communication as a dynamic, interactive process that predicts healthcare outcomes (Tran, 2020). The framework emphasises the importance of rapport in building a strong relationship based on trust which leads to effective information exchange and shared decision-making. The PCCMC highlights the connection between health communication and healthcare outcomes, emphasising that effective communication is essential for enabling

desirable outcomes throughout the healthcare system (Tran, 2020). Successful shared decision-making is thus a result of effective communication built on rapport and the exchange of information, empowering patients with the knowledge to work with their provider and make informed decisions about their care (Tran, 2020).

Whilst both PCC and effective communication have been shown to be important in tinnitus management, there remain limited practical guidelines within the evidence on integrating communication and PCC and how to implement these successfully in clinical practice. Through interactional analysis of current tinnitus management practices, and the understanding of PCC and communication as a dynamic interactive practice, evidence for practical facilitators to tinnitus management can be better explored.

In summary, the lack of standardisation for tinnitus assessment and management, along with differing views from audiologists and patients on successful interventions, makes tinnitus intervention a complex role for audiologists. There are several different tinnitus management modalities, of which counselling and communication are central components. Effective communication is essential to PCC and counselling as it forms the foundation of patient-professional relationships, however, audiologists have been shown to have difficulty communicating effectively with their patients. There is a growing body of research exploring communication and PCC in audiology through interactional analysis, yet there remains a shortage of literature on communication in tinnitus intervention. Further, practical facilitators to tinnitus management can be better investigated by understanding PCC and communication as a dynamic interactive practice that can be explored through interactional analysis of tinnitus management practices – which is what this dissertation sets out to present.

Chapter 3: Methodology

3.1. Research Question

What are the communication processes in initial tinnitus management sessions between audiologists and adult patients in Gauteng, South Africa?

3.2. Research Aims

The primary aim of this study was to explore audiologists' communication processes during initial tinnitus management sessions with adult patients in Johannesburg, South Africa.

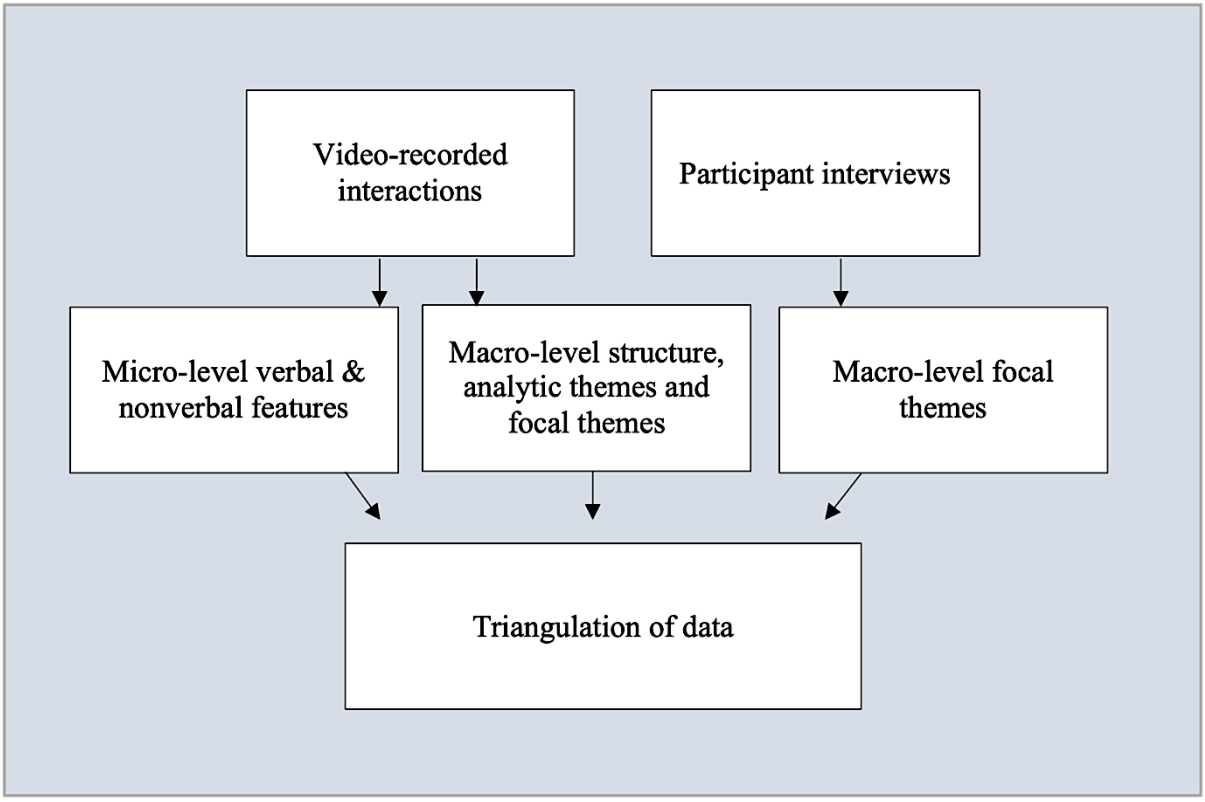
The specific objectives of this study were the following:

- To explore the verbal and non-verbal communication behaviours of audiologists and their patients in tinnitus management sessions.
- To investigate the manner in which audiologists communicate information and provide counselling to patients with tinnitus.
- To explore facilitators and barriers to communication in tinnitus management sessions.
- To examine how audiologists and patients negotiate complexities such as patient expectations, emotions, decision-making and goal setting in tinnitus management sessions.
- To understand how patients respond to audiologists' communication strategies and information giving during tinnitus management sessions.
- To understand how patients and audiologists share information in tinnitus management sessions.

3.3. Research Design

This study used a multimethod exploratory qualitative design incorporating interactional analysis of video recorded audiological tinnitus management consultations, triangulated with participant interviews. Multi-method triangulation, through the use of both interactional analysis and participant interviews (Figure 1), incorporated multiple research strategies within a single paradigm to ensure validity and overcome potential research biases (Holloway & Galvin, 2017).

Figure 1: Research Design



Video-based research has become a widely used tool in examining real-life communications and interactions between healthcare providers and their patients providing important insights into current practice (Parry et al., 2016). Video observation allows researchers to evaluate complex constructs and interactions in order to improve healthcare

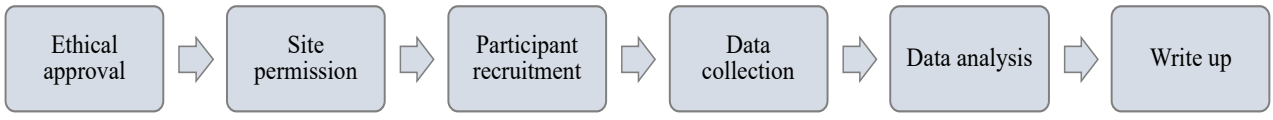
systems (Asan & Montague, 2014). Semi-structured interviews are commonly used in qualitative research, wherein the interviewer is able to guide the conversation, while still providing leeway to include all information deemed relevant by the interviewee (Brinkmann, 2014).

Qualitative research aims to define, understand, and decipher social phenomena as perceived by individuals and groups in order to provide meaning for their behaviours, feelings and experiences (Holloway & Galvin, 2017). The exploratory approach to qualitative research is typically implemented when somewhat little is known about particular phenomena (DeForge, 2010). The person-centred and holistic perspective employed in qualitative research is fundamental to health professionals focusing on communication and interaction (Holloway & Galvin, 2017).

3.4. Research Process

Ethical clearance was obtained from HREC Medical (certificate no. M200853) (Appendix A). A letter requesting permission to conduct the study was sent to the Chief Executive Officer of each hospital site (Appendix B) and permission was granted by means of an approval letter from each site (Appendix C). The audiologists participating in the tinnitus clinics were approached by the researcher with the permission of the Chief or Manager of the Audiology Departments at the hospitals. Data collection commenced following ethical approval and site permission as outlined in Figure 2.

Figure 2: Research Process



3.5. Research Sites

The study aimed to conduct research at tinnitus clinics run by audiology departments within public sector hospitals in the Gauteng Province. For reasons of feasibility, the research sites were limited to the Gauteng province. Three hospitals were initially identified as providing regular tinnitus management on a daily or weekly basis as part of their clinical services. Exploratory discussions with potential sites indicated that public sector hospitals, as opposed to private practice, provide the most convenient sample due to the consistency of the tinnitus clinics held by the audiology departments and the homogeneity of the setup between hospitals. Furthermore, initial tinnitus consultations at these clinics were conveniently separated from diagnostic hearing tests thus enabling the researcher and audiologists to focus on the concerns of tinnitus with less focus on hearing devices and other audiological factors. Exploratory discussions with the potential hospital sites indicated that consultations were held on an individual basis and not in the form of group sessions. Audiologists working in the public healthcare sector are less likely to have had further CBT training, as is common amongst private practice audiologists offering tinnitus management. In this way, the audiologists participating in the study were less likely to have had tinnitus-specific communication training allowing for a more accurate representation of South African audiologists working in the area of tinnitus management.

Following formal requests for site permission, two of the three identified sites provided permission to conduct the study, namely Hospital A and Hospital C. Shortly after permission was granted at Hospital C, the site temporarily closed preventing the collection of data. An additional site fitting the above criteria was identified (Hospital B) and permission to conduct the study was subsequently granted. Data collection commenced at Hospital A and Hospital B thereafter.

3.5.1. Site Descriptions:

Hospital A is a regional hospital located in Gauteng. It has 540 functional beds and has a catchment area population of 1.2 million (as recorded in the 2011 Census) (Blaauwberg Online, n.d.-a). Tinnitus consultations are scheduled by the audiology department on an ad-hoc basis when referrals are made by audiologists, doctors and other allied services.

Hospital B is an academic hospital located in Gauteng. It has 1652 approved beds and a catchment area population of 1.2 million (as recorded in the 2011 Census) (Blaauwberg Online, n.d.-b). The audiology department holds a tinnitus clinic every Thursday. Patients are referred by audiologists, doctors and other allied services and subsequently booked into the clinic.

3.6. Participants

3.6.1. Sample and Sampling Strategy

Participants in the study were identified by means of non-probability purposive sampling. Non-probability sampling involves selecting a sample from a population of interest as opposed to randomised selection (Etikan et al., 2016). Purposive sampling involves a selected group of participants that are typical of the study phenomenon and have experience in the phenomena being studied (Brink et al., 2018). It is a commonly used sampling strategy in qualitative research (Brink et al., 2018).

Participants fell into two categories, namely (1) audiologists and (2) adult patients presenting with tinnitus. The term ‘patient’ was used in this study, as opposed to ‘client’, as this term was most frequently used by the audiologists at the research sites and literature indicates that most individuals who receive healthcare prefer the term ‘patient’ over alternate terms such as ‘client’ or ‘consumer’ (Costa et al., 2019). Prior to commencing recruitment,

the researcher aimed to obtain a minimum sample size of 15 to 20 participants, with a minimum of 10 patients with tinnitus and 5 to 10 audiologists in order to provide an array of opinions, behaviours and experiences from which data could be obtained. Given the intensive nature of the analytic work proposed for this project, a small sample size was considered appropriate as the researcher focused on providing an in-depth understanding of the data (Hesse-Biber & Leavy, 2017).

On commencement of the recruitment process, the researcher experienced difficulty in gaining access to research sites and participants due to the COVID-19 pandemic. The most consistent barrier to accessing patients was observed in exploratory discussions with potential research sites, which indicated that many tinnitus clinics were put on hold during the various levels of lockdown due to a decline in the number of referrals as well as a decline in the consistency of patients arriving for appointments. A total of 12 participants were thus included in the study, 5 audiologists and 7 patients, providing 7 video recorded interactions and 12 interviews. The number of participants in this study was found to be an adequate sample size for the purposes of an exploratory study, considering that the rich data obtained from the video-recorded interactions represented variable communication behaviours.

To provide insights into communication in tinnitus management, the study required participants to be purposively selected according to inclusion criteria, thus justifying the selection of the sampling technique. Below is a list of the inclusion and exclusion criteria implemented in the study.

3.6.2. Participant Inclusion Criteria

Audiologists included in the study were required to meet the following criteria:

- Audiologists who are qualified with a degree in Audiology or a dual degree in Speech and Hearing Therapy.

- Audiologists employed by the Gauteng Department of Health. This study focused on tinnitus management within the public sector, in consideration of a convenient sample due to the consistency of the tinnitus clinics being held by the audiology departments on specific days and at specific times, as well as the homogeneity of the setup between hospitals.
- Audiologists registered with the Health Professions Council of South Africa.
- Audiologists with varying degrees of clinical experience were included in the study, from community service audiologists to heads of department, in order to be better representative of current practice amongst audiologists in this sector.

Patients with tinnitus included in the study were required to meet the following criteria:

- Patients had to be 18 years or older, as a legally accepted age-boundary for adulthood in South Africa. This study focused on adult patients in its exploration of communication behaviours. These behaviours may vary with adolescents of different ages and with the added dynamic of parents or guardians participating in the consultation.
- Patients with tinnitus.
- Patients must have undergone a diagnostic audiological assessment, either prior to the initial consultation or during the initial consultation. Both patients with and without hearing loss were included in the study. With hearing loss being the most common risk factor of tinnitus (Bhatt et al., 2016), and in consideration of commonly used tinnitus management strategies, such as sound therapy and hearing devices, an audiological evaluation is a standard step in assessing tinnitus and would be reflective of common practice.
- Patients speaking any of the official recognised languages of South Africa were included in the study to allow for a richer data set as participants were better able to

express themselves. Furthermore, by including languages other than English, the results of the study had the potential of being more reflective of the multilingual population in South Africa.

- Patients must have been attending an initial tinnitus consultation at the research site. Although patients may have been previously known to the audiology department for the purposes of audiological assessment and hearing aid fittings in some cases, this study focused on initial tinnitus consultations and excluded follow-up tinnitus consultations. Follow-up consultations may build on communication actions such as rapport and information sharing that have occurred in the initial consultation. Furthermore, patients may not require follow-up consultations or attend follow-up consultations as consistently.

3.6.3. Participant Recruitment

Audiologists providing services within tinnitus clinics at each of the hospitals were approached with the permission of the respective departmental heads. The researcher provided each of the audiologists with a detailed explanation of the study and a participant information sheet (Appendix D). Consent was obtained from the audiologists who were willing to participate in the study (Appendix F, G and H). Thereafter, the patients booked into the tinnitus clinic with the participating audiologists were provided with information regarding the study on the day of their appointment with an accompanying participant information sheet (Appendix E). Consent was then obtained from patients who were willing to participate in the study (Appendix F, G and H).

3.6.4. Demographic Profile of Participants

Table 1 provides a detailed overview of the participant demographics:

Table 1: Demographic profile of patient participants

Patient Identifier	1	2	3	4	5	6	7
			Demographic Information				
Age	23	23	34	53	32	67	43
Gender	F	F	F	F	F	F	F
Home language	Sesotho	Shona	isiZulu	Setswana	Setswana	Sesotho, isiXhosa	Afrikaans
Additional Languages	isiZulu, English, Afrikaans, Sepedi, Setswana	Ndebele, isiZulu, Sesotho, English	Sesotho, English	English	None	English	English
Occupation	Studying	Self employed	Unemployed, caregiver	Pensioner	Pensioner	Domestic worker	Unemployed
			Tinnitus Descriptors				
Onset	4 months ago	1 year ago	12 years ago	3-4 years ago	2 years	7 years ago	2 months ago
Constant/intermittent	Constant	Intermittent	Constant	Constant	Constant	Constant	Constant
Previous treatment or management	None	None	None	None	None	None	None
			Hearing Descriptors				
Self report of hearing difficulty	None	Difficulty hearing	Known loss of hearing	Known loss of hearing	Known loss of hearing	Unknown	Difficulty hearing

Table 2: Demographic profile of audiologist participants

Audiologist Identifier	1	2	3	4	5
			Demographic Information		
Age	25	37	25	29	28
Gender	F	F	F	F	F
Home language	Xitsonga	English	isiZulu	isiZulu	English
Additional Languages	English, isiZulu, Sepedi	Afrikaans	Afrikaans, English, Tswana	English, Xhosa	Afrikaans
			Experience Descriptors		
Place of employment	Hospital A	Hospital A	Hospital B	Hospital A	Hospital A (temporary)
Dual/single qualification	Single	Dual	Single	Single	Single
Years of work experience	1	14	3	7	4
Formal/Informal post graduate training in tinnitus	None	Hearing aid company tinnitus training	None	None	None
Number of years working with tinnitus patients	1	14	2	5	4
Average number of tinnitus patients seen per month	3	>4	4	2	4

3.7. Data Collection

A total of seven initial tinnitus consultations were video recorded and a total of 12 interviews were audio recorded. Table 3 provides a detailed summary of the data collected in this study. Of the total video-recorded interactions, five of the seven were collected at Hospital A, with two of the seven video-recorded interactions being collected from Hospital B. A greater number of video-interactions were collected at Hospital A because the tinnitus clinic was operated by four audiologists on rota, whereas the tinnitus clinic at Hospital B was run by only one audiologist. Furthermore, although the tinnitus clinic was scheduled once a week at Hospital B, it was not always fully booked, with some clinic days not having any patients scheduled.

Table 3: Summary of Data Collected

Data Set	Total Number	Total Time (hh:mm:ss)	Average length of Time (hh:mm:ss)
		Hospital A	
Video-recorded Interactions	5	03:40:35	44:07:00
Interviews	9	02:35:20	00:17:15
		Hospital B	
Video-recorded Interactions	2	01:20:02	00:40:01
Interviews	3	00:50:00	00:16:40
		Cumulative Total	
Video-recorded Interactions	7	05:00:37	00:42:56
Interviews	12	03:25:20	00:17:06

When collecting the video-recorded interactions, the researcher was not present in the tinnitus consultation and the camera was unmanned in order to limit the researcher's presence in the consultation and possible observer bias. The researcher set up the video camera and tripod prior to the start of the consultation. After written consent was obtained from both participants (audiologist and patient), recording commenced prior to the start of the consultation and was turned off following the audiologist and patient's exit from the room. The video cameras were placed in a fixed position using a tripod, with the placement optimised to capture non-verbal communication such as body language and facial expression of both the audiologist and the patient. The researcher took into account Parry et al.'s (2016) recommendations to ensure good practice in the video recording methods undertaken. Table 4 provides a detailed description of the video-recorded interactions. In total, seven tinnitus consultations were video-recorded with approximately 5 hours 37 seconds of video-recorded interactions analysed. The average length of the video-recorded interactions was approximately 42 minutes 56 seconds.

Table 4: Description of Video-Recorded Interactions

Descriptor	Site	Language	Length of Interaction (hh:mm:ss)
Audiologist 1 Patient 1	Hospital A	English	00:44:22
Audiologist 2 Patient 2	Hospital A	English	00:55:23
Audiologist 2 Patient 3	Hospital A	English	00:44:14
Audiologist 3 Patient 4	Hospital B	Setswana/ Sesotho/ Sepedi	00:57:02
Audiologist 3 Patient 5	Hospital B	Setswana/ Sesotho/ Sepedi	00:23:00
Audiologist 4 Patient 6	Hospital A	isiXhosa	00:46:41
Audiologist 5 Patient 7	Hospital A	English	00:29:55

Participant socio-demographic information was obtained using audiologist-specific demographic questions (Appendix I) and patient-specific demographic questions (Appendix

J) at the start of each participant interview. Demographic information enables the researcher to reflect on the relationship between the sample and the data and demonstrate the diversity of a sample or the limits thereof (Braun & Clarke, 2013).

The researcher conducted semi-structured interviews with the patients (Appendix L) and with the respective audiologists (Appendix K) immediately after the tinnitus consultations. These interviews were audio recorded. The interviews examined the audiologists' approaches to communication within the tinnitus consultations and the patients' experiences of the interactions. The semi-structured interview followed guidelines which were derived from a growing body of research on communication in audiology and based on principles of PCC (Bellon-Harn et al., 2019; Grenness et al., 2014; Manchaiah et al., 2019; Tai et al., 2018, 2019; Watermeyer et al., 2012, 2017). The questions were formulated according to the research aims and with reference to similar studies conducted by Tai et al. (2018, 2019) and Watermeyer et al. (2012, 2017). Participants whose first language was not English were routinely offered to have an interpreter present during the interview. Only one patient participant opted to have an interpreter present for their interview. Table 5 provides a detailed description of the audio-recorded interviews. In total, 12 interviews were audio-recorded, with approximately 3 hours 25 minutes and 20 seconds of audio-recorded interviews analysed with an average length of 17 minutes and 6 seconds per interview.

Table 5: Description of Audio-Recorded Interviews

Descriptor	Site	Language	Length of Interaction (hh:mm:ss)
Patient 1	Hospital A	English	00:08:53
Patient 2	Hospital A	English	00:19:00
Patient 3	Hospital A	English	00:23:09
Patient 4	Hospital B	Setswana/ English	00:14:41
Patient 5	Hospital B	English	00:15:39
Patient 6	Hospital A	English	00:10:58
Patient 7	Hospital A	English	00:14:39
Audiologist 1	Hospital A	English	00:16:31
Audiologist 2	Hospital A	English	00:14:49
Audiologist 3	Hospital B	English	00:19:40
Audiologist 4	Hospital A	English	00:30:41
Audiologist 5	Hospital A	English	00:16:40

3.8. Interpreter, Research Assistant and Reviewer

An interpreter was selected to be available on standby (via Zoom video meeting platform) for interviews in which participants opted to communicate in their home language. The interpreter that participated in this study is a dual qualified speech-language therapist and audiologist. He has informal experience in interpreting and translating in his work as a speech-language therapist and audiologist. The interpreter is fluent in Setswana and English, and has varying degrees of familiarity in IsiZulu, Sesotho, Sepedi and Xitsonga. The researcher provided training to the interpreter telephonically, explaining the aims and objectives of the study and the requirements of the researcher in interpreting the spoken language of the patient participants. Thorough debriefs were conducted with the interpreter

following the sessions that he provided assistance in. During the debriefs, the researcher offered constructive feedback for the interpreter and discussed with the interpreter how he felt the session went, if there were moments where he had difficulty understanding or communicating what was being said, and if there were any additional insights he could provide. In the interview wherein the patient participant opted to have an interpreter present, the interpreter joined the interview via Zoom, with a camera angle providing visual of both the researcher and the participant. The interpreter subsequently interpreted the researcher's spoken questions in English to the patient participant in Setswana, and in turn, the patient participants' responses in Setswana back to the researcher in English. The interview was audio-recorded, and the Zoom meeting was recorded for later analysis.

A research assistant was selected to act as a translator when transcribing video observation data. The research assistant that participated in this study has worked with the University of the Witwatersrand's Health Communication Research Unit since April 2019. Since April 2021, she has worked as a research assistant assisting with administration, transcribing and translating data, and writing publications. She has experience with observational analysis via transcription-less approaches on other projects. The research assistant is fluent in English, isiZulu and isiXhosa, and is able to understand Sesotho, Setswana and Sepedi. The researcher provided the research assistant with a training session over Zoom, explaining the aims and objectives of this study and the data analysis therein. The research assistant translated the video analysis data that was obtained in Setswana, Sesotho, Sepedi and IsiXhosa into English, with guidance from the researcher and research supervisors and in line with the methodological framework of this study. The research assistant enabled the inclusion of participant consultations conducted in additional languages allowing for more rich data as participants were better able to express themselves. Furthermore, the results of the study were more reflective of the multilingual South African population.

Following the analysis of the data, the interpreter described above reviewed 25% of the translated data as well as the transcriptions and direct translations provided as extracts in the results. He was tasked with watching the video-recorded interactions, and reading the descriptions of these interactions, as well as the extracted transcriptions and direct translations, in line with the methodological framework of this study described below.

3.9. Data Analysis

The data collected in this study was analysed using a hybrid sociolinguistic analytic approach which incorporated principles of theme-oriented discourse analysis (TODA) (Roberts & Sarangi, 2005) and principles of Interactional Sociolinguistics (IS) (Gumperz, 2015). The hybrid sociolinguistic analytic approach builds on the methodological framework which has been successfully used in several projects in the field of audiology and health communication by Watermeyer et al. (2012, 2015, 2017).

3.9.1. Interactional Sociolinguistics

IS is an approach to discourse analysis that examines how people use language when interacting face-to-face and analyses how meaning is interpreted and created during these interactions accounting for intention conveyed in participant communication practices (Crease, & Copland, 2017; Gumperz, 2015). Through an IS approach, the researcher can study how meaningful contexts are implied within participant interactions and how production and reception of these meaningful contexts influence interaction (Jaspers, 2012). Participants employ contextualisation cues or signals in addition to words, such as vocal or prosodic features (intonation, code-switching, style shifts) or non-verbal features (gesture, gaze, posture) in order to aid interpretation of talk (Jaspers, 2012). An IS approach can effectively demonstrate how diversity affects interpretation of meaning and is thus applicable

in both monolingual and multilingual communicative situations (Gumperz, 2015), making it an effective tool in the analysis of communication within the South African context.

3.9.2. Theme-Oriented Discourse Analysis

In TODA, analytic themes from linguistics and sociology are linked to focal themes relevant to the professional domain, to examine how language shapes professional practice (Roberts & Sarangi, 2005). Analytic themes are derived from sociolinguistic and sociocultural analysis such as contextualisation cues and inferences, frames and footing, face and facework and other devices such as repetition, lists, metaphor, and analogy (Koenig et al. 2019; Sarangi, 2010). Focal themes can be defined as topics considered relevant to professional practice in healthcare, such as shared decision-making, PCC, quality of life, as well as knowledge boundaries and expertise (Koenig et al. 2019; Sarangi, 2010).

3.9.3. Hybrid Sociolinguistic Analysis Process

Within the principles of the TODA approach, the researcher familiarised themself with both data sets by repeatedly watching and re-watching the video-recorded interactions and repeatedly listening to the audio-recorded interviews, in order to identify the phases of the interactions that make up the whole interaction (Penn & Watermeyer, 2018; Roberts & Sarangi, 2005). A broad structural map of each video-recorded interaction was drawn up on a spreadsheet, with structural content components such as ‘greetings and introductions’ opening the consultation, ‘case-history taking’, ‘assessment measures’, ‘informational counselling’, ‘management counselling’ and ‘closing the consultation’. Thereafter, descriptions of the content of the interactions within the structural components were detailed according to timestamps. The descriptions of the content acknowledged the speaker's turns, a description of what was being said, and connected responses. A structural map alone does not

reveal exact details about participant structure in relation to content of talks, thus, in order to make sense of the participant and content structure it is desirable to map the encounters interactionally and thematically (Sarangi, 2010).

Once the structure and descriptions of the content were mapped out, the researcher reviewed the video-recorded interactions, paying attention to and describing verbal features, such as prosody, tone, pauses, code-switching, style shifts (Jaspers, 2012); non-verbal features such as eye-gaze, gestures, body posturing (Jaspers, 2012) and analytic themes, such as contextualisation cues, repetition and metaphor (Roberts & Sarangi, 2005).

Simultaneously, video-recorded interactions in languages other than English were analysed by the research assistant. The research assistant, with guidance from the researcher and with the example of the analysed English interactions, detailed the broader structure, content and notable verbal and non-verbal features of these interactions by means of the same process. The researcher reviewed the non-English interactions and provided additional analysis of verbal and non-verbal features of these interactions. Regular debriefing and reviewing sessions of the translated non-English data were held between the researcher and research assistant in which meanings and context were discussed for purposes of rigor. Considering the mapping of the structure, content and analytic themes, the researcher then examined each interaction as a whole, examining the outcomes of each interaction, and interpreting and comparing interactions together with consideration to sociolinguistic and cultural concepts (Penn & Watermeyer, 2018; Roberts & Sarangi, 2005). A list of key focal themes was identified across the data set, linked to the analytic themes and verbal and nonverbal features of each of the interactions.

3.9.4. Transcription of Data

In preparing the data for analysis, the semi-structured interviews were transcribed by

the researcher. The audio-recorded data was transcribed using Express Scribe Transcription Software (https://apps.apple.com/gb/app/express-scribe-transcription/id1163880535?mt=12). Transcriptions were performed manually by the researcher listening and relistening to the audio-recordings, transcribing the information, and subsequently relistening while checking for accuracy. No automatic transcription software was used in this process.

A transcription-less analysis approach was used in analysing the video-recorded data collected in this study for pragmatic reasons considering the number and length of recordings. Further, the transcription-less approach accounts for the 'atmosphere effect' described by Langewitz (2007, p. 319) as "the impression of 'something in the air' that sometimes can be identified during communication or upon entering a room. Even though it can be sensed with high evidence, it cannot be deduced from particular observations". Penn and Watermeyer (2018) conducted two video-recorded transcription-less studies and found that video material provides an outside observer with a greater sense of the interaction's atmosphere than can be conveyed with transcripts alone. Further, they found that there was no evidence that a transcription-less approach compromised validity in these studies.

When watching and re-watching video-recorded interactions, meaningful segments of the interactions were noted revealing verbatim extracts from the interactions which most appropriately grounded the findings with examples (Penn & Watermeyer, 2018). These meaningful segments were transcribed according to Eggins and Slade (2004) transcription conventions. Non-English extracts were transcribed and translated by the research assistant. Meaningful segments from the audio-recorded semi-structured interviews and the transcriptions thereof were mapped to corresponding and dissenting extracts from the video-recorded interactions.

A reviewer subsequently examined 25% of the non-English data, reviewing the translated description of the content and the direct translations and transcriptions of the non-

English interactions. The reviewer was instructed to provide written feedback to the audiologist with assertions of accuracy, or where necessary, alternate translations of the data. The reviewer was debriefed via a Zoom call, wherein any proposed adjustments were discussed. The researcher then proposed adjustments to the translations which were discussed again with the research assistant in order to further ensure rigour.

3.9.5. Triangulation of Data

Triangulation involves utilising multiple research methods within the same framework to gather data and provide a complete view of the results (Holloway & Galvin, 2017). In this study, data was collected through audio-recorded semi-structured interviews and interactional analysis of video-recorded consultations, which complemented each other and provided more reliable results. Upon listening and re-listening to the audio-recorded interviews, and reading and re-reading the transcriptions there-of, emerging themes that coincided with or dissented from key focal themes identified from the video-recorded interactions were highlighted, triangulating the findings of the data sets.

3.10. Trustworthiness and Rigour

Lincoln and Guba (1985) originally proposed four pillars to develop a trustworthy study, namely credibility, dependability, confirmability and transferability. These concepts were implemented throughout the data collection and analysis process to promote the validity and rigour of this study.

Credibility establishes whether the research findings represent accurate information and correct interpretation of the participants' data (Korstjens & Moser 2018). One such strategy for strengthening credibility is intra-method triangulation, which makes use of multiple research methods to gather data within a single paradigm in order to ensure validity

and overcome potential research biases (Holloway & Galvin, 2017). Converging data was collected from participant interviews and interactional analysis in this study for intra-method triangulation. Furthermore, the research supervisors provided a critique and review of the data analysis findings to ensure that the researcher's interpretation of the data accurately portrayed the participants' responses. Video observations contributed to the credibility of the study as the visual nature of the video data provided a more complete picture of the interactions occurring than would be available with traditional observation (Asan & Montague, 2014).

Dependability refers to the use of appropriate and accepted standards in the research processes (Korstjens & Moser, 2018). Lincoln and Guba (1985) suggest the triangulation of methods for data collection, such as the converging data collected in the participant interviews and interactional analysis of this study.

Confirmability can be described as the neutrality of the data, without bias in the form of the researcher's particular preferences and viewpoints (Korstjens & Moser, 2018). To promote confirmability, the researcher kept a reflective journal of the research process to ensure transparency. Video and audio recordings of data collection enabled analysis of data to be reviewed for discrepancies and allowed for verification of the findings. Furthermore, an interview guideline guiding the semi-structured interviews (Appendix I and Appendix J) enabled methodological coherence.

Observation of interactions poses a potential threat of observer bias. The Hawthorne Effect refers to participants altering their behaviour as a result of being observed (James & Vo, 2010). Pringle and Stewart-Evans (1990) have demonstrated that an unmanned camera is less likely to result in the Hawthorne effect than a human observer. Whilst there is no evidence to suggest that video-observation poses a threat to research participants or the communication between them (Parry, et al. 2016), the researcher attempted to limit observer

bias by placing the video cameras as unobtrusively as possible and consulted with the audiologist participants to determine if the placement of cameras was deemed suitable and would not interfere with the provision of their service. Furthermore, the researcher clearly explained to participants that there was no correct or incorrect answer to the questions asked in the interviews and that the observations were not a test of competence. The researcher was careful to identify and comment on any potential observer biases in the results and limitations of the study.

Transferability refers to the applicability of the results of the study to other contexts (Korstjens & Moser, 2018). The reader must judge the transferability of a study's findings in order to determine if the results are applicable to their own setting (Korstjens & Moser, 2018). In this study, detailed descriptions of the participants, research sites and research process contribute to the reader's ability to determine if the study is transferable to their own context. The inclusion of an interpreter in participant interviews and a translator for video-recorded interactions allowed the researcher to account for language diversity. Together with a purposive sampling technique, this allowed for strengthened transferability to the multilingual and multicultural South African population.

3.11. Ethical Considerations

3.11.1. Informed Consent

Informed consent ensures that participants are provided with clear information regarding what is involved when participating in a particular research project, and in doing so, allowing the participants to decide if they would like to participate (Wiles, 2013). All participants in the study were informed of the nature of the study, as well as the access to, use and storage of the video and audio recordings of participants (Appendix D and E). All

participants were required to complete consent forms (Appendix F, G and H). The participant information sheet and consent form were typed in English but participants were provided with an opportunity to have the information verbally translated into their first language by a research assistant should they have required it. None of the participants requested for the written information to be verbally translated by the researcher. However, one of the participants had a family member verbally talk through and translate the document instead.

3.11.2. Voluntary Participation

Participants were informed that they were under no obligation to remain in the study and could withdraw at any time without any negative consequences.

3.11.3 Confidentiality, Anonymity and Privacy

Participant privacy and confidentiality was maintained throughout the study as far as was possible. Video recording of observations are intrinsically not anonymous (Parry et al., 2016). Thus, data that could not be anonymised was stored electronically in a password-protected encrypted data cloud and was only accessible to the researcher, research supervisors, and research assistant. Although anonymity could not be guaranteed during the data collection, it was ensured during data analysis and write up through the use of participant numbers. Participants' names were coded with numbers throughout data transcription, analysis and write up for anonymity.

Chapter 4: Results

This chapter explores the key themes identified by the researcher through the analysis of the video-recorded interactions and the audio-recorded interviews with regards to the aims and objectives of this study. The themes are presented as communicative actions and are discussed in relation to the literature and supported with extracts from both data sets. For clarity in these extracts, English translations are presented in italics and notable phrases have been bolded. The implications of the findings are related to current practice in audiological tinnitus management settings.

The findings of this study reveal six important communicative actions which appear to contribute to effective and integrated PCC in adult tinnitus management consultations, namely (1) agenda setting, (2) breaking the scripted approach, (3) prioritising patient needs, (4) engaging in emotional and psychosocial topics, (5) shared decision-making, and (6) expectation setting. These actions were not observed in all consultations and did not necessarily occur concurrently in one single consultation. However, this chapter will demonstrate that when implemented effectively by the audiologists, these communicative actions lead to interactions that displayed greater symmetry of knowledge and authority in encounters wherein more attention was given to the patient's voice. Additionally, there was observable trust and rapport between audiologist and patient and management recommendations appeared more relevant to the patient as these were grounded in the information shared in the case history.

Conversely, this chapter will present evidence from interactions in which the antithesis of these communicative actions occurred. These interactions resulted in observable hesitancy in rapport and information sharing between the patient and audiologist and greater asymmetry of knowledge and epistemic authority between patients and audiologists inhibiting patient-centredness. This asymmetry in interactions aligns with traditional

approaches to interactions between patients and healthcare professionals, wherein the healthcare practitioner holds authority and leads the conversation, and the patient follows the conversation with little interruption or questioning (Meeuwesen et al., 2007). Further, in interactions wherein these communicative actions did not occur, management recommendations appeared to be less relevant to the patients' needs, context and culture.

These findings were observed across both research sites and are presented below with excerpts from the data sets provided to illustrate the findings.

4.1. Agenda Setting

Agenda setting is a communicative action that was rarely observed to be implemented by the audiologists. In this context, agenda setting refers to introducing and orientating a patient to the role of the audiologist, negotiating the purpose and intended outcome of the consultation from both the audiologist and patient's perspective, and discussing the intended sequence of events that will occur in the consultation. This may involve discussing topics that need to be explored, from both the audiologist and the patient's perspective, and particular tasks that need to be carried out in the consultation. Across the video-recorded interactions, communication in the tinnitus consultations appeared to be mostly dominated and lead by the audiologists. Notably, when agenda setting did occur, it was the audiologist who determined the agenda. No attempts were observed wherein the audiologist actively attempted to establish the patient's agenda for the consultation.

Interviews with the audiologists indicated that all audiologists had a predetermined agenda for the information that they aimed to obtain from the patient and share with the patient in the initial tinnitus management consultation. When asked about their goals in an initial tinnitus management consultation, most of the audiologists responded that they wanted

their patients to leave with an understanding of the cause and triggers of their tinnitus and how to manage those triggers.

Notably, only one of the audiologists referenced obtaining information about the patient's goals or agenda, stating "*Maybe the main goal for me it's just to sort of find uhm middle ground of what the patient is feeling and saying and how my test battery can sort of match a little bit, even though sometimes it's not reached the goal um but just to get an insight to work from their perspective as to like what exactly is happening and how can I possibly assist*" (A4HA).

Despite the audiologists indicating that they have specific goals and outcomes for tinnitus management consultations, few interactions were observed to involve any form of explicit agenda setting for the session. An important question would be whether agenda setting was observed more frequently from audiologists with more experience, however, this trend was observed across the data set, at both sites, amongst audiologists of varying degrees of experience.

In extracts 1.1 and 1.2 below, the audiologists are observed to attempt to set an agenda with their respective patients, providing a brief description of the intended purpose of the consultation.

Extract 1.1: P2A2

1. Aud:	Umm, ok soo you back here today and the **main thing I need to do is to follow up on how you doing**… ok? **To retest** the… the right ear especially… um because we had the gap? I don't know if you remember? **I must show it to you**. **Or when I do the results we'll show it to you**. And then to - to **see how - what we need to do further based on the results** we have, ok?

Extract 1.2: P4A3

1. Aud:	Lebitso laka ke Senamile,[gestures to herself], ok? **Ke nna audiologist**. *My name is Senamile, [gestures to herself] ok?* ***I am an audiologist****.*
2. Pt:	==Ok. [nods]
3. Aud:	==So…umm… the last time ba o testile ka the other side akere? **So, today ba o booka so that ke tlo explaina more ka ringing sound e ko tsebeng cause o batla go itsi go dirahala eng ka ditsebe tsa hao, akere?** *==So…umm… they tested you on the other side the last time you were here, right****? So, today they booked you for here so that I can explain to you more about the sound in your ear cause they want to know what is going on with your ears, right?***
4. Pt:	Le go se otlwe pila. *And not hearing properly.*
5. Aud:	Mmm mmm.

In extract 1.1 and extract 1.2, both audiologists begin the consultation by explaining the agenda they have set out to the patient. Their explanations are brief but provide a general understanding of the focus of the consultation to follow in comparison to other interactions observed wherein the audiologist would immediately begin confirming patient details or taking case history. However, in neither extract is the audiologist observed to ask the patient what they are expecting of the consultation or their intended outcome for the consultation.

When agenda setting in relation to the intended purpose and outcome of the consultation did not occur, the patients often appeared uncertain in their interactions, demonstrating confusion and sometimes frustration in response to questions posed by the audiologists. When interviewing the patients, many indicated uncertainty about the purpose of the tinnitus consultation and what would occur in the consultation, with one patient stating "*Uh for the fact that I didn't know what kind of a session I'm going to do, I thought maybe its exercises, at first when they say you must go to the session, I thought maybe it's something*

exercises" (P4HB) and another patient saying, "*Ya, I didn't know what to expect. Because it was a long time to come here*" (P6HA), referring to a long wait between making the appointment and attending the clinic. In one interview, a patient even indicated fear prior to the consultation: "*I was worried the sounds gonna hurt my ears, you know? Cause I did it when I was very, very small, you see? For the first time after how many years, they put this thing here*" (P7HA) referring to the hearing test.

Furthermore, when agenda setting did not occur, some of the patients were observed to seek clarification of the agenda. In doing so, patients would interrupt the audiologist with information or questions that appeared to fulfil their own agenda or introduce new topics that were inconsistent with the current topic. Extract 1.3 details an initial tinnitus consultation with a patient that has been referred to the tinnitus clinic by her general practitioner. This extract shows the patient attempting to clarify the purpose and intended outcomes of her consultation with the audiologist, as no agenda has been set in opening the consultation.

Extract 1.3: (P1A1)

1.	Aud:	Did you find the number?
2.	Pt:	Ohh [searches on mobile phone] [pause – 14 seconds] (contact number)
3.	Aud:	[Writes in file]
4.	Pt:	[Puts mobile phone in bag] **What are we going to be doing today?**
5.	Aud:	**Mmm…actually, I'm asking you (laughs)**
6.	Pt:	**Oh you going to ask ME what we going to do?**
7.	Aud:	==Yes…
8.	Pt:	==Ok
9.	Aud:	Because uhh… ya the main reason why you are here
10.	Pt:	The ringing ears. [gestures to ear]
11.	Aud:	The ringing ==in the ears.
12.	Pt:	==Mmm.

13. Aud:	Ok, so we are just going to do that - like an assessment for that.
14. Pt:	Ok… and is there treatment for it?
15. Aud:	How old are you – sorry.
16. Pt:	Sorry 34.
17. Aud:	[Writes in file and then looks up] **Is there a treatment?**
18. Pt:	Mmm
19. Aud:	Umm… like medication?
20. Pt:	Ya or something==
21. Aud:	==No unfortunately.
22. Pt:	**So, what do we do? Do we just manage it?**
23. Aud:	Yes. [looks down and writes on form]
24. Pt:	Oh…ok.
25. Aud:	[Looking down at form] Which language do you speak?

In extract 1.3 the audiologist introduces herself and immediately begins reviewing the patient's demographic information and contact details. While the audiologist writes this information down on a form the patient interjects with a question (line 4) in an attempt to gain clarity on the agenda of the consultation. The patient's question and subsequent dialogue demonstrates an assertiveness that is not typically seen in other consultations in this data set. The audiologist's response in line 5, "*Actually, I'm asking you"* is confounding, considering that the audiologist has not indicated the purpose of the consultation. Her response may be interpreted as an attempt at the more common open-ended question, "what brings you in today?" Despite the intention, the audiologist's response in line 5 conveys superiority, does not provide the patient with clarity, and does not mitigate the uncertainty that she is expressing. The patient's subsequent question in line 14, "*Ok and is there a treatment for that*?" alludes to her own agenda and priorities for the consultation which she has not been given an opportunity to voice previously. Again, the audiologist does not provide a

satisfactory response to the patient's questions but continues to follow the questions set out in the case history form observed in line 25. As a result, the agenda of the audiologist, whether described to the patient or not, is observed to be rigid and inflexible, following a predetermined agenda, dictated by the 'script' of the case history form.

4.2. Breaking the Script

A scripted approach was used by most audiologists in the observed tinnitus management consultations. A scripted approach refers to providing information in a rigid, rote or generic format (Kanji et al., 2021; Watermeyer & Kanji, 2022). Breaking the scripted approach to an initial tinnitus consultation is a communicative action that was observed to enable audiologists to ask narrative-eliciting, open-ended questions and follow the patient's lead through the consultation. In contrast, following a rigid scripted approach appeared to inhibit information sharing.

The tinnitus consultations at both hospitals appeared to follow a pre-determined, clinician-driven structure. At times, the structure of the consultations was rigidly implemented. Other consultations were more flexible in structure, determined by information shared by the patient. The rigidity of the structure of the tinnitus consultations varied between audiologists as audiologists were observed to be more flexible in their structure with one patient and more rigid in their structure with another patient.

Many of the tinnitus consultations observed at Hospital A typically followed a scripted approach to information giving which was dictated by a case history form and later an educational tinnitus pamphlet. The case history form employed was extensive and lengthy, and covered topics related to medical conditions and medications, the onset, nature and characteristics of the patients' tinnitus, as well as the patients' lifestyle, sleep and stress management. The educational pamphlet at hospital A was provided in English only. It

described the nature and mechanism of tinnitus and provided recommendations for management related to lifestyle changes, sleep hygiene, relaxation therapy, and external noise generation. A flip-file of Augmentative and Alternative Communication (AAC) boards was also used in many of the consultations observed at Hospital A with the intention of supporting communication with patients with significant loss of hearing and with patients whose home language differed from that of the audiologist. It is unclear if the AAC boards were developed within the department or by an outside source. The AAC board appeared to make use of photographic images with categories such as lifestyle changes, hobbies and stress relief. Images for terms such as swimming, running, walking, massage, cooking, reading, music and television were included in the boards.

Whilst Hospital B appeared to employ similar tools such as a case history form and tinnitus pamphlet, the audiologist appeared to follow the 'script' of these tools less rigidly. There was no observation of an AAC board being used at Hospital B. Although the audiologists at Hospital A followed a script to varying degrees, the consultations wherein the script was followed more rigidly resulted in poor symmetry in the encounters with the audiologist dominating the interaction. Furthermore, there was notable repetition and redundancy in the case history and information sharing in the informational counselling that was irrelevant to the patient's needs.

Whilst the use of a rigid, scripted approach was observed to inhibit patient-centred communication, two of the audiologists indicated that they found the case history form and pamphlet to be valuable tools in their consultations. When speaking to the case history form in their interview, one of the audiologists noted, "*Also when they are talking to me writing things down for them to see that I am writing somewhere and I'm moving when I'm writing, it shows to the patient that actually the questions that, like, the answers they are giving me it correlates in a way, it's not like I'm just asking for the sake of asking. But I am taking note of*

everything that they are saying" (A1HA). This indicates that the audiologist perceived the patients to value the audiologist taking notes and appearing to be actively listening. An extensive case history is important for an audiologist in gaining a holistic understanding of the patient's presentation of tinnitus, the impact it is having on their day-to-day functioning, and the implications to their quality of life, however, the rigidity to which the script of the form was followed appeared to inhibit information sharing related to these topics.

In the interviews, the audiologists appeared to perceive the pamphlets as a valued tool in their counselling for recall and certainty as it provided a reference for patients to refer to after the consultations. When speaking on the use of the pamphlet, one of the audiologists noted, "*So, written information that they can take home and go back to because, it's a wealth of information that you're giving so they sometimes don't remember everything*" (A2HA). Another audiologist stated, "*It's already good if the patient comes in and they see that there's already been a pamphlet that's made about this thing that I am experiencing. It shows it's something serious so, like, I will explain the pamphlet to the patient as well and then give the pamphlets and mainly it's been like excellent mechanisms that really work so far for the patients" (A1HA)*. Here, the audiologist indicates the thought and intention behind the pamphlets that are used, despite the pamphlet containing generic information that is not specific to the patient.

However, other audiologists alluded to the limitations of rigidly following a scripted approach outlined by the case history form and pamphlet, such as the closed-ended questions and the use of jargon. One such audiologist noted, "*Someone might look at our assessment form and see it as it being very structured, although I think it should be used as a guide. I personally use it as a guide. Open-ended questions are preferred, um, so that the patient has more room to, um, explain and, um, not, like, closed-ended. Um, yeah, so, I prefer more*

open-ended questions, um, less jargon, um, more of an active listener and trying to, you know, get them to speak" (A4HA).

Similarly, in one interview, a patient noted a communication that arose in their interaction with the audiologist because the audiologist used a lot of jargon, prompted by their use of the case history form. She explained, "*Uhhh, no its only that the constant use of your, your, you know the words of your work. Ok, how can I say, there are common words that we talk like ahhh 'eat' what, what, what. Ok, you see talking about the fruit. But how to do the planting, planting seeds. But maybe you know the words, you know the seeds, you know about, so, what? But now I didn't know about the ear. You know your terms of ears, of the parts of the ears." (*P2HA). As the patient explains, in following a script-like approach, audiologists may be inadvertently using jargon in their questions and information-sharing.

The case history form typically led the audiologists at Hospital A to ask closed-ended questions, which patients would often respond to with a single word or short answers. This limited the patient's ability to communicate with narrative and resulted in the audiologist dominating the interactions. When following the scripted approach rigidly, the audiologists were observed to dismiss, or quickly close topics introduced by the patient as this forced a break in the script indicating inflexibility in the consultations and an inability to deviate from the scripted approach. The information that patients volunteered in these interactions would often be asked again by the audiologist later in the consultations leading to repetition and redundancy.

Extract 2.1 shows an audiologist progressing through the case history of her patient, asking short, closed-ended questions that prompt short responses. The audiologist is observed to move on from one question to the next without eliciting elaboration from the patient or maintaining the topics.

Extract 2.1: P1A1

1. Aud:	[Looking down at form and writing] **When did the problem start?**
2. Pt:	Eish… [Shakes head, eyes widen] I would say maybe… four months now.
3. Aud:	[Looks up at patient] Four months? [Looks down and writes]
4. Pt:	Ya
5. Aud:	[Looks up at patient] **Is it in – uhh one ear or both ears?**
6. Pt:	It alternates.
7. Aud:	It alternates? [Looks down and writes on form]
8. Pt:	Mmm… [nods] it's both ears.
9. Aud:	**Are your ears painful?**
10. Pt:	Mmm mmm [shakes head] but they sometimes when I… like… [gestures rubbing ears] try to when they itchy … there's sort of like a little bit of a liquid that comes out when I try to…[gestures moving finger in ear] I don't know.
11. Aud:	==Ok
12. Pt:	==Mmm… I don't know…==(but I)
13. Aud:	== **Have you ever had ear infections?**
14. Pt:	Yes, I've had an ear infection before. [nods]
15. Aud:	When last did you have one?
16. Pt:	[pause] Ok the last time when I've BEEN to the Doctor was two months back...or three months back and he said it's an ear infection and gave me antibiotics… then from it the - the ringing didn't go away.
17. Aud:	Ok and then after that the ear infection was it cleared or was it ==still there?
18. Pt:	==Ya he had – he had said its cleared.
19. Aud:	[Looks down and writes] [pause – 27 seconds] [Looks up at patient] Have you ever had an accident when you injured your head or something?==
20. Pt:	==Mmm mmm== [shakes head]
21. Aud:	==Do you have a hearing problem?
22. Pt:	No I can hear properly.
23. Aud:	**Balance problems?** ==Do you
24. Pt:	

	==Ya sometimes I feel… [gestures head moving around] a bit dizzy. Like I could be sitting on a couch, and then I start feeling…[gestures head moving side-to-side] and then I start
25. Aud:	feeling… a bit [gestures hand moving in front of face] ya, dizzy.
26. Pt:	While you are sitting?
27. Aud:	While I'm sitting. [nods]
28. Pt:	Is it bothersome?
29. Aud:	Excuse me?
30. Pt:	Is it bothersome?
31. Aud:	What is that? [leans forward slightly]
32. Pt:	The dizziness, like is it bothering you? Is it something that's like constantly there that ==is
33. Aud:	==It is bothering me ya.
	[Looks down at form and writes] [pause – 30 seconds] Uhh did you work in a noisy
34. Pt:	environment before?
35. Aud:	Mmm mmm [shakes head]
	[Looks down at form and writes]

In extract 2.1, line 1, line 5 and line 9 the audiologist asks several closed-ended questions. These closed-ended questions typically elicit short responses from the patient, observed in line 2 and line 6. The audiologist acknowledges the patient's responses but does not ask the patient to elaborate. The audiologist moves swiftly through these questions. In line 9, the audiologist asks, "Are your ears painful?". The patient responds (line 10), *"Mmm-mmm (shaking her head) but they sometimes when I… like… (rubbing her ears) try to when they itchy … there's sort of like a little bit of a liquid that comes out when I try to… (moving her finger in her ear) I don't know."* The audiologist acknowledges the patient's response but as the patient continues (line 12) the audiologist cuts her off with the next question (line 13), "*Have you ever had ear infections*?". The overlapping speech, and the fast pace of the interaction to follow, suggests that the audiologist is expecting short and quick responses to her questions. The closed-ended questions limit the patient's responses and guides the pace

and direction of the conversation. This style of questioning conveys a checklist approach to the questions being asked and answered as opposed to a fluid, natural conversation.

Extract 2.2 shows a continuation of the same case history wherein the audiologist again reiterates questions that have previously been asked and answered and reintroduces topics that she has previously closed.

Extract 2.2: P1A1

1.	Aud:	So the tinnitus you say it started four months ago?
2.	Pt:	Mmm [nods]
3.	Aud:	**Uhh did it start at the same time with the infection?**
4.	Pt:	[Pause] I'm not sure…because it - it… it started... the tinnitus… and then I went to a doctor… and that's when he gave me antibiotics, for the infection.
5.	Aud:	So how long did you wait before you… went to the Doctor?
6.	Pt:	[Pause] I don't know… I don't… I don't remember.
7.	Aud:	Like… would you say it's been like weeks, or days before you went to the doctor and he told you that you had an infection?
8.	Pt:	[Pause – 3 seconds] Maybe a month or ==something (inaudible)
9.	Aud:	==a month?**[Looks down at form and writes] [Pause – 57 seconds]** **Ok so for the dizziness that you are talking about… I will also do uhh… I will go like further into that but now we just need to complete the uhh - like ask you questions about the tinnitus, ok?**
10.	Pt:	[Nods]

In extract 2.2, line 3 the audiologist asks the patient at a later stage in the case history about the onset of the tinnitus related to the infection she was previously diagnosed with and treated for. The audiologist has previously introduced the topic of infections with patient, but now circles back to this topic in order to elicit further information. The audiologist then reintroduces the topic of dizziness in line 9 but indicates, possibly in reference to her set of

case history questions, that this will be discussed at a later stage because at this time she needs to ask questions about the tinnitus.

Notably, in extract 2.2, the use of the written artefact of a case history form proved to detract from the interaction. As the audiologists would often be looking downward to write patient responses, the non-verbal communication cues exhibited by the patients were oftentimes missed or had to be reiterated by the patient verbally. Furthermore, the long pauses observed as the audiologist writes down the patient's responses (line 9) disrupt the flow of conversation.

Similarly, the educational pamphlets employed in the counselling phase of the tinnitus consultations were observed to impede communication when followed verbatim with a scripted approach. The counselling phase of the tinnitus consultations at hospital A typically followed an assessment and a discussion of the assessment results (as depicted in figure 1.1 above). The tinnitus pamphlet employed as a tool in the counselling stage of the consultations was provided only in English and made generalised recommendations for lifestyle changes and tinnitus management strategies. A flip-file of AAC boards was used to support the pamphlet, providing visual cues for the recommendations made. It appears that the audiologists used the AAC boards in an attempt to overcome language barriers and communication barriers due to hearing loss when making their recommendations. When this counselling script was followed rigidly, the recommendations often proved to be irrelevant to the patient based on information shared previously in the consultation.

Extract 2.3 illustrates an audiologist using the educational pamphlet and AAC boards as a script when making tinnitus management recommendations. As a result, these recommendations are shown to disregard the information sharing that has previously occurred in the consultation and are thus in many ways irrelevant to the patient.

Extract 2.3: P3A2

1. Aud:	[Points at pamphlet] So… there is some things that can make the sound WORSE… [gestures with both arms up] ok?
2. Pt:	Yes=
3. Aud:	=Ok? And LOUDER [gestures with both arms up]… that you can do – that you can help, right? [Opens pamphlet] Umm so you can read here… what you can do, neh?
4. Pt:	Ok ok
5. Aud:	So, maybe like here… [points to AAC board] you see… lifestyle changes.
6. Pt:	[Looks at AAC board] Yes.
7. Aud:	To exercise… [gestures running motion with arms] Neh? To be healthy.
8. Pt:	Yes [nodding]
9. Aud:	**Ya…[Points to AAC board] Swimming, or running, or whatever. [Pointing at different pictures on AAC board] Running and walking, neh?**
10. Pt:	[Nods, looking at AAC board] Yes==
11. Aud:	==Yes. Then hobbies. Stress relief [pointing at AAC board]. To be calm, not to stress. The sound it goes down. [Gestures with both hands downward] When you stress the sound goes up. [Gestures with both hands upward].
12. Pt:	Yes [nodding]
13. Aud:	You understand?
14. Pt:	Yes, I understand. [Nodding]
15. Aud:	Ok… umm [looks at AAC board] … **then you see…massage [gestures massaging own shoulders] if you got stress massage the shoulders.** You see, some people like to cook… [gestures stirring] some people they read. **But your eyes… [gestures to eyes] we must tell you to go to the Eye Doctor.**
16. Pt:	Yes [nodding]
17. Aud:	Ya. Some people they listen to music… [gestures headphones with hands] some people they watch TV.
18. Pt:	[Nods]
19. Aud:	Ok. [Takes page out of AAC folder] Ok, umm… so for you [turns and reads in file] …you go to bed, and you toss and you turn. [Turns back to patient] Ok so if you not sleeping, neh?

	Then maybe you must – you must do other things. **You must read or do other things until you tired, and then you can go sleep.** That's one. [gestures one with finger]
20. Pt:	Yes. [Nods]
21. Aud:	Another thing you can do is you can play – play m- soft music but next to your bed.
22. Pt:	Yes
23. Aud:	**Ok? Then the – the - the - you can play the timer on the phone to switch off… after few songs… or after few sounds.**
24. Pt:	Yes
25. Aud:	And then you can fall off to sleep… maybe? You understand?
26. Pt:	Yes, I understand.

In extract 2.3, the audiologist is observed to make use of an AAC board. The AAC boards appear to mimic the general recommendations provided in the pamphlet. In the above extract (line 9 and line 15), the audiologist's recommendations for the patient are determined by the images present on the board, such as swimming, running and massage.

The patient has previously indicated to the audiologist in the case history taking that she has difficulty with her vision and cannot read smaller text. Furthermore, she has indicated that she occasionally walks for exercise, when she feels strong enough, but cannot do more than that. Contextually, this patient has provided no reference to her technological knowledge nor whether she has access to a smart phone. However, within the context of the state hospital setting in the socio-economic climate of South Africa this cannot be assumed as a benchmark. In this example, the audiologist acknowledges the patient has difficulty reading but then reiterates reading as an activity if she cannot fall asleep. The audiologist recommends swimming or running for exercise based on the images on the AAC board, and then quickly corrects herself suggesting running or walking, despite the patient indicating she is not capable of higher intensity exercise. Furthermore, the audiologist vaguely recommends a noise-generating app on a smart phone in line 23, without seeking further understanding of

the patient's access to this technology. The informational counselling and management strategies provided do not align with the patient's abilities or circumstances and are thus not relevant to the patient. The audiologist possibly makes use of the AAC board with the intention of overcoming communication barriers due to language differences and hearing loss. However, the AAC boards appear to dictate the audiologist's recommendations, instead of supporting communication thereof, thus inhibiting PCC. Further, there is a lack of integration of the information obtained in the case history with the recommendations being made. Following the script outlined in the case history form verbatim has led to inflexibility in information sharing and has impeded communication, and subsequently relationship building. The management strategies that are recommended to the patient by the audiologist allude to an underlying misunderstanding of the patient a disconnect between the audiologist and the patient.

When the audiologists were observed to 'break' this script, and employ the tools less rigidly, they were better able to follow the patient's lead, maintaining topics that the patient introduced or engaged in. Breaking the script allowed audiologists to employ more open-ended questions and elicit narrative responses from patients. Oftentimes, these narrative responses provided opportunities for patients to voice their concerns and priorities and delve into emotional and psychosocial stressors.

Extract 2.4 shows an audiologist breaking the scripted approach previously observed in other video-recorded interactions, by following the patient's lead and maintaining topics introduced by the patient, resulting in this patient providing a narrative about her tinnitus experience, revealing her emotional and psychosocial distress and providing the audiologist with valuable information that can be carried into her informational counselling and management recommendations.

Extract 2.4: P7A4

1.	Aud:	Your cell phone number? [Looking at form and writing]
2.	Pt:	Zero eight four… double… zero eight… [reaches down to bag and looks through bag] wait let me just see because… I'm still battling with my own… [riffles through bag] cell phone number. Where is my phone now? I put it in somewhere here. [Stands up to feel in pockets]
3.	Aud:	There's a thingy in here that (maybe that) [looks through file]
4.	Pt:	Where is my blimmen cell phone now! [Rifling through bag]
5.	Aud:	No don't stress, we can also do it after don't worry about it. [Looking through file]
6.	Pt:	[Pause – 3 seconds] No man I ==can't
7.	Aud:	==Oh is it this one here? [Points to page] Oh eight four==
8.	Pt:	==Ya ya //looking at page//
9.	Aud:	(Contact number)… that's ok.
10.	Pt:	But now where's my phone? [Searching in bag] I'm worried about my phone now.
11.	Aud:	[Looks up from file] Oh yes! You can't find it?
12.	Pt:	Nee! *No!*
13.	Aud:	Your pockets? Oh! Is that not your phone there? [Points to table]
14.	Pt:	Agg you! [Puts bag away]
15.	Aud:	[Laughs]
16.	Pt:	My mind is not up there because of this sound [gestures to head] in my head.
17.	Aud:	Oh yeah
18.	Pt:	It's not nice.
19.	Aud:	Ya==
20.	Pt:	==**Everyday I'm waking up with it, go sleep with it. Even when people talk around me**== [closes bag and sits down]
21.	Aud:	==Ya
22.	Pt:	**I can hear this** [gestures with both hands circling head]
23.	Aud:	**And it's in in your head**, ==more
24.	Pt:	==Its in hierso hier [gesturing to her head with both hands] *==Its in here like here*

25. Aud:	**Ok. [Nodding] Can you describe the sound for me?**
26. Pt:	Umm [Sighs and looks away]
27. Aud:	Even if you make ==the sound
28. Pt:	==I thought…we – the – the… it was about two or three month ago, neh? No one was at home, my – nee, my uncle was at home. *– no, my uncle was at home.* He was by his house neh. He used to stay on the corner there where we staying now neh. So … I heard someone was grinding or something. Then I went out, to see who is – is doing this noise all the time.
29. Aud:	[Nodding] Ya.
30. Pt:	Then I asked uncle, "Listen are you grinding or sweising or doing something?". *"Listen, are you grinding or welding or doing something?"* He says "no!"
31. Aud:	Ok==
32. Pt:	==Then after that it started all over again, you know? [Gesturing with both hands around head]
33. Aud:	Sho
34. Pt:	I don't know what it is – is it because of – of stress? Is it because of my ears? I don't know.
35. Aud:	**Well it can be related to both. [Nods] So that's important to know==**
36. Pt:	==Mmm
37. Aud:	If you have a hearing loss
38. Pt:	Ya
39. Aud:	And it is most likely in the higher frequencies, which I'll explain when we do the test==
40. Pt:	==Mmm
41. Aud:	Then it can be related most likely. Especially if you had a lot of noise exposure, like if you worked in a factory where there was a lot of noise, or heavy machines where there was a lot of noise==
42. Pt:	==Mmm
43. Aud:	Most likely that is the cause of it. Then also it can be related to stress. So, if you had a== traumatic event

44. Pt:	==It's==
45. Aud:	==Umm anything from a uh car accident to someone dying anything traumatic can induce you to experience…== umm that noise.
46. Pt:	==Mmm
47. Aud:	Ok and then also it can be a side effect of medication.
48. Pt:	Mmm
49. Aud:	Ok.
50. Pt:	Ohh.
51. Aud:	[Nodding] **Ok, so… before we go into more detail [laughs] let me just get all the details here.** Do you know your ID number?

In extract 2.4, the audiologist is observed to be following the structure seen in previous consultations, first obtaining and confirming patient details before following the case history form, in line 1. However, when the patient briefly loses her cell phone and then locates it again, she introduces the topic of her tinnitus and the impact it is having on her everyday functioning. In line 23, the audiologist breaks from the script presented in the case history form and acknowledges the patient's concern, maintaining the topic by asking her tinnitus specific questions in line 25 and line 27. The audiologist also assures the patient in line 51 that more explanation will follow. As a result, the patient engages in a narrative that elicits information related to the onset of the tinnitus, her primary concerns about the tinnitus, and later develops a rapport in which the patient is able to share information related to high emotional distress with the audiologist. In this consultation, the audiologist responds with empathy to the patient's emotional distress, reaffirming the trust developed in this interaction. In line 51, the audiologist gently guides the patient back to the script after acknowledging the information offered by the patient and sharing information with the patient that is relevant to her questions, without dismissing the patient or breaking down the communication. Here, the

audiologist uses open-ended questions in order to invite the patient's narrative and demonstrates flexibility in her approach, following the patient's lead.

4.3. Prioritisation of Patient Concerns

The communicative action of directly eliciting information about a patient's primary concerns and addressing these concerns during the initial tinnitus consultation was a communicative action that was rarely observed in the video-recorded interactions.

In their interviews, patients indicated common priorities for information regarding their tinnitus, ranging from deteriorating loss of hearing, sleep, concentration, and even 'brain tumours'. When communicating their biggest concerns about their tinnitus, one patient stated "*My worry was maybe the next years I can't hear, I don't know. I was thinking so*" (P6HA). And another expressed, "*Umm, if it's going to be a permanent damage or if there's something wrong with my brain, because I don't know if it is because of my brain, if it is because of stress, you know it's like, uh, I don't understand what happened, you know?*" (P7HA). A third patient stated "*My concentration. To, like, try and study. That was my biggest worry. Because you know what I would actually like to try and further my studies next year so I'm worried that this thing just keeps going on and on and it's going to stop me from doing what I want to do*" (P1HA). Throughout the video-recorded interactions, patients were observed to stress or repeat particular concerns throughout their consultations. The patients were observed to indicate these primary concerns and priorities in moments of silence or in introducing or maintaining a topic related to these concerns.

In their interviews, many of the audiologists referred to implicitly gauging these concerns from their patients during the consultations, even those who made use of a scripted approach. One of the audiologists mentioned following the patient's lead in order to gain information regarding the patient's concerns, saying, "*They lead the session in actual essence*

because whatever comes up next is something that they've either brought up or its their specific, um, concerns that I can address. Um, so, again it's - it comes back to the goals of the session. They already know that it's all about them, so, um, I tend to focus more on, um, on when I ask them certain questions then I get more, um, information from them than I can sort of gauge where we headed to" (A3HB). Another audiologist noted her focus is on being holistic and explicitly asking the patients about their concerns, "*To identify how long they have been living with the tinnitus and how much it's affecting the patients, in all areas like be it work, family, and also, like, emotionally*" (A1HA).

Although many audiologists referred to prioritising or gauging their patients' concerns in their interviews, this communicative action did not translate into their practice. As noted above in extract 2.1, 2.2 and 2.3, the audiologists were observed not to establish the patient's agenda for the consultation. Similarly, the audiologists were not observed to directly establish the patients' primary concerns or priorities within the tinnitus consultations. These audiologists were observed to inconsistently acknowledge the patients' concerns and maintain the topic of conversation surrounding the patients' concerns. At times, the audiologists were observed to acknowledge their patients' concerns but did not pursue further discussion of those concerns.

Audiologists were rarely observed to provide counselling focused on these primary concerns immediately or during later counselling processes in the consultation. Occasionally the audiologists were observed to not respond at all to concerns raised and stressed by patients. Failure of the audiologists to acknowledge or engage in these topics resulted in patients demonstrating uncertainty during the consultation with patients asking for clarification when the audiologist concluded the session. Some patients even demonstrated frustration, either looking away from the audiologist and growing silent, or raising their tone of voice when responding to the audiologist.

The following three extracts (extract 3.1, 3.2 and 3.3) demonstrate an audiologist navigating the topic of balance problems and dizziness with a patient in her tinnitus management consultation. In the following sequence of extracts, the patient indicates a concern about dizziness. The audiologist is observed to inhibit information sharing on this topic, leaving the patient with uncertainty about her concern seen when she reintroduces it in the conclusion of the consultation. As a result, the patient leaves the consultation without clarity on a management plan for the problem she is facing.

Extract 3.1: P1A1

1. Aud:	[Looking down at form and writing] When did the problem start?
2. Pt:	Eish… [Shakes head, eyes widen] I would say maybe… four months now.
3. Aud:	[Looks up at patient] Four months? [Looks down and writes]
4. Pt:	Ya
5. Aud:	[Looks up at patient] Is it in - uhh one ear or both ears?
6. Pt:	It alternates.
7. Aud:	It alternates? [Looks down and writes on form]
8. Pt:	Mmm… [nods] it's both ears.
9. Aud:	Are your ears painful?
10. Pt:	Mmm mmm [shakes head] but they sometimes when I… like… [gestures rubbing ears] try to when they itchy … there's sort of like a little bit of a liquid that comes out when I try to…[gestures moving finger in ear] I don't know.
11. Aud:	==Ok
12. Pt:	==Mmm… I don't know…==(but I)
13. Aud:	== Have you ever had ear infections?
14. Pt:	Yes, I've had an ear infection before. [nods]
15. Aud:	When last did you have one?
16. Pt:	[pause] Ok the last time when I've BEEN to the Doctor was two months back...or three

	months back and he said it's an ear infection and gave me antibiotics… then from it the - the
17. Aud:	ringing didn't go away.
18. Pt:	Ok and then after that the ear infection was it cleared or was it ==still there?
19. Aud:	==Ya he had - he had said its cleared.
	[Looks down and writes] [pause – 27 seconds] [Looks up at patient] Have you ever had an
20. Pt:	accident when you injured your head or something?==
21. Aud:	==Mmm mmm== [shakes head]
22. Pt:	==Do you have a hearing problem?
23. Aud:	No I can hear properly.
24. Pt:	**Balance problems?** ==Do you
	==Ya sometimes I feel… [gestures head moving around] a bit dizzy. Like I could be
	sitting on a couch, and then I start feeling…[gestures head moving side-to-side] and then I
25. Aud:	start feeling… a bit [gestures hand moving in front of face] ya, dizzy.
26. Pt:	While you are sitting?
27. Aud:	While I'm sitting. [nods]
28. Pt:	Is it bothersome?
29. Aud:	Excuse me?
30. Pt:	**Is it bothersome?**
31. Aud:	What is that? [leans forward slightly]
32. Pt:	The dizziness, like is it bothering you? Is it something that's like constantly there that ==is
33. Aud:	==It is bothering me ya.
	[Looks down at form and writes] [pause – 30 seconds] Uhh did you work in a noisy
34. Pt:	**environment before?**
35. Aud:	Mmm mmm [shakes head]
	[Looks down at form and writes]

In extract 3.1, the audiologist proceeds through a number of closed-ended questions in order to obtain case history information. In line 23, she introduces the topic of dizziness when she asks, "*Balance problems?*". Here, the patient affirms that she does experience dizziness,

particularly when sitting down (line 24). The audiologist acknowledges the patient's response by repeating it back to the patient, and then asks, "*Is it bothersome?*" (line 29). After some miscommunication and repair, the patient affirms that the dizziness is bothering her (line 32), indicating a concern for the patient. The audiologist's question about the dizziness being bothersome is interesting on a clinical level, as theory and policy in practice would indicate that dizziness should be investigated further by gaining more information about the patient's experience and possibly making onward referrals for assessment. However, when the patient affirms that the dizziness is bothersome, the audiologist does not verbally or non-verbally acknowledge this information, but instead looks back down at her case history form and asks another, unrelated, closed-ended question prompted by the form (line 33). The audiologist continues the case history taking process, leading to the next extract (extract 3.2).

Extract 3.2: P1A1

1.	Aud:	So the tinnitus you say it started four months ago?
2.	Pt:	Mmm [nods]
3.	Aud:	Uhh did it start at the same time with the infection?
4.	Pt:	[Pause] I'm not sure…because it - it… it started... the tinnitus… and then I went to a doctor… and that's when he gave me antibiotics, for the infection.
5.	Aud:	So how long did you wait before you… went to the Doctor?
6.	Pt:	[Pause] I don't know… I don't… I don't remember.
7.	Aud:	Like… would you say it's been like weeks, or days before you went to the doctor and he told you that you had an infection?
8.	Pt:	[Pause – 3 seconds] Maybe a month or ==something (inaudible)
9.	Aud:	==a month?[Looks down at form and writes] [Pause – 57 seconds] **Ok so for the dizziness that you are talking about… I will also do uhh… I will go like further into that but now we just need to complete the uhh - like ask you questions about the tinnitus, ok?**

10. Pt:	[Nods]

In extract 3.2, subsequent in the case history to extract 3.1, the audiologist acknowledges the patient's concern about dizziness again (line 9), without being prompted by the patient, and indicates that she doesn't have time to address it immediately but will revisit it at a later stage in the consultation. In doing so, the topic of the dizziness is opened and closed by the audiologist halting any further information sharing on the matter from the patient. The audiologist's choice to delay discussion of this topic despite the perceived importance to the patient may be reflective of uncertainty from the audiologist in how to address concerns of dizziness and balance problems. However, this action reflects the inflexibility and redundancy previously illustrated in the scripted approach that this audiologist uses and how it is imposed on the patient effectively limiting valuable information sharing opportunities that the audiologist could have explored further.

The audiologist proceeds with the tinnitus consultation, through the case history, tinnitus assessment measures and counselling, leading to the conclusion of the consultation in extract 3.3. The audiologist does not return to the topic of dizziness until the patient prompts her, and again the audiologist is observed to shuts down the discussion and defers it for another appointment.

Extract 3.3: P1A1

1. Aud:	**Do you have any questions?**
2. Pt:	[Pause] **No… Umm and with the – the dizziness?**
3. Aud:	**Oh yes, the dizziness umm… sho… cause of time like they need to see the other patient umm… I'm just going to give you another appointment**
4. Pt:	Ok.
5. Aud:	

6. Pt:	But, like or we can do the test when you come again for the tinnitus, because its - if it's like bothersome in a way that you are like at risk of falling or something like that
7. Aud:	Umm no it just comes and - and goes so [flips hand back and forth]
8. Pt:	It comes and goes?
9. Aud:	Mmm== ==Uhh because sometimes it could be related to like your blood pressure as well if its low and stuff like that it happens like when you stand up you can just feel a bit [moves both hands around in circle motions showing imbalance] dizzy and all that. And stress as well…uhh… its related to that… [nods] ya, so could be that but… **umm because of time unfortunately I'll have to either give you another date, or you can see how it goes, like how you manage it, and then when you come to the next appointment, we can do that**
10. Pt:	**assessment==** ==Ok. [Nodding]

Later in the same consultation (extract 3.3), line 1 shows the audiologist asking the patient, "*Do you have any questions?*" in an attempt to conclude the consultation. She has not since discussed the dizziness with the patient nor provided any further information or counselling regarding this concern. Here, the patient reintroduces the topic (line 2), again indicating it is an area of importance. The audiologist indicates she has forgotten about this and does not have time left in the consultation to address the concern (line 3). She provides vague counselling which does not apply to the patient in reference to the information she has previously provided about the dizziness and proceeds to suggest it will be looked into in the following consultation (line 9), effectively shutting down the line of discussion. In this interaction, the patient has identified and clearly indicated that her dizziness is a concern. However, the audiologist has directly inhibited information sharing on this topic by asking closed-ended questions and actively delaying further discussion, only to forget to address this

concern at a later stage. In doing so, the audiologist has failed to provide the patient with assurance on this topic, or clarity on the management plan moving forward.

When the audiologists did acknowledge and engage in topics related to patients' primary concerns, the audiologists appeared to elicit narratives from the patients that provided valuable information sharing related to topics of emotional and psychosocial distress troubling the patients. Furthermore, the patients shared contextually relevant information in their case history that could better equip their audiologist to make relevant and meaningful recommendations during counselling. This pattern was observed across interactions, regardless of language symmetry within the consultation.

In contrast to extracts 3.1-3.3, extracts 3.4-3.5 demonstrate a patient identifying several concerns related to her tinnitus in the case history, and the audiologist acknowledging these concerns and returning to them in counselling. By leaning into these topics and reintroducing these concerns later in the consultation, the audiologist provides the patient with clarity and eases the patient's worry when leaving the consultation.

Extract 3.4: P6A4

1.	Pt:	Lento iyaphela noma==
		Is this thing going to go away or…
2.	Aud:	**==Eish! I think kuzomele nje nami ngazi kahle ukuthi kwenzakalani ngoba ngibonile kwi fil yakho ukuthi sesiside iskhathi ==lento ikuhlupha.**
		Eish! I think I will also have to understand better what's going on because I saw your file, and it shows that you have been coming here for a long time now.
3.	Pt:	==Mmm
4.	Aud:	So==
5.	Pt:	==Mayiqala bengicinga uk'ba mhlambe ilapha kwi brain==
		When it started, I thought maybe it's in the brain.
6.	Aud:	==Yeah.

7. Pt:	Basithi pha kwi ==brain akukho lutho. *I went there (where her head was examined) and they said there is nothing.*
8. Aud:	==Ohh ok. Akho lutho. *==Ohh ok. There's nothing.*
9. Pt:	**Nda cinga uk'ba mhlambe…Cause bendisebenzisa i vacuum cleaner kakhulu. I'm sure yila ngxolo, sound emakhitshini** ***I thought maybe…cause I used the vacuum cleaner a lot. I'm sure it's that noise, where I worked.***
10. Aud:	Okay. **Sizobuyela kuzona.** *Okay.* ***We will come back here.***

In extract 3.4, the patient identifies three concerns related to her tinnitus, namely, concern over the permanence of her tinnitus (line 1), concern over her neurological health (line 5), and concern related to noise exposure as the cause of her tinnitus (line 9). The audiologist responds each time by acknowledging the patient's information, although she does not seek out further information. In line 2, the audiologist indicates that she will need to assess further prior to addressing the patient's questions or concerns. Subsequently, in line 10 the audiologist indicates that she will return to this topic with the patient.

Extract 3.5 shows the audiologist addressing two of the concerns that the patient has introduced about her tinnitus later in counselling the patient, showing that she has listened to these concerns and prioritised them.

Extract 3.5: P6A4

1. Aud:	**So ke, nakhona ke if umuntu engezwa kahle emadlebeni… lo msindo ubakhona.** ***But then, when a person has a hearing problem… they also get this sound.***
2. Pt:	[Pause] [Eye contact with audiologist]
3. Aud:	

	But, wena uzwakala endlebeni eyodwa kuphela even though lama results ayatshengisaukuthi amadlebe akho oy'2 aseyaqala ukwehla.
4. Pt:	*But to you, it's only in one ear even though your results show that both your ears are deteriorating.*
5. Aud:	Ok==
6. Pt:	==Ok **Ubudala. ==*[Laughs]***
7. Aud:	***It's old age. ==[Laughs]*** ==[Laughs] **No, angiboni ukuthi it's because of age, the way ame ngakhona, it's because of noise.** *==[Laughs]* ***No, I don't think it's because of age, looking at your results, it's because of noise.***

Extract 3.5 occurs subsequent in the consultation to extract 3.4, following case history and assessment measures. As the audiologist counsels the patient, she is observed to address the patient's concerns regarding the cause of the tinnitus by explaining that the tinnitus is a result of the patient's hearing loss (line 1) and affirming the patient's concern regarding noise exposure, as well as indicating that her hearing loss may be noise induced (line 7). Although this exchange is brief, the audiologist acknowledges the patient's concerns as they are introduced and, once more information is obtained through assessment, returns to address these concerns in counselling. In doing so, the patient is able to leave the tinnitus consultation with more clarity on issues pertaining to her tinnitus that are bothersome.

4.4. Engaging in Emotional and Psychosocial Topics

During the video-recorded interactions, many of the patients were observed to display emotional distress and psychosocial concerns. Engaging in these topics of emotional and psychosocial distress and responding with empathy is a communicative action that proved to

elicit vulnerable information sharing and build trust and rapport between the audiologist and the patient.

In many instances, patients initially indicated higher levels of distress around certain topics with verbal and non-verbal cues, such as a raised voice, long pauses, loss of eye contact, or a shake of the head. When audiologists did not pick up on these cues, the patients were observed to engage less as the interaction proceeded. In some instances, audiologists responded without empathy, dismissing the patients' concerns.

Extract 4.1 demonstrates an audiologist introducing the topic of stress with a patient. The patient's responses, and her verbal and non-verbal cues, indicate that it is an emotive subject. However, the audiologist appears not to pay attention to these cues, nor does she elicit further information about the patient's emotional or psychosocial distress, instead closing the topic and moving on to another unrelated question.

Extract 4.1: P1A1

1.	Aud:	**Ok umm… are you – are you stressed maybe?**
2.	Pt:	**[Shrugs] ==The stress is there. It's always there. [shakes head and then shrugs]**
3.	Aud:	==You don't know? It's always there? **But is it too much or is it just like [shrugs]**
4.	Pt:	**No, it's just your normal stress [shrugs]**
5.	Aud:	Normal stress about?
6.	Pt:	**General things… [shrugs] it's not like *EXTREME* (now).**
7.	Aud:	[Nods] Ok. What do you do so far to relax?
8.	Pt:	(Pause – 5 seconds) not much
9.	Aud:	**Mmm… Like sleeping is also something that people do to==**
10.	Pt:	**==I can't sleep. That's the problem!**
11.	Aud:	You can't sleep. Ok. [Writes on form] What do you do for a living?
12.	Pt:	I'm a student.

In extract 4.1, the patient has previously indicated to the audiologist that her tinnitus is worse when she lies down. When the audiologist asks about stress, the patient indicates in line 2 that she is constantly stressed saying, *"It's always there."* The audiologist responds by repeating the patient and following with another closed-ended question in line 3, *"It's always there? But is it too much…"* Whilst repetition may be used as a tool to invite further explanation, the audiologist inhibits explanation from the patient by immediately moving to the next phrase, "*But is it too much?".* The question results in the patient mitigating her response. When the audiologist prompts the patient about stress management strategies in line 9, the patient cuts the audiologist off in line 10 with a harsher tone *"I can't sleep. That's the problem!"* The audiologist's responses in this interaction have dismissed a prior concern that the patient has brought up. Furthermore, the audiologist has directed the interaction with closed-ended questions, which do not allow the patient to share information about her psychosocial stressors, but rather mitigate the impact that they are having on her. Her harsh tone indicates frustration in the interaction, which appears to go unnoticed by the audiologist as she continues her line of questioning.

Similarly, in extract 2.3, the audiologist misinterprets the patient's tone and responds with laughter to a serious concern. In doing so, the audiologist is dismissive instead of empathetic to the patient and her stressors.

Extract 4.2: P5A3

1.	Aud:	So mama, since o opara machine, ringing sound e byang? *So mama, since you started wearing the machine, how is the ringing sound?*
2.	Pt:	**Tse tsa di tsebe? O kare ke ka robala ka tsona** ***These ones for the ears? I wish I could sleep with them on.***
3.	Aud:	**[Laughs out loud]**
4.	Pt:	

	[Frowning] ha ke dintsa kere kea robala mantsibuo, [claps hands] i duma bo sego bo bothle, ke sa robale.
5. Aud:	*When I remove them to sleep at night, [claps hands] it rings the whole night, I can't sleep.* Ya, wa kgopola kere machine, h a o rabale kawona. Wa kgopola akere?
6. Pt:	*Ya, you remember I said you cannot sleep with the machine. You remember right?* Mmm

In extract 4.2, the patient tells the audiologist in line 2 that she wishes she could sleep with the hearing aids in because as soon as she removes them at night, her tinnitus is more noticeable. In line 3, the audiologist laughs in response, finding humour in the patient's admission. However, the patient appears to be frowning as she speaks and does not laugh with the audiologist. Instead, she continues to speak with a tone that indicates frustration. Although the audiologist has been making eye contact as the patient speaks, she has misread the patient's non-verbal cues and tone as well as the atmosphere in the consultation. As a result, her response may be interpreted as dismissive of the patient's psychosocial stressor and lacking in empathy.

In general, when audiologists provided opportunities for the patients to offer narrative accounts of their emotional and psychosocial stressors and responded with empathy the patients appeared to share information more freely and demonstrate trust in the audiologist. This was observed on two occasions, when patients requested that the video recording be temporarily ceased, in order to speak truthfully and vulnerably about sensitive information that they did not want to be recorded.

Extract 4.3 shows an audiologist identifying verbal and non-verbal cues indicating emotional distress. She responds with empathy and warmth, using a gentle tone, pauses and encouraging words to elicit an emotional narrative from the patient about her psychosocial stressors.

Extract 4.3: P4A3

1.	Aud:	Umm would you say mama the time e thoma ringing sound e, was there anything e be e hofa stress at the time…Or maybe anything e ne e dirahala ko hae== *Umm would you say when the ringing sound first started, was there anything that was giving you stress at the time.. Or maybe anything that was happening at home==*
2.	Pt:	==Ya
3.	Aud:	Le bana == or something like that? *With your children ==or something like that?*
4.	Pt:	==Ya!
5.	Aud:	**Can you talk to me about what happened mama?**
6.	Pt:	[Closes eyes and shake head]
7.	Aud:	Mmm. [Nods]
8.	Pt:	[Shaking head with eyes closed]
9.	Aud:	**Mmm…[nods] it's okay mama, take your time. Take your time.**
10.	Pt:	[Remains silent, with eyes closed, starts crying]
11.	Aud:	And just breathe.
12.	Pt:	[Takes deep breath in and exhales]
13.	Aud:	Mmm, [nods] just breathe in. Breathe in [deep inhale]. And out. [Exhales]
14.	Pt:	[Takes deep breath in and exhales]
15.	Aud:	O ka tlosa mask so that o tlo hema pila. *You can remove your mask so that you can breathe properly.*
16.	Pt:	I can't talk about it. [Shakes head once]
17.	Aud:	Yes [nods]
18.	Pt:	It's a personal thing
19.	Aud:	Yes [nods]
20.	Pt:	[Pause- 5 seconds] I [looks down]
21.	Aud:	Ah-ha, take your time mama, take your time.
22.	Pt:	[Inhales and exhales audibly]

23. Aud:	**Just breathe. Breathe in… [gestures at diaphragm and moves hand upwards] and breathe out [gestures at diaphragm and moves hand downwards]**
24. Pt:	[Audibly inhales and exhales]
25. Aud:	Slowly. Just take your time. I know gore ke trigger di memory nou *I know that I am triggering memories now.*
26. Pt:	[Pause – 8 seconds] My life has been a mess for a long time.
27. Aud:	Mmm mmm
28. Pt:	[Clasps hands around knee, closes eyes and faces upward] It was heavy for me.
29. Aud:	Yaa [nods]
30. Pt:	I [pause - 6 seconds]
31. Aud:	Cause re batla go thosa mama akere? *Cause we want to help you mama, right?*
32. Pt:	Ya.
33. Aud:	We don't want to stay le stress se. wa understanda akere? *We don't want you to stay with this stress. You understand, right?*
34. Pt:	Ya.
35. Aud:	So kea understanda gore ha o gone go bolela ka yona mara at least ke hloka idea.== Wa understanda? *So I understand that you can't talk about it but at least we need an idea. ==Do you understand?*
36. Pt:	==Ya. Ke tla bua. *Yes. I will talk.*
37. Aud:	Ke ka ho thathela tissue mama? *Can I bring you tissues?*
38. Pt:	[Nods]

In extract 4.3, line 1, the audiologist introduces the topic of stressful life events that may have triggered the patient's tinnitus. The audiologist demonstrates an understanding that there is information that the patient is having difficulty sharing, attending to the patient's

non-verbal cues in line 8. The audiologist uses an open-ended question and gentle tone in line 5 to elicit a narrative from the patient. When the patient becomes more emotionally distressed, with clear non-verbal cues in line 10, the audiologist responds with empathy, acknowledging the patient's difficulty and guiding her through breathing exercises to reduce distress in that moment (line 21-35). Over time, the patient reveals that she wants to share information but is concerned about the video recording. The audiologist responds quickly, leaving the room to ask the researcher to cease recording temporarily. Thus, demonstrating that the audiologist is sensitive to the patient's emotional cues, and that the empathy she has shown to the patient encouraged the patient to trust the audiologist enough to share sensitive information.

Interviews with the audiologists indicated that they often feel out of their depth in managing the emotional distress and psychosocial stressors elicited in tinnitus management consultations. One of the audiologists noted, "*It does get quite personal. I think also at times being an audiologist, we're not really trained in how to deal [with] any or severe psychological issues so um so that aspect for me - I'm not too sure as to if I'm doing it correctly and where should I draw the line if the patient needs to be referred to psych, for example, or social work. We usually just do have case discussion and then we brainstorm as a team but, ya, it's a bit wishy washy that aspect*" (A4HA). She went on to say, "*Maybe knowledge in terms of, um, having like a psychological background maybe to deal with this certain emotions that do come up and how do we cope with that because, um, yes we do reflect but it does, you know, have, like, it makes you feel like you haven't done enough and its heavy on your heart, um, the patients coming up with issues*" (A4HA).

Despite the audiologists indicating that they feel unprepared to manage or address the emotional and psychosocial stressors that patients disclose, some patients suggested that being given the opportunity to have their voices heard in the tinnitus consultation was most

valuable to them. Patients with whom the audiologist engaged in these topics indicated in their interviews that they had perceived care and respect during the consultation. These patients often described their audiologists as patient and caring, with one patient stating, "*I actually felt comfortable with her. Felt like I know her for many years. She made me feel comfortable. - Yes, she made me feel very calm, nice, you know? She explained to me stuff gently. Not fast. She took her time to tell me, to understand me what's going on, you see. She made me feel very nice, I must say. I like her actually, I actually wanted to give her a huge hug you know or something*" (P7HA). Another patient noted, "*She's got the skill for communicating. There are other people if she talks to you [they don't] feel free. You must feel free to talk. So, she's got that thing that make people feel free to talk anything, anything*" (P4HB).

Some patients referred to feeling rushed and insecure or invalidated in other medical consultations but felt that they were afforded time and felt secure in the tinnitus management consultations with the audiologists. One patient noted, "*I'm happy because something she can see is not good enough. I can say its ok. Right, because before they was say it's the flu. And it took me too long to believe there is something. [Patient's voice cracks here and she begins to cry] And that it hurt me too much*" (P3HA). Later this patient stated, "*I'm not gossiping but you know what I stressed myself not hearing or maybe I'm taking a lot of time for her... it's different from other [healthcare professionals] - you can't ask them*." She went on to say, "*And when I am coming here, I am not fearing that 'I'm going to that room'. You see?"* (P3HA).

Additionally, some of the patients indicated that they found comfort in learning that tinnitus is a prevalent symptom that affects many people. One patient stated, "*She make me to feel that it's not me alone. This thing it happens to other people. I must know that it's not a curse, it's not a disease, it's a thing that happens if this thing happens that can lead to*

hearing sounds from your ear. I must never feel very - I must not feel very bad - why myself why do I have this sound. There are things that can make you go to that point that you feel that sound. So, the explanation was very clear to me." Another patient noted, "*Oh no she made me understand that it's not just me that's going through it, other people are also going through it so to just find ways to manage it"* (P4HB). Thus, demonstrating that despite some audiologists feeling unsure of their ability to manage the complex psychosocial and emotional stressors that patients can display in tinnitus management sessions, what the patient values is being given the time and opportunity to voice their concerns and being shown empathy in response to their distress, allowing for rapport and trust to develop between the patient and the audiologist.

4.5. Shared Decision-Making and Setting Expectations

Shared decision-making as an intentional, explicit communicative action was not observed in any of the recorded tinnitus management consultations. Actions that might signal moments of shared decision-making include informing the patient that there are different management options available, educating the patient on the different options, and discussing and supporting the patient's values, preferences and hesitancies for these options (Elwyn et al., 2012). In most of the observed consultations, the audiologists provided tinnitus management recommendations in a prescriptive manner without consistently prioritising the patients' needs nor establishing the patients' agendas. Furthermore, in counselling the patients, most of the audiologists provided recommendations according to a script, presented in an educational pamphlet. In their recommendations, audiologists were rarely observed to ask the patient if the tinnitus management recommendations offered were relevant to their current lifestyle and routines or aligned with their preferences or personal values. Furthermore, patients were rarely asked about their access to equipment for management

strategies, such as noise-generating apps or radios. When patients expressed resistance or concern regarding recommendations the audiologists were at times observed to reiterate the instruction, instead of engaging in a conversation related to their concerns or altering their recommendations. Audiologists were rarely observed to set expectations for the management strategies which they recommended. Whilst audiologists often made references to there being no 'cure' for tinnitus, their explanations surrounding habituation often did not translate into their management recommendations, as they provided no explanation as to how the management strategies (such as external noise generation) would aid the process of habituation. The reasoning provided for management recommendations and the outcome expectations related to the management recommendations were typically vague.

Despite the lack of shared decision-making, the audiologists often referred to the patients' self-efficacy in implementing the recommended management strategies (such as lifestyle changes or hearing aid use) in their tinnitus consultations and in their interviews, placing the responsibility of implementing the management strategies on the patient alone. In an interview, one audiologist stated, "*Whether that means they need to have sound enrichment um therapy and lifestyle changes, uh, and that - it's up to them. That I can give them information but it's up to them to implement*." Here, the audiologist indicates that the implementation of management strategies should be the responsibility of the patient.

In Extract 5.1 below, the audiologist provides management recommendations to the patient. The patient's caregiver is present and participates in the conversation, possibly because the patient is elderly and requires support both in mobility and in communicating due to her loss of hearing. This extract demonstrates the audiologist providing recommendations in a prescriptive manner and discounting the patient's objections to the recommendations. Further, it demonstrates the audiologist suggesting that the effectiveness of the patient's

tinnitus management is dependent on her self-efficacy, placing the responsibility for implementing the management strategies on the patient.

Extract 5.1: P5A3

1. Aud:	**Umm another thing ba hlalosago mo, every time o dira something gore o distract, akere focus is no longer ko ringing. [Looking at caregiver]** ***Another thing they are explaining here, every time you do something to distract yourself, focus is no longer on the ringing sound. [Looking at caregiver]***
2. CG:	Ya ya
3. Aud:	So, I don't know if, when she goes to bed, does she immediately fall asleep? Cause if when she goes to bed, like she still sits and doesn't go straight to sleep==
4. CG:	== Mmm mmm
5. Aud:	She can take knitting eo ko mpeteng until a feela otshwere ke boroko. ==Radio is on and then wa knitta. Akere? *She can take the knitting to bed until she feels like she is sleepy. Radio is on and then she's knitting on the other side.*
6. CG:	==Mmm mmm
7. Aud:	There's something a dirang gore a distracte without ==machine. *There is something she's doing to distract herself without the ==machine*
8. CG:	== Ya.
9. Aud:	A bone gore go knitta go distract na. *To see if knitting is distracting her.*
10. CG:	Mmmm
11. Aud:	**Ok! O a nkutlwa mama? [Looking at patient]** ***Ok! Can you hear me mama?***
12. Pt:	Mmm
13. Aud:	When you go to sleep, neh, machine off!
14. Pt:	Mmm
15. Aud:	Radio, ON. Okay?

16. Pt:	Mmm
17. Aud:	Then, o tlo dira something gore o distracte until o ekwa boroko. *Then you will do something to distract yourself until you fall asleep.*
18. Pt:	Mmm
19. Aud:	**So then, maybe you can knit.**
20. CG:	[Turns to patient] ua ultwa a reng? A re oka loga. Ha o tlosa lintho tsena, o kane wa loga. Hore o tswe mo [points to the ear] Le baka la hore machine, utswile until otswara ke boroko. *[Turns to patient] Do you hear what she's saying? She is saying you can knit. When you remove these things, [points to ears] you can knit so that you don't focus on here, the sound, until you fall asleep.*
21. Aud:	Mmm
22. Pt:	**Ga ke kgone go loga ka letsoho lena** ***I cannot knit with this hand.***
23. CG:	**[Looks at patient] Ayy Motho wa modimo, otla practiza hore utsware ke boroko. Hape le wena oska idira ngwana o monyane.** ***[Looks at patient] Ayy Person of God, you will practice so that you fall asleep. Don't behave as if you are a child.***
24. Pt:	**Ke tla etsa** ***I will do so.***
25. Aud:	Mmm cause mama…
26. CG:	Mmm
27. Aud:	**Rona mama, all we can do ke go bolela fela. ==Mara, it's up to you hore oye gae o dire these things so that e tla go thusa.** ***Us, all we can do is talk, ==but it's up to you to go home and do these things so that they can help you.***
28. CG:	==Mmm mmm
29. Pt:	**Ke na ledi wool, ke tla loga.** ***I have wool. I will knit.***

In extract 5.1, the audiologist is observed to address the caregiver throughout the interaction. In line 1, the audiologist looks at the caregiver as she speaks. In line 3, the audiologist speaks about the patient to the caregiver, "*So, I don't know if, when she goes to bed, does she immediately fall asleep? Cause if when she goes to bed, like she still sits and doesn't go straight to sleep…"* instead of addressing the patient directly. Whilst the audiologist may have done this to overcome communication barriers due to loss of hearing (line 11), the patient is effectively left out of the decision-making process. As the interaction continues, the audiologist makes recommendations in a prescriptive manner. The audiologist tells the caregiver (line 9) and the patient (line 19) that the patient should knit when she is struggling to sleep in order to help distract her from the tinnitus. Whilst the caregiver agrees with this recommendation, the patient indicates that she has trouble knitting due to her dexterity. In response, the caregiver grows frustrated and tells the patient off (line 23). The audiologist does not provide an opportunity for the patient to suggest alternative preferences for activities. Instead, she dismisses the patient in saying it is up to the patient to follow through with the recommendations (line 27) despite the patient clearly indicating it will be difficult for her to do this. Defeated by the exchange, the patient concedes, "*I have wool. I will knit*" (line 29). The interaction shows both the audiologist and the caregiver dictating to the patient without allowing the patient to advocate for herself. In doing so, autonomy is removed from the patient.

Extract 5.2 again shows a patient being excluded from the decision-making process. In this interaction between the audiologist and the patient, the audiologist is observed to code-switch frequently (with English translation presented in full in italics). Whilst the tone of the interaction is gentle and the audiologist provides a thorough explanation of her recommendation for a hearing aid, the patient is not given an opportunity to voice her opinion on the decision.

Extract 5.2: P6A4

1.	Aud:	**Lama test ayatshengisa ukuthi unga benefita kumshini ozobe siw'fakile, ozok'siza ngalo msindo.** ***These tests show that you can benefit from the machine we will insert. It will help you with your sound.***
2.	Pt:	Oh, hearing aid?
3.	Aud:	**Hearing aid iyasebenza Kabili. Iyasebenza ngokuthi isiza umuntu ezwe. Also, iyasebenza ngokuthi ikwazi uku maska… umsindo kwi tinnitus yakho.** ***A hearing aid can achieve two things. It works in that it helps a person with hearing. Also, it works in that it can mask… the noise in your tinnitus.***
4.	Pt:	Okay.
5.	Aud:	Njengoba kade senza ama test la, ukuthi ngidlale umsindo== *Like the way I was conducting the tests here, playing sounds.*
6.	Pt:	==Ya
7.	Aud:	isebenza ka njalo. *That's how it works.*
8.	Pt:	Ya
9.	Aud:	Ukuthi ikwazi, njengoba bowushilo eqaleni, ikwazi ukuthi wena ukhohlwe ungawunaki, wenze okunye. *So that it can, as you had said in the beginning. So that you can ignore it and do other things.*
10.	Pt:	Mmm.
11.	Aud:	Inkinga yayo hearing aid ukuthi, mawuse ndaweni enomsindo akumelanga uyifake ngoba yenza yokinto vele ibe loud== *The problem with a hearing aid is that you are not supposed to wear it when you are in a noisy place because it makes everything louder.*
12.	Pt:	==Loud
13.	Aud:	

	So, mawusemsindweni, chaza ukuthi lo msindo uzoba ==more endlebeni zakho. So, mawuse ndaweni enjalo, kumele uyikhiphe.
14. Pt:	*So, when you are in a noisy place, it means this noise will be intense in your ear. So, when you are in a place like that, remove it.*
15. Aud:	==Ya ok.
	But sizokuchazela after ==ENT ibone yona ukuthi yenze njani.
16. Pt:	***But we will explain further after the ENT decides what to do.***
17. Aud:	== Ya ok
	If ithi no, asiqhubeke ne hearing aid, sizoqhubeka siyi order.
18. Pt:	***If ENT says we should proceed with the hearing aid, we will go ahead and order it.***
19. Aud:	Ok.
	But ngizobheka idate manje ngizwe ukuthi ENT umm sizobhukhela nini.
20. Pt:	***But I will check the date for you to see the ENT.***
21. Aud:	Okay.
	Uya underastanda yokinto?
22. Pt:	*Do you understand everything?*
	==Yebo
23. Aud:	*==Yes*
	==Ngichaze kahle?
24. Pt:	*==Did I explain well?*
	Ya.

In extract 5.2, the audiologist tells the patient that her test results indicate that a hearing aid will benefit her hearing and also distract from her tinnitus with masking (line 1 and line 3). In line 15, the audiologist indicates that if the Ear Nose and Throat Specialist (ENT) provides confirmation for a hearing aid, one will be ordered for the patient. The patient is not offered the opportunity to voice her opinion or preference for a hearing aid and, as such, the decision for management is being made by the ENT, not the patient or even the audiologist. There is no opportunity for shared decision-making.

In contrast, extract 5.3 below shows an interaction wherein the patient asserts her preferences and priorities in decision-making. The audiologist is observed to set expectations of the hearing aids for tinnitus management with the patient.

Extract 5.3: P4A3

1. Aud:	**So, I – I want us to try… so we're gonna – we're gonna have a couple of sessions, depending ka wena.** ***Depending on you.***
2. Pt:	Ya
3. Aud:	**It's all patient dependent.**
4. Pt:	Ya
5. Aud:	So I'm definitely gonna see you again after today cause want to see the things that we're gonna discuss today gore are you gonna implement them== *We're gonna discuss today if you are going to implement them==*
6. Pt:	==Ya==
7. Aud:	==And how is it going.
8. Pt:	Ya
9. Aud:	Ok! So let's start with the first thing, the hearing loss okay?
10. Pt:	Ya
11. Aud:	Cause we said there's three things, akere? *Cause we said there's three things, right?*
12. Pt:	Ya
13. Aud:	Hearing problem, stress and then the high blood also is affecting (you).
14. Pt:	Ya
15. Aud:	So, the hearing problem. Ke bone uhm one thing that can help mama, the hearing aids. *So, the hearing problem. I saw that uhm one thing that can help mama, the hearing aids.*
16. Pt:	Ya
17. Aud:	Ha kitsi hore o bonste de hearing aids cause== *I am not sure if she showed you the hearing aids cause==*

18. Pt:	==Ga a mpontsa tsona
	==She did not show them to me.
19. Aud:	Cause o ngwadile mo hore o ka di nyaka, di machine.
	Cause she wrote here that you might need it. The machine.
20. Pt:	**Ga se nke kare ha kedibatli. [Blows nose]Se na explaina tsona ke hore go tla mo go lona maybe le ka nthusa, before ke tsaya di hearing aid. So, I decided ke tle ho lona and then I think it helps me ke tle mo. Maybe ne ke tlo tsaya di hearing aid then ke dule hae. But ke se ke ka fumana thuso ==further than… o a bona?**
	I never said I did not want them. What she explained to me is that maybe coming here to you can help me, before I commit to hearing aids. So, I decided to come here, I think it helped me to come here. Maybe I was gonna take the hearing aids and just stay at home and not get the ==further help that I received here. You see?
21. Aud:	==Yes, yes, yes.
22. Pt:	So I decided before ke tsaya di hearing aid==
	So I decided to come here before taking the hearing aids==
23. Aud:	==o Batla ho bona ho re how's it going ka mo?
	==You wanted to see how it's going here?
24. Pt:	Ka mo lonna 107 oho re ke eng seo le nka nthusang ka sona before the hearing aid.
	I decided to come here to see what you can help me with before I take the hearing aids
	It doesn't mean that I don't want them==
25. Aud:	==Yes
26. Pt:	Ya==
27. Aud:	==Ke a understanda==
	==I understand==
28. Pt:	==I could use them anytime, I don't have ==a problem.
29. Aud:	==Cause a kere wa complaina ka hearing ==as well?
	Cause you are complaining with your hearing ==as well?
30. Pt:	==Ya
31. Aud:	[Takes hearing aid in hand] So, hearing aids look like this.
32. Pt:	Ya

33. Aud:	This is the mechanical part.
34. Pt:	Ya
35. Aud:	e ya ka morago ga tsebe. *[Places hearing aid on ear]* But for wena because severity e moderate, it won't be big go swana le e. *This one goes to the back of the ear. [Places hearing aid on ear] But for you, because severity is moderate, it won't be big like this one.*
36. Pt:	Ya
37. Aud:	Ya gago will be smaller, ==neh? *Yours will be smaller, ==neh?*
38. Pt:	==Ya
39. Aud:	And then, it's up to you. You can either have this ko tsebeng ya gago, or there's a smaller tube which is less visible. *And then it's up to you. You can either have it in your ear or there's a smaller tube which is less visible.*
40. Pt:	Ya
41. Aud:	And kea bona hore wena you wouldn't have a problem ka small tube gore o kenye ka gare mo and then behind tsebe ya gago. ==Ube sharp. Okay? *And I see that you wouldn't have a problem with a small tube to insert inside here and then behind your ear ==and be fine. Okay?*
42. Pt:	==Ya Ya [nods]
43. Aud:	**Because what happens is, hearing aids mama, they don't bring back hearing ya gago.** ***they don't bring back your hearing.***
44. Pt:	Ya
45. Aud:	All they do is, they increase the volume where you are struggling.
46. Pt:	Ya
47. Aud:	So, we take di results tsa gago, we put them mo computer and then we plug machine wa hao, neh== *So, we take your results, we put them in the computer and then plug your machin*e, neh==
48. Pt:	==Mmm
49. Aud:	

	To the computer, then we check, we adjust, we adjust… and then we only give you gain
50. Pt:	where you need it==
51. Aud:	== *Mmm*
52. Pt:	So we only increase volume where you need ==volume.
53. Aud:	==Ya ya==
	==So it's not like re tla increase volume mo o lego normal gona. No
54. Pt:	==*So it's not like we will increase the volume where it's normal. No*
55. Aud:	Ya
	Only the high frequencies where bothata bo teng.
56. Pt:	*Only the high frequencies where the problem is.*
57. Aud:	Ya ya
	So, machine o, we found that a lot of patients, once re bafa machine… ringing sound…they stop complaining ka yona.
58. Pt:	***So this machine, we find that a lot of patients, once we give them the machine, they stop complaining about the ringing sound.***
59. Aud:	[Looking at audiologist]
	Because what happens is, because machine o bafa access to other sounds mo environment, it now masks, it blocks ringing sound and then patients are complaining less ka ringing sound.
60. Pt:	*Because what happens is…the machine gives them access to other sounds in their environment, it now masks, it blocks ringing sound and then patients complain less about the ringing sound.*
61. Aud:	Ya.
62. Pt:	Neh?
63. Aud:	Ya.
	So, ga ke tsi gore o ka nyaka gore, maybe just try it
64. Pt:	*So, I am not sure if you maybe want to try it?*
65. Aud:	Ya
	Because you can always give them back. If you try it then realise you don't like these
66. Pt:	**things, you can always bring them.**
67. Aud:	Ya

	Rather than saying, asiyithathi and we haven't even tried.
68. Pt:	***Rather than saying, we are not taking it and we haven't even tried.***
69. Aud:	Ya
70. Pt:	Neh?
71. Aud:	==Ya
72. Pt:	==So let's try ==and let's see what happens.
73. Aud:	==Ya
74. Pt:	Because we are trying to decrease everything that would be contributing to your stress. And we don't want now this ringing sound to add to everything that's happening. Eh

In extract 5.3, the audiologist begins by explaining that the patient can return for follow-up, and that this recommendation is 'patient dependent' (line 1 and line 3). However, immediately afterwards, the audiologist asserts, "*So, I'm definitely gonna see you again after today*" without input from the patient regarding this plan.

The audiologist proceeds to engage in a discussion about hearing aids with the patient. In line 19, the audiologist indicates that her colleague has previously recommended hearing aids. The patient responds by asserting that she did not indicate that she was not interested in hearing aids, but rather wanted to have the tinnitus consultation first before making a decision and that she is open to the prospect of hearing aids (line 20-24). With this information, the audiologist proceeds to show the patient a hearing aid and explain how it works (line 31-41). She attempts to manage the patient's expectations by stating, "*they don't bring back your hearing*" (line 43). The audiologist explains how hearing aids have helped other patients and how they might help the patient, "*So this machine, we find that a lot of patients, once we give them the machine, they stop complaining about the ringing sound. Because what happens is…the machine gives them access to other sounds in their environment, it now masks, it blocks (the) ringing sound and then patients complain less about the ringing sound*" (line 57

and line 59). The audiologist offers a trial period of the hearing aids, enabling the patient to make an informed decision, based on her experience. She also mitigates for possible outcomes with the hearing aids stating, "*Because you can always give them back. If you try it then realise you don't like these things, you can always bring them"* (line 65). It is unclear what transpired in the patient's previous hearing aid consultation, however, her assertiveness in this interaction lends to a shared decision being made. Although the audiologist is not observed to elicit the shared decision, she accepts the patient's buy-in and creates an opportunity for the patient to try the hearing aids without being forced into a decision to keep them.

In the interviews, when speaking to outcomes and expectations in tinnitus management consultations, one audiologist referred to setting realistic expectations stating, "*Making them aware that whatever you going to try, it doesn't mean its gonna work, and making them aware from the beginning that I'm not gonna give you any pill that's gonna take the tinnitus away. Its-it's more we now going to be training our brain to cope with it and trying different things that could help with it*" (A3HB). In another interview, an audiologist states, *"Sometimes, to just tell them that you know the problem you are experiencing it is a real thing but there's basically not much we can – like there's no medication or an instant things that's gonna take it away ya that's sort of – to make sure they understand that part of tinnitus" (A5HA)*. Whilst there is value in setting expectations, there is equal value in still providing patients with a sense of hope and control over their symptom(s).

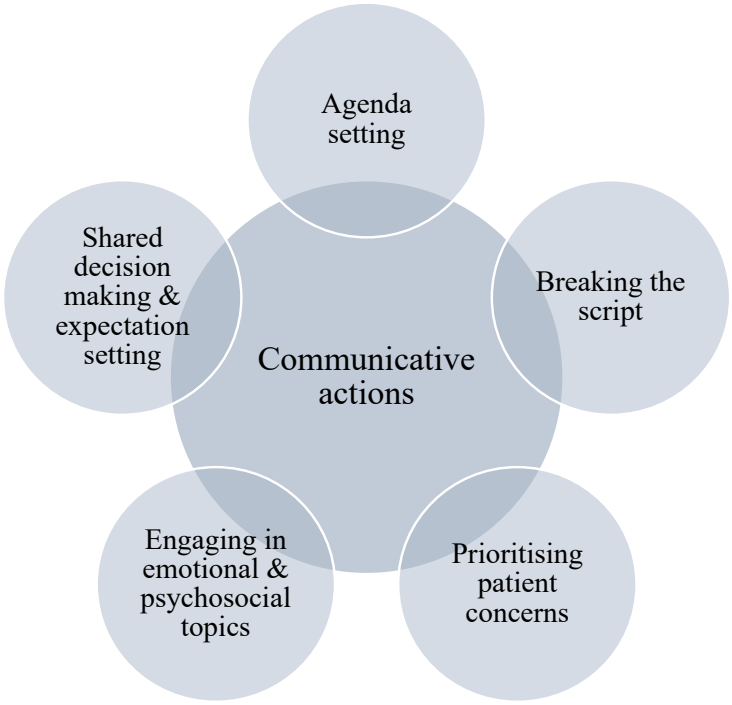
In many consultations, a decision, shared or not, was made by the audiologist to fit the patient with hearing aids. In their interviews, some patients indicated fear and insecurity related to hearing aid fittings as part of their tinnitus management plan. One patient noted, "*I think I'm going to cry at the end. Because what is the people going to think about me, you know? I don't know. But maybe I must just accept it, you know? I don't know*" (P7HA). When

asked how she felt about the decision to try hearing aids, another patient stated, "*I can say I'm not hundred percent because my problem. I got the doubt because uh before they put the hearing aid, that noise came worse, right? And then now they say they want to put the both ears, the hearing aid is going to help me, it's the new one […] It's ok I'll try it till I see is helping me to clear that noise, or what. Because looks them like there's no other treatment that can treat that noise. They never talk about it. Only it's that hearing aid and whatever, same like before. No changes […] I don't know. Just the thing she told me now, no I don't know*" (P7HA). These responses indicate that patients may be experiencing insecurity and doubts about being fitted with hearing aids. This may be because they do not understand the reason for fitting hearing aids, or the link between the tinnitus and hearing aids as a management strategy, considering that the purpose of their consultation was to address tinnitus. Further, these responses reflect that the patient's concerns about hearing aids have not been properly elicited and addressed during their consultations, as part of the decision-making process.

4.6. Chapter Summary

This chapter has provided an insight into the findings of this study, presenting six communicative actions that appear to have an impact on patient-centredness in initial adult tinnitus management consultations. Figure 3 illustrates the communicative actions discussed in this chapter.

Figure 3: Summary of Communicative Actions



Although these communicative actions have been described individually, there is an overlap in the implications of these communicative actions with regards to rapport, information exchange and shared decision-making. Together these communicative actions have temporal significance, with the earlier actions of agenda setting, unscripted conversation and prioritisation of patient concerns impacting upon subsequent responsiveness to emotional and psychosocial topics, shared decision-making and expectation setting. The results of this study show that when audiologists do not implement these communicative actions within adult tinnitus management consultations, PCC is inhibited. Conversely, when audiologists effectively implement these communicative actions, it led to interactions that were more patient centred.

Chapter 5: Discussion

The results of this study highlight the difficulties that audiologists encounter when attempting to implement PCC during the initial management consultations for patients with tinnitus. In particular, they suggest that audiologists struggle with setting an agenda for a consultation, information exchange, addressing emotional and psychosocial topics, and prioritising patient needs. As a result, there is often a lack of shared decision-making and setting of expectations, and management recommendations that may not adequately meet the individual needs of the patient. Such shortcomings in communication may negatively impact patient satisfaction, self-efficacy in tinnitus management, adherence to recommendations, and continuity of care.

5.1. Navigating the Complexity of Communication in Tinnitus Management

The findings of this study align with recent studies that have explored the communication practices in various other areas of audiology, ranging from initial consultations, hearing aid fittings and auditory rehabilitation, through interactional analysis (e.g., Tai et al., 2019; Watermeyer et al., 2012; Watermeyer et al., 2015; Watermeyer et al., 2017). These studies have highlighted the importance of effective communication and found gaps in current practice related to patient-centred principles of information giving, decision-making and responsivity to patient emotions. These studies have indicated a need for further communicative training in students and qualified audiologists. While there is limited research on communication in tinnitus management, the results of this study similarly show that patient-centred care is difficult to implement. Traditionally, audiologists have focused on the clinical diagnosis and management of hearing loss, with most of their time spent assessing the hearing loss and allocating limited time to gathering relevant information about the patient's hearing or explaining management options (Tai, 2018). Similarly, when discussing

hearing aid options, audiologists may take a formulaic approach that overlooks patients' unique needs and preferences (Tai, 2018). The audiology curriculum has traditionally prioritised the development of students' technical and diagnostic skills, only recently integrating counselling and communication skills into the curricula (Tai, 2018). This lack of emphasis on counselling means that many graduates may struggle to effectively address patients' emotional concerns or provide personalised care. Some clinicians may be naturally gifted communicators and able to respond empathetically to patients, but others may require additional training and support in this area (Tai, 2018). Without ongoing upskilling in this area, even experienced clinicians may overlook opportunities to provide personalized care and support that meets patients' emotional needs.

Tinnitus management consultations are multifaceted and complex interactions requiring a high level of information-gathering and information-giving. As a result, the shortcomings in communication and patient-centredness that are seen in other audiological consultation are exacerbated, as evidenced by the findings of this study. The complexity of tinnitus arises from its psychological, physiological, and cognitive underpinnings, which involve both the auditory pathways and emotional and attentional distress networks of the prefrontal cortex and limbic systems (Venneste et al., 2010). Further, tinnitus is subjective and experienced differently between individuals. During tinnitus management consultations, information sharing may involve the disclosure of emotional distress and psychosocial stressors. Patients may display varying degrees of emotional and psychosocial distress. Whilst many patients may be mildly bothered by their tinnitus with little impact on their quality of life, some patients are highly distressed by their tinnitus, with catastrophic impact on their quality of life (Bhatt et al., 2016). As such, audiologists are required to consider multiple factors when obtaining detailed case histories from patients with tinnitus, including overall health, ear health, hearing, emotional response, and day-to-day functioning.

Moreover, for audiologists to provide patients with meaningful information and education about their tinnitus, they need to frame the complex concept of tinnitus in a digestible way, explaining the possible causes, triggers and aggravators of their tinnitus, specific to their subjective experience of it. This is a difficult task, particularly within the multicultural, multilingual and economically diverse setting of South Africa where patients may have differing levels of health literacy, traditional beliefs, and language differences.

5.2. The Implications of Communicative Actions in Interactions

Recent work by Tran (2020) has described the importance of the temporal and interactive context in which medical encounters unfold, through rapport, information exchange and shared decision-making. This study highlights key communicative actions in tinnitus management consultations that promote patient-centredness when implemented effectively and inhibit patient-centredness when not implemented effectively or at all. Evidently, ineffective implementation of some communication actions affected the successful implementation of others. Thus, the temporal and interdependent nature of these communicative actions is highlighted in the present study and the findings identify practical steps that audiologists can take to optimize PCC and communication in the management of their patients with tinnitus from the beginning to the end of a consultation.

5.2.1. Agenda Setting

Setting the agenda at the beginning of a consultation provides an opportunity to understand patients' expectations, priorities and needs. In opening the consultations observed in this study, audiologists were not setting the agenda of the consultation with the patient consistently. Whilst the audiologists may have occasionally expressed their plans, objectives and outcomes with the patient, they did not elicit the patient's objective and outcomes for the

consultation, which holds equal importance. Frankel et al. (2013) describe agenda setting as one of the first opportunities in a health care consultation to implement patient-centredness by collaboratively discussing the topics to be covered in the consultation and negotiating if and when these topics will be covered, therein managing the patient's expectations. In doing so, the healthcare provider and patient share power and control (Mead & Bower, 2000), increasing provider and patient satisfaction and producing valuable information from which the provider can make appropriate treatment decisions (Frankel et al., 2013). By describing their agenda, audiologists can mitigate for patient confusion and uncertainty throughout the consultation. Additionally, by providing the patient with an opportunity to express their own agenda, the audiologist can ascertain the patient's expectations and priorities for their management outcomes and consider this information when engaging in shared decision-making with the patient, formulating a management plan that is unique and relevant to the patient's life-systems. By establishing the patient's agenda at the beginning of the consultation, the audiologist may be better able to foster an atmosphere of collaboration and understanding with the patient.

5.2.2. Information Exchange

Open-ended and narrative-eliciting questions are vital for information sharing. Throughout case history taking and informational counselling, audiologists were regularly observed to follow a script-like approach to gaining and sharing information, making use of written artefacts such as case history forms and educational pamphlets. These written artefacts prompted closed-ended questions and inhibited information sharing, cutting off opportunities to listen to patient concerns and thus inhibiting patient centredness. Furthermore, management recommendations were often inappropriate or irrelevant to the patient's life-systems and did not account for the information that was shared by the patient.

Current literature shows that audiologists are observed to asked more closed-ended questions, limiting the amount of information that the patient (and family members) are able to share in consultations (Manchaiah et al., 2019). Murtagh et al. (2018) suggest that features of healthcare provider interactions such as long pauses, open- or closed-ended questions, declarative statements and clarification of information can facilitate or inhibit the patient's involvement in their own care. In order to tailor information giving to the individual patient and break away from the scripted approach, audiologists need to reflect on the manner in which they ask for information from their patients, adjusting closed-ended questions to open-ended questions that better elicit narratives about their experiences, concerns and priorities.

Whilst scripts and routines may be valuable in upholding a standard of care within a clinic, and the continuity of care as patients move between audiologists, written information should be reflective of patient-specific recommendations that are provided verbally in counselling. Zellmer (2018, p.31) describes the pamphlet approach as "the use of, and dependence on, impersonal and untraceable tactics to guide individuals to both internal and external resources". In evaluating this approach to information sharing, Zellmer (2018) suggests that brochures, pamphlets, impersonal referrals, and other similar web-based resources are ineffective in promoting adherence and do not prioritise patient outcomes. It has been well established in the literature that a patient's greater social environment, physical surroundings, and financial situation have a major impact on their overall health. Therefore, simply providing informational materials cannot adequately empower or educate patients. It is unrealistic to expect significant behaviour changes to occur through a brief doctor visit or by reading a brochure (Zellmer, 2018). Information and recommendations need to be tailored to the individual needs of the patient with generalised material such as pamphlets supplementing the information and recommendations, not dictating them.

In dealing with unique individuals as a part of a greater and unique system, script-like approaches cannot be implemented rigidly but tools such as case history forms, pamphlets and AAC boards should be used as a dynamic guide. Well thought out, open-ended and narrative-driven questions could reduce redundancy and time in case history taking and lead to more effective information sharing and patient-centred recommendations in management. AAC boards should be used with specific communication goals in mind and should be used to aid communication, not dictate it. When audiologists focus on asking open-ended and narrative eliciting questions, the ensuing information-sharing will provide valuable insight into the patient's experience of their tinnitus and the impact it has on their daily life, emotions, and psychosocial environment, aligning with PCC.

5.2.3. Rapport and Responding to Emotions

Engaging in emotional and psychosocial topics empathetically creates trust and rapport. As information sharing occurred throughout the observed consultations, the audiologists did not consistently engage in emotional and psychosocial topics introduced by their patient, or respond with empathy and understanding, inhibiting the rapport between audiologist and patient. Current literature indicates that audiologists regularly fail to address the emotional and psychosocial concerns communicated by patients in other areas of audiological intervention (Manchaiah et al., 2019; Muñoz et al., 2017; Watermeyer et al., 2015). A strong patient-provider relationship, built through rapport, leads to open communication and information sharing in which patients can disclose their values, preferences and expectations for care outcomes, ensuring both parties have a complete understanding of the patient's care needs (Tran, 2020). In the current research, empathetic elicitation and responses to patients' emotional and psychosocial stressors enabled patients to exhibit greater vulnerability and trust during their consultations. However, also notable was

the contrast in the importance that audiologists placed on their inability to ‘solve’ these concerns and the patients' appreciation for the time and opportunity to talk about them. It may not always be within the audiologist’s scope to ‘solve’ the patient’s emotional and psycho-social stressors, but they can offer a safe space and time to listen to patient’s experiences and be sensitive to these experiences in developing a care plan.

Tran (2020), in his development of the PCCMC, indicates that clinicians can strengthen their interpersonal relationship with patients by going into their health care interactions with the objective of forming a therapeutic bond and offering patients social and emotional support by demonstrating empathy and compassion for the patient’s specific health journey. Audiologists can set out to develop rapport from the beginning of their tinnitus consultations by using non-verbal communication features such as eye contact, facial expressions showing interest and understanding, well timed head nodding, relaxed and open body posture and proximity to the patient in order to improve communication (Drossman & Ruddy, 2020). Rapport and feelings of trust between healthcare providers and patients promote an atmosphere in which patients are comfortable about sharing their preferences and enabling the healthcare provider to elicit the patient’s expectations, personal values, and preferences for care (Tran, 2020). When audiologists elicit information sharing and engage empathetically with topics related to emotional distress and psychosocial stressors, they develop trust and rapport with their patients, which allows the patient to place value in the audiologist’s knowledge and skills when developing a management strategy, setting realistic expectations for outcomes.

Audiologists can create and draw on a multidisciplinary network of referrals for patients wherein the patients’ needs surpass the audiologists’ scope. Providing in-service training to this multidisciplinary network on tinnitus and receiving in-service training from this network in order to develop audiologists’ skills can aid in developing better continuity of

care for patients between disciplines. Whilst referral networks, support for audiologists to develop their counselling skills within their scope, and debriefing opportunities are important implications of this research, the understanding that there is value in just listening without fixing has an implication in and of itself for how audiologists are responding in the face of emotional and psychosocial distress in the case of tinnitus management.

5.2.4. Shared Decision Making

Agenda setting, effective information sharing, and trust building are important precursors to shared decision-making and expectation setting. The present research showed that in closing their consultations, audiologists provided their patients with management plans and scheduled follow-up appointments. However, the audiologists provided tinnitus management plans in a prescriptive manner and often emphasised the importance of self-efficacy in the implementation of management recommendations. Patients were expected to take responsibility for the implementation of the management strategies that were prescribed, which often did not align with the patients' needs and were not negotiated in terms of their individual circumstances.

Shared decision-making was not observed in the conclusions to these consultations, and expectation setting for management outcomes was rarely discussed. Shared decision-making plays a crucial role in developing trust between the patient, family members, and audiologist (Preminger et al., 2015) and a lack thereof may limit patient adherence to tinnitus management recommendations. Further, rapport and effective information exchange help ensure that patients and healthcare providers have the necessary information to work together in assessing the available treatment or management options leading to successful collaboration in the shared decision-making process (Tran, 2020). Considered together, rapport, information exchange and shared decision-making show the significance of the

timing and interactive environment in which health care communication and the patient-provider relationship occur during a medical consultation. This creates a reliable and practical basis for delivering health care that focuses on the patient's needs (Tran, 2020).

If patients are unable to voice their agenda, desired outcomes, and priorities for their tinnitus management, they are unable to participate in the key patient-centred practice of shared decision-making. Furthermore, without a clear understanding of the patient's overall functioning and environment, through open-ended questions and elicitation of narrative, the audiologist is unable to assist the patient in finding management strategies that are implementable for the patient within their framework. Finally, a lack of rapport between the audiologist and patient, which breaks down when empathy and understanding of the patient is limited, would directly impact the patient's trust in the audiologist when expectations are set and further management consultations are scheduled.

In order for shared decision-making to occur in tinnitus management, audiologists need to have an understanding of the patient's agenda and priorities for their management outcomes. Healthcare providers should take into account their patients' expressed values, expectations for care, and preferences when considering available options for management in order to identify options that best meet their patients' needs (Tran, 2020). Furthermore, audiologists need to engage in effective information sharing practices in order to understand the patient's unique life-systems and how their recommendation may be relevant and appropriate within this system. More specifically, when making recommendations audiologists should seek to understand the patient's specific circumstances and ability to implement the recommended management strategies and evaluate if the recommendations align with the patient's preferences and personal values. Audiologists need to set realistic expectations for tinnitus management recommendations, while still providing patients with hope and encouraging self-efficacy. In order for audiologists to set appropriate expectations

for management outcomes, they need to elicit the patients' expectations and agenda going into the consultation and have developed trust with the patient.

In order to implement the communicative actions discussed in this study, a list of 10 practical questions that audiologists can reflect on, ask and expand on in practice in initial tinnitus consultations is provided below in figure 4. This list is developed directly from the findings and evidence presented in this study.

Figure 4: Practical Questions to use in an Initial Tinnitus Consultation

10 practical questions audiologists can ask their patients and expand on in tinnitus management sessions:

1. What brings you here today?
2. What would you like to discuss today?
3. What do you know about tinnitus?
4. What are your biggest concerns about your tinnitus?
5. What would you like to achieve in today's session?
6. Tell me about how the tinnitus is affecting your day-to-day life?
7. Tell me about how your tinnitus is affecting your mood?
8. How do you think you can implement these recommendations?
9. Why do you think this management plan will work for you?
10. Why do you think this management plan will not work for you?

Chapter 6: Conclusion

Tinnitus is a symptom that has a significant impact on the lives, emotions, and overall psychosocial functioning of our patients. As audiologists, we have the opportunity to address not only the physiological, but also engage in the emotional and psychosocial impacts of this symptom. However, research shows that in order to effectively manage patients with tinnitus, we need to ensure that our communication is patient-centred (Erdman et al. 2019, Grenness et al., 2014). As an audiologist stated in their interview, "*Patient-centredness - I think like it's one of those terms that everyone knows about but not really*." It seems we understand the concept but struggle with its practical implementation.

In its exploration of communication between audiologists and patients in tinnitus management consultations, this study has revealed important communicative actions that contribute to patient-centred communication and care in tinnitus management consultations. These findings have implications for audiologists in practice, as well as for educators and broader policy makers in healthcare.

This research has provided valuable insight into the current communication practices of audiologists in adult tinnitus management consultations in South Africa. There is currently a scarcity of research in the field of tinnitus in South Africa and few studies on communication and PCC in tinnitus management specifically. Existing research indicates that effective communication and PCC has a positive impact on the management outcomes of patients with tinnitus. The results of this study demonstrate where audiologists are succeeding and falling short in their implementation of effective communication and PCC, particularly in areas of information exchange, responsiveness to patient emotions and psychosocial stressors, and shared decision-making. The findings of this study may thus be valuable in encouraging awareness of practices for audiologists in order to reflect on their communication actions and the effectiveness thereof in tinnitus management consultations. Further, the findings of this

study may be valuable in inferring practical supports and communication strategies for audiologists to implement in their tinnitus management as well as data that may be useful to future researchers, educators and policy makers.

6.1. Implications for practice

Audiologists need to consider how they can transform the concepts of PCC and effective communication into practical actions within their tinnitus management. Although undergraduate teaching typically includes courses in psychology, university curricula may need to be revisited in order to better equip audiologists in their ability to develop rapport, share and elicit information, and collaborate with patients in the decision-making process. Watermeyer and Kanji (2022) have suggested that communication training needs to be introduced early in the curriculum. Teaching communication skills early in the audiology curriculum may enable better foundational skills that undergraduate students can refine and develop for more complex interactions such as those in tinnitus management consultations. For qualified audiologists to improve in their communication and patient-centredness, they may consider enrolling in courses or workshops. Alternatively, experienced audiologists may be able to provide mentorship for graduates. Further, for audiologists to feel better equipped to manage the extensive psychosocial and emotional implications of tinnitus, the development of multidisciplinary networks to share and learn information related to tinnitus counselling may be of value to the care outcomes of tinnitus clinics.

6.2. Implications for policy

With little to no standardisation of practice related to tinnitus management in South Africa it may be difficult for audiologists, and referring healthcare professionals, to access

information related to best practice in tinnitus management. A set of guidelines for assessment and management practices that specifically and practically encompass communication actions and strategies that promote patient centredness would be of value for new and experienced audiologists alike in providing the best possible intervention for tinnitus management patients.

6.3. Implications for theory

Although there is a significant amount of research into PCC and effective communication in health care, it is evident that literature related to these principles in relation to tinnitus management may be lacking. In order for tinnitus management to be carried out in accordance with these principles, it is imperative for the literature to emphasise not only the importance of these principles but also practical guidance on how they can be implemented. Further, literature involving interactional analysis and communication could be introduced at a curricular level for undergraduate students, enabling them to learn from real interactions and gain understanding as to how specific communicative actions can promote or inhibit patient centredness.

6.4. Strengths and Limitations

It is important for the researcher to take note of and reflect on the strengths and limitations to the present research process, in order to make recommendations for future research.

As a clinical audiologist with experience in tinnitus intervention, this study was founded in an interest in communication practices within this setting. To provide an accurate and rigorous analysis of the data, the researcher needed to acknowledge and reflect on innate biases and preconceived perspectives.

Through an exploratory design, this study generated a wealth of data from which the researcher was able to analyse communication behaviour in a field where little research exists. Although the relatively small sample size was deemed appropriate considering the volume of data obtained from this sample, the intensive nature of analysing the volume of data, and the variable communication behaviours observed, there were limitations in the data collection process. Due to the COVID-19 pandemic, many tinnitus clinics in the area had changed their structure and therefore were not consulting with tinnitus patients with consistency. Additionally, unforeseen events such as the closure of a previously approved site limited variance in sites and thus audiologists, with less audiologist participants than patient participants being included in the study. A larger portion of the sample was collected at Site A compared to Site B as the tinnitus clinic at Site B was run by one audiologist alone. In light of the sample size, and the exploratory nature of this study, the results of this study do not represent the population of audiologists as a whole. Despite the sample size of this study, through interactional analysis, compelling examples of communication behaviours in tinnitus management consultations emerged with important implications for practice.

The sites were purposely limited to the public healthcare setting in this study in order to explore the communication behaviours of audiologists of varying experience levels and training. As a result, this study is limited in its view of the dual healthcare system in South Africa. Due to the socioeconomic experiences of patients relying on the public healthcare system, as well as the experiences of audiologist who have moved into the private sector with access to more variable equipment, hearing aid devices and training programmes, intervention for tinnitus within the private healthcare sector may differ to that provided in the public healthcare sector.

Data analysis using a transcription-less hybrid sociolinguistic approach allowed the researcher to obtain an exploratory view of the interactions at hand, in an efficient manner.

By using principles of theme-oriented discourse analysis and interactional sociolinguistics in analysis, the researcher was able to gain an understanding of micro-levels of communication, such as verbal and non-verbal features, as well as analytic themes such as contextual cues, inferences and repetition, within greater focal themes in our industry, such as power dynamics, shared decision-making and patient centricity.

Video-recording interactions was a valuable tool in gaining a holistic view of the interactions that could be revisited throughout analysis. However, there was a limitation to the video-recorded interactions in that one patient requested a brief pause in recording to reveal a personal, distressing narrative and another patient requested the details of a traumatic event be discussed after the consultation, following the cessation of recording. Whilst the researcher took necessary steps to ensure the patients understood the confidentiality of the study and placed the recording equipment as unobtrusively as possible, the researcher also highlighted to the patients that recording could be paused or ceased at any time. Tinnitus by nature carries known psychosocial and emotional distress and with that, patients may reveal traumatic experiences. Although these pauses may present a limitation to the study in that conclusions are being drawn from only what was recorded, these two consultations in particular still provided valuable insight into the audiologists' responsiveness to distress cues and empathetic handling of patients' emotions.

6.5. Future research

There appears to be a scarcity of research investigating tinnitus management within the South African context. This study presents a view into the communicative actions in tinnitus management sessions, but there is much opportunity for further research in this field of study:

- Future researchers may consider investigating communication in tinnitus management sessions within the private sector as the experiences of both patients and audiologists may differ in comparison to those who rely on the public healthcare system.
- Future researchers might consider exploring the efficacy of interventions to support communication, such as comparing communication in tinnitus management consultations before and after workshops focused on PCC and communication.
- The present study investigated communication in initial tinnitus management consultations. Future research into how this communication shifts and changes over follow-up visits may yield valuable results.

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Appendices

Appendix A: Ethical Approval HREC Medical

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG	HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research and Postgraduate Affairs)

TO:	Ms M Stonestreet School of Human and Communiuty Development Department of Speech Pathology and Audiology University E-mail: micaelastonestreet@gmail.com
CC:	Supervisor: Professors A Kanji and J Watermeyer <Amisha.Kanji@wits.ac.za> and <HREC-Medical Research Office@wits.ac.za>
FROM:	Mr Iain Burns Human Research Ethics Committee (Medical) Tel: 011 717 1252 E-mail: Iain.Burns@wits.ac.za
DATE:	2021/05/24
REF:	R14/49
PROTOCOL NO:	**M200853** (This is your ethics application reference number. Please quote it in all enquiries, oral or written, relating to this study.)
PROJECT TITLE:	*An exploration of audiologists' communication behaviours and patient perceived effectiveness in South African adult tinnitus management sessions*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

Appendix B: Site Permission Request Letter

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
SPEECH PATHOLOGY AND AUDIOLOGY

Study Title: An exploration of audiologists' communication behaviours and patient perceived effectiveness during adult tinnitus management sessions in Johannesburg, South Africa.

Hello,

My name is Micaela Stonestreet. I am currently completing my Masters in Audiology at the University of the Witwatersrand. I am conducting research on communication behaviours in tinnitus management sessions.

In this study I want to learn how audiologists communicate with patients in tinnitus sessions, and how patients perceive this communication. I would like request your permission to conduct this research at (name of hospital).

If you agree to allow me to conduct this study, I would like to **video record** an initial tinnitus session between an audiologist and a patient. This will be done with an unmanned camera and I will not be in the room. The video recording serves to capture verbal communication, as well as gestures, facial expression and the use of visual aids.

Following the tinnitus session, I would like to conduct an **interview** with both the audiologist and patient respectively, which I would like to **audio record**. The interview will include

questions related to communication techniques, facilitators and barriers to communication, and patient-centred care in tinnitus management. Interviews will ideally be face-to-face at the hospital, following the tinnitus session. However, if this is not possible for any reason, I will arrange an interview on the phone. The interview is expected to take between 30 minutes to one hour. I may request to record more than one tinnitus session with the same audiologist (but with different patients). The audiologist will only be requested to participate in one interview.

The study will have no direct benefit to the participants or the site of research, however the results of this study will potentially inform communication practices between audiologists and patients with tinnitus. The participants will be provided with any pertinent information on the study while involved in the project and after the results are available. Refreshments may be provided, but there is no payment or cost associated with participation.

Participation in this study is completely voluntary. Participants will be informed that refusal to participate in this study will involve no penalty or loss of benefits to which they would otherwise be entitled.

Personal information will be treated in the strictest of confidence, and will only be available to the principal researcher, the research supervisors and the research assistant.

The only exceptions (which are rare) would normally be:

1. Personal information may be disclosed if required by law
2. The Human Research Ethics Committees of the University may exceptionally require personal data to respond to a formal complaint, or for a compliance audit

Due to the nature of video and audio recordings, I cannot guarantee anonymity. Data that cannot be anonymised will be stored electronically in a password-protected encrypted data cloud and will only be accessible to the researchers for the purpose of the study. Participants' names will be coded with numbers throughout data transcription and analysis for the purposes of anonymity.

All data collected in the course of the study will be securely retained for two years if a scientific publication arises from the study, and six years if there is no publication. Thereafter it will be destroyed accordingly. The output of this study will be a Master's Dissertation, which we I willingly share with you on completion of the study, should you request it.

Permission to conduct this study has been granted by the Gauteng Department of Health, via the NHRD website.

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg. A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research. If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za.

Thank you for reading this letter of permission. Should you grant permission for this study to be conducted at (name of hospital), please will you do so in writing.

If you have any further questions, please don't hesitate to contact me.

Kind regards,

Micaela Stonestreet

MA Student

Cell: 082 342 1353

Email: micaelastonestreet@gmail.com

Professor Amisha Kanji and Professor Jennifer Watermeyer

Supervisors

Date: _____ (month) _____ (year)

Appendix C: Site Permission Approval Letters

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

OFFICE OF THE CEO
Mr Z K O Ndabula

Tambo Memorial Hospital
: (011) 898-8317
: (011) 892-0358
: Zenzo.Ndabula2@gauteng.gov.za

To	:	Ms Micaela Stonestreet
From	:	Dr A Christoforou Acting Chief Executive Officer
Date	:	3 February 2021
Subject	:	**Request to Carry Out Research at Tambo Memorial Hospital: GP_202007_053**

This serves to grant provisional permission Ms Micaela Stonestreet to carry out a research study: *An exploration of audiologists' communication behaviours and patient perceived in South African adult tinnitus management sessions* at Tambo Memorial Hospital. This permission is granted in light of improving the skill capacity of the Gauteng Department of Health.

The permission is granted in line with the code of ethics or research.

The information of the Gauteng Health Department will be used for the purpose of research and it will be utilized discreetly and confidentiality will be maintained at all times.

The permission is granted in good faith with the notion and understanding that the abovementioned clause is upheld.

Furthermore, there should be no financial implication to the hospital.

The collection of data will be the responsibility of the researcher.

Thank you.

Dr A Christoforou
Acting Chief Executive Officer
Tambo Memorial Hospital

3/2/2021

Tambo Memorial Hospital

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Dr. George Mukhari Academic Hospital

Office of the Director Clinical Services
Enquiries : Dr. C Holm
Tel : (012) 529 3691
Fax : (012) 560 0099
Email:Christene.Holm @gauteng.go.za
keitumetse.mongale@gauteng.gov.za

To Ms M Stonestreet
Department of Speech Pathology and Audiology
University of Witwatersrand

Date : 18 August 2021

PERMISSION TO CONDUCT RESEARCH:

The Dr. George Mukhari Academic Hospital hereby grants you permission to conduct research on "An Exploration of Audiologists' Communication Behaviours and Patient Perceived Effectiveness in South African Adult Tinnitus Management Sessions at Dr George Mukhari Academic Hospital

This permission is granted subject to the following conditions:

- ☑ That you obtain Ethical Clearance from the Human Research Ethics Committee of the relevant University
- ☑ That the Hospital incurs no cost in the course of your research
- ☑ That access to the staff and patients at the Dr George Mukhari Hospital will not interrupt the daily provision of services.
- ☑ That prior to conducting the research you will liaise with the supervisors of the relevant sections to introduce yourself (with this letter) and to make arrangements with them in a manner that is convenient to the sections.
- ☑ Formal written feedback on research outcomes must be given to the Director: Clinical Services
- ☑ Permission for publication of research must be obtained from the Chief Executive Officer

Yours sincerely

DR. C. HOLM
DIRECTOR CLINICAL SERVICES
DATE: 18/8/21

Appendix D: Participant (Audiologist) Information Sheet

Study Title: An exploration of audiologists' communication behaviours and patient perceived effectiveness during adult tinnitus management sessions in Johannesburg, South Africa.

Hello,

My name is Micaela Stonestreet. I am currently completing my Masters in Audiology at the University of the Witwatersrand. I am conducting research on communication behaviours in tinnitus management sessions.

In this study I want to learn how audiologists communicate with patients in tinnitus sessions, and how patients perceive this communication. I would like to invite you to participate in this study.

If you agree to participate, I would like to **video record** an initial tinnitus session with a patient. This will be done with an unmanned camera and I will not be in the room. The video recording serves to capture verbal communication, as well as gestures, facial expression and the use of visual aids.

Following the tinnitus session, I would like to conduct an **interview** with you, which I would like to **audio record**. The interview will include questions related to communication

techniques, facilitators and barriers to communication, and patient-centred care in tinnitus management. Interviews will ideally be face-to-face at the hospital, following your tinnitus session. However, if this is not possible for any reason, I will arrange an interview on the phone. The interview is expected to take between 30 minutes to one hour. Should you participate in more than one video observation (with different patients), you will only be requested to participate in one interview.

As part of the study, we will request that you identify potential patients booked into the tinnitus clinic for an initial consultation and provide them with basic information regarding the study, as well as the opportunity to be provided with further information by the researcher. The researcher will subsequently contact these patients (with the patient's permission) to provide further information and consent forms should they be willing to participate.

While participating in this study will have no direct benefit to you as the participant, the results of this study will potentially inform communication practices between audiologists and patients with tinnitus. As a participant, you will be provided with any pertinent information on the study while involved in the project and after the results are available. Refreshments may be provided, but there is no payment or cost associated with participation.

Participation in this study is completely voluntary. Refusal to participate in this study will involve no penalty or loss of benefits to which you would otherwise be entitled. Should you choose to participate in the study, you have the right to withdraw at any time.

There is no requirement to provide any reason for withdrawing and any data collected on such a person will in default be destroyed, unless you specifically consent to its retention.

Personal information will be treated in the strictest of confidence, and will only be available to the principal researcher, the research supervisors and the research assistant.
If you would like to participate in the study, please complete the below form and return it to me. The only exceptions (which are rare) would normally be:

1. Personal information may be disclosed if required by law
2. The Human Research Ethics Committees of the University may exceptionally require personal data to respond to a formal complaint, or for a compliance audit

Due to the nature of video and audio recordings, I cannot guarantee anonymity. Data that cannot be anonymised will be stored electronically in a password-protected encrypted data cloud and will only be accessible to the researchers for the purpose of the study. Participants' names will be coded with numbers throughout data transcription and analysis for the purposes of anonymity.

All data collected in the course of the study will be securely retained for two years if a scientific publication arises from the study, and six years if there is no publication. Thereafter it will be destroyed accordingly. The data will be stored on the institutional repository - http://wiredspace.wits.ac.za/handle/10539/20690; thereafter the data set will be stored in a secure data archive in the University's library. Applications for access to the dataset by external parties will be reviewed by the University's data management librarian, the Human Research Ethics Committee, and the principal researcher. Interested users will need to submit a research proposal to the Human Research Ethics Committee and the University's data management librarian, who together with the principal researcher will make a decision regarding access to the dataset based on merits of the proposal. A process of appeal will be

followed when necessary. The output of this study will be a Master's Dissertation, which we I willingly share with you on completion of the study, should you request it.

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg. A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research. If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za.

Thank you for reading this Study Information Sheet.
If you have any further questions, please don't hesitate to contact me.

Kind regards,

Micaela Stonestreet
MA Student
Cell: 082 342 1353
Email: micaelastonestreet@gmail.com

Professor Amisha Kanji and Professor Jennifer Watermeyer
Supervisors

Date: _____ (month) _____ (year)

Appendix E: Participant (Patient) Information Sheet

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
SPEECH PATHOLOGY AND AUDIOLOGY

Study Title: An exploration of audiologists' communication behaviours and patient perceived effectiveness during adult tinnitus management sessions in Johannesburg, South Africa.

Hello,

My name is Micaela Stonestreet. I am currently completing my Masters in Audiology at The University of the Witwatersrand. I am conducting research on communication behaviours in tinnitus management sessions.

Research is a process used in seeking new knowledge. In this study I want to learn how audiologists communicate with their patients in tinnitus sessions, and how their patients perceive this communication. Tinnitus is typically described as a ringing, buzzing, or hissing sound coming from the ear. I would like to invite you to participate in this research study.

If you agree to participate, I would like to **video record your conversation** with the audiologist. This will be done with an unmanned camera and I will not be in the room. I need to video record the conversation so I can look at what is said and also look at gestures, facial expressions, and if the audiologist uses any pictures while she talks with you.

After your conversation with the audiologist, I would like to conduct an **interview** with you, which I would like to **audio record**. The interview will include questions related to your

experience of your conversation with the audiologist. Interviews will ideally be face-to-face at the hospital, following your tinnitus session. However, if this is not possible for any reason, I will arrange an interview on the phone. The interview is expected to take between 30 minutes to one hour.

While participating in this study will have no direct benefit to you as the participant, the results of this study will potentially provide audiologists with an understanding of how to best communicate with patients with tinnitus. As a participant, you will be provided with any pertinent information on the study while involved in the project and after the results are available. Refreshments may be provided during the interview, but there is no payment or cost associated with participation.

Participation in this study is completely voluntary. Refusal to participate in this study will involve no penalty or loss of benefits to which you would otherwise be entitled. Should you choose to participate in the study, you have the right to withdraw at any time. There is no requirement to provide any reason for withdrawing and any data collected on such a person will in default be destroyed, unless you specifically consent to its retention.

Personal information will be treated in the strictest of confidence, and will only be available to the principal researcher, the research supervisors and the research assistant.
If you would like to participate in the study, please complete the below form and return it to me. The only exceptions (which are rare) would normally be:

1. Personal information may be disclosed if required by law
2. The Human Research Ethics Committees of the University may exceptionally require personal data to respond to a formal complaint, or for a compliance audit

Due to the nature of video and audio recordings, I cannot guarantee anonymity. Data that cannot be anonymised will be stored electronically in a password-protected encrypted data cloud and will only be accessible to the researchers for the purpose of the study. Participants' names and identifying information will not be used in transcriptions of the data, but will be coded with numbers throughout data transcription and analysis for the purposes of anonymity.

All data collected in the course of the study will be securely retained for two years if a scientific publication arises from the study, and six years if there is no publication. Thereafter it will be destroyed accordingly. The data will be stored on the institutional repository - http://wiredspace.wits.ac.za/handle/10539/20690; thereafter the data set will be stored in a secure data archive in the University's library. Applications for access to the dataset by external parties will be reviewed by the University's data management librarian, the Human Research Ethics Committee, and the principal researcher. Interested users will need to submit a research proposal to the Human Research Ethics Committee and the University's data management librarian, who together with the principal researcher will make a decision regarding access to the dataset based on merits of the proposal. A process of appeal will be followed when necessary. The output of this study will be a Masters Dissertation, which we will willingly share with you on completion of the study, should you request it.

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg. A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research. If you have any concern over the way the study is

being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za.

Thank you for reading this Study Information Sheet.

If you have any further questions, please don't hesitate to contact me.

Kind regards,

Micaela Stonestreet

MA Student

Cell: 082 342 1353

Email: micaelastonestreet@gmail.com

Professor Amisha Kanji and Professor Jennifer Watermeyer

Supervisors

Date: _____ (month) _____ (year)

Appendix F: Participant Consent Form

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
SPEECH PATHOLOGY AND AUDIOLOGY

Study Title: An exploration of audiologists' communication behaviours and patient perceived effectiveness during adult tinnitus management sessions in Johannesburg, South Africa.

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I understand that if I consent to the study, the session will be video recorded, and the interview will be audio-recorded.

8. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Contact details:

Principal Investigator:

Micaela Stonestreet

082 342 1353

micaelastonestreet@gmail.com

Supervisor:

Professor Amisha Kanji

011 717 4551

Amisha.Kanji@wits.ac.za

Supervisor:

Professor Jennifer Watermeyer

011 717 4578

Jennifer.Watermeyer@wits.ac.za

Chairperson of the Human Research Ethics Committee (Medical)

University of Witwatersrand:

Professor CB Penny

011 717 2301

Clement.Penny@wits.ac.za.

Human Research Ethics Committee (Medical) Secretariat

University of Witwatersrand

011 717 2700 /1234

Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Participant name	Participant signature	Place	Date

Witness name	Witness signature	Place	Date

Appendix G: Participant Consent for Audio Recording

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
SPEECH PATHOLOGY AND AUDIOLOGY

Study Title: An exploration of audiologists' communication behaviours and patient perceived effectiveness during adult tinnitus management sessions in Johannesburg, South Africa.

I hereby consent to audio recording of the interview.

I understand that:

1. The recording will be stored in a secure location (encrypted cloud) protected with restricted access to the researcher and the research supervisor.
2. The recording will be transcribed and any information that could identify me will be removed,
3. The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research
4. Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
5. Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

Participant name	Participant signature	Place	Date

Witness name	Witness signature	Place	Date

Appendix H: Participant Consent for Video Recording

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
SPEECH PATHOLOGY AND AUDIOLOGY

Study Title: An exploration of audiologists' communication behaviours and patient perceived effectiveness during adult tinnitus management sessions in Johannesburg, South Africa.

I hereby consent to visual recording of the initial tinnitus consultation.

I understand that:

1. The recording will be stored in a secure location (encrypted cloud) with restricted access to the researcher and the research supervisor.
2. The recording will be transcribed and any information that could identify me will be removed
3. My face and voice will be identifiable in any visual recording
4. The recordings will normally be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research,
5. Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
6. Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

Participant name	Participant signature	Place	Date

Witness name	Witness signature	Place	Date

Appendix I: Participant (Audiologist) Demographic Questionnaire

1. Age
2. Home language
3. Additional languages spoken
4. Place of employment
5. Dual or single qualification
6. Number of years work experience as an audiologist
7. Please describe any post-graduate training (formal and informal) that you have had in tinnitus management.
8. Number of years working with tinnitus patients
9. Average number of patients with tinnitus seen per week/month

Appendix J: Participant (Patient) Demographic Questionnaire

1. Age
2. Home language
3. Additional languages spoken
4. Occupation
5. Previous occupations and current occupations?
6. Describe your tinnitus
7. When did your tinnitus start?
8. Is your tinnitus constant or intermittent?
9. Have you done anything to help manage your tinnitus prior to this session at the tinnitus clinic?
10. Do you currently struggle with difficulty hearing?

Appendix K: Audiologist Semi Structured Interview Guide

1. Tell me about the tinnitus patients you see here in the clinic?
2. What are your main goals for an initial tinnitus session?
3. How do these goals differ in follow-up tinnitus sessions?
4. What are the most important points to convey to your patients in an initial tinnitus session?
5. What do you feel is the most important information to obtain from your patient in the initial tinnitus session?
6. How do you encourage patient participation in the tinnitus sessions?
7. What verbal communication strategies do you try to implement into your tinnitus sessions to facilitate or enhance communication?
8. What nonverbal communication strategies do you implement into your tinnitus sessions to facilitate or enhance communication?
9. What strategies do you use to identify and repair miscommunications or misunderstandings?
10. What techniques have you found to be most effective in counselling tinnitus patients?
11. What challenges or barriers to communication do you come across in your tinnitus sessions?
12. How do you feel you implement patient-centredness in your tinnitus sessions?
13. What challenges do you experience in implementing patient-centred care in your tinnitus sessions?

Appendix L: Patient Semi Structured Interview Guide

1. Tell me about your tinnitus session? How did it go?
2. What were your main concerns going into the tinnitus session today?
3. How do you feel these concerns were addressed?
4. What were you hoping to achieve from this session today?
5. Do you think these aspects were achieved? Can you explain?
6. Did you feel that the audiologists communicated well with you?
7. Please explain?
8. What communication challenges did you experience in the tinnitus session?
9. How did the audiologist address your feelings regarding the tinnitus?
10. What are your biggest concerns or worries regarding your tinnitus?
11. How did the audiologist address these concerns or worries?
12. What is the next step in your tinnitus management?
13. How do you feel about this decision?