CHAPTER FIVE
CONCLUSIONS

Aim: To derive specific conclusions and implications from the findings and formulate recommendations for future research. The value of the research study will be discussed in terms of application of the hearing aid service delivery guidelines.

5.1 INTRODUCTION

In the last decade more emphasis has been placed on the importance of accountability. Health care professionals began to appreciate the complexity of quality assurance necessary for effective service provision, as this adds the value of beneficence, autonomy and justice for all clients. The South African population is one of diversity and constant change therefore research must fulfil the requirements of the population. This research aims to fulfil those goals by highlighting the needs of clients with government fitted hearing aids. The research has practical implications for audiologists in government hospitals as well as for hearing aid users in the South African context.

The development of service delivery guidelines even in a working format has benefits and provides useful information in addressing the needs of the South African population. This chapter contains the conclusions and limitations of the study. A critical evaluation of the findings is also provided as well as recommendations for future research possibilities.

5.2 CONCLUSIONS AND CLINICAL IMPLICATIONS

5.2.1 General conclusions

It is evident from the results of this study that in general government fitted hearing aids are inadequately cared for and under utilised. This was found to be attributed to a number of factors. One of the main factors to influence the utilisation and maintenance of government fitted hearing aids is finance. The cost of travelling to and from tertiary hospitals, as well as paying for repairs and batteries significantly contributed to under utilisation and poor maintenance. Furthermore, the issue of language also presented a complication in terms of participants not being able to fully understand all aspects covered during the hearing aid fitting and orientation. There is also an unmet need in terms of adequate counselling and aural rehabilitation. The above findings indicate a need for improvement in the service delivery of hearing aids in the public sector and the development of service delivery guidelines to address the above issues.

5.2.2 Development of service delivery guidelines

"Clinical practice guidelines are tools for making decisions in health care more rational, for improving the quality of health care delivery, and for strengthening the position of the patient" (Council of Europe Committee, 2000:1).

Service delivery guidelines must be systematically developed statements which will assist in the decision making about appropriate health care for specific clinical conditions. One must firstly consider the role of service delivery guidelines i.e. to promote effective health care by reinforcing good clinical practice and to promote change in professional practice where this does not comply with current evidence of best practice. Secondly, one has to consider the role of all stakeholders involved the delivery of the specific area (Ferrer, Hambidge and Maly, 2005:691-699).

The concept of primary health care is to match client needs to health care resources available. Primary level care is the most financially and geographically accessible arm of

the health care system. In order to achieve a good health status for all, society must be able to distribute health care across its entire population with equity and efficiency. The problem occurs when idealised versions of primary health care becomes difficult to reliably execute into reality. Therefore, before conceptualising service delivery guidelines, one has to consider three questions (Ferrer et al., 2005:695):

1. How should people be linked primary care practices to promote the systems functions to primary care?
2. How should primary care be linked to other services within the health care system (i.e. tertiary levels) to optimise the functioning of the overall system?
3. How should primary care be linked to communities to best integrate community members?

The proposed guidelines for the service delivery of hearing aids in the public sector is based on literature for developing service delivery guidelines and models as well as the findings and responses from participants'. Figures 5.1, 5.2 and 5.3 provides a description of three options / guidelines to consider for the service delivery of hearing aids in the South African context. An evaluation of each option is also provided. All options were developed according to the principles of community care (Thornicroft and Szmukler, 2001:159-161), which are the following:

Continuity/ Sustainability:

This refers to the ability of relevant services to continue regardless of change of personnel.

Accessibility:

Service characteristic experienced by clients and their caregivers, enables them to receive services where and when they require it.

Comprehensiveness:

Services extend across the entire range of assessment, diagnosis, treatment and rehabilitation.

Equity:

This ensure a fair distribution of resources i.e. services available are similar on par with that of tertiary level care.

Efficiency:

Services rendered are carried out with efficiency and adequacy.

The following figures represent three possible options for hearing aid service delivery in South Africa. The visual representations of options will be followed with a discussion of each.

Option One

All services occur at primary health care level i.e. at a Primary Health Care / Community Clinic or secondary hospital.

PHC Clinic

-Identification of hearing loss
-Diagnostic evaluation of hearing
-Hearing aid evaluation, selection and fitting
-Follow-up: aural rehabilitation, repairs, replacement maintenance and servicing of hearing aids.

Audiologist

Figure 5.1: Option one of hearing aid service delivery guidelines.

In Figure 5.1 all hearing services including hearing aids and follow-up is conducted at a primary health care level i.e. primary clinic or a district level (secondary) hospital. The advantages of this option is that services will be easily accessible to all clients since primary clinics and district hospitals are situated in rural areas close to where the majority of clients reside. This would also be a more financially viable option to clients as they would not have to pay for transport to tertiary hospitals and clients' would not have to miss a day's work due to the service being available close to where they live and most likely work. Furthermore, waiting times for repairs and servicing would be improved as well as the purchase of batteries.

However, in order for option to work effectively the following aspects must be available:

- Placement of speech-language pathologists and audiologists at primary clinics and district level hospitals. This will require the creation of positions and the willingness of professionals to work in such areas.
- Placement of trained interpreters at primary clinics and district hospitals. This will also require the creation of positions and the willingness of professionals to work in such areas.
- Infrastructure i.e. budget for hearing aids, salaries and equipment. This will require government health official's approval of a budget.

If Option One is to be implemented it will meet the principles of community care and will be a form of assertive outreach (Thornicroft et al., 2001:557). Assertive outreach is an active form of services taken to clients rather than expecting clients to attend services at tertiary level and services are offered in community settings at times suited to clients (Thornicroft et al., 2001:557).

There are also several challenges with regard to option one. For example it requires interpreters. However, there is a lack of trained interpreters as well as a lack of Black audiologists and speech-language pathologists. Therefore even though services will be more accessible and affordable, a language barrier may still exist and this could still impact negatively on the utilisation and maintenance of government hearing aids.

Option Two

- Identification of hearing loss
- Diagnostic evaluation of hearing
- Hearing aid evaluation, selection, and fitting

Tertiary Hospital

- Monthly Follow-up: aural rehabilitation, repairs, replacements, maintenance and servicing of hearing aids

Mobile van

Audiologist from tertiary hospital

Figure 5.2: Option two of hearing aid service delivery guidelines.

Option Two is represented in Figure 5.2. In this option some hearing services occur at tertiary level and some at primary level.

Currently, identification of hearing loss, diagnostic evaluation as well as selection and fitting of hearing aids can occur at tertiary level. This can remain as is. However follow-ups i.e. rehabilitation, repairs, servicing, replacements and distribution of batteries can be done monthly at a primary health care clinic. The audiologist or speech-language pathologist can visit various clinics monthly via a mobile van. Other professionals such as optometrists, occupational therapists, etc can also be included to facilitate coordinated service delivery by a team of health care professionals.

The advantages of this option are similar to option one in that services will be more accessible and economical for clients. However, since the audiologist would only go in monthly, waiting times for repairs, replacements and batteries would not be as immediate as Option one.

Rehabilitation can occur via group therapy or support groups during the monthly visits and checklists can be kept by the audiologist to monitor areas that require assistance and additional support.

As with option one, this option has numerous challenges as well. Clients will still have to visit tertiary institutions for diagnostic testing and the hearing aid fitting which brings about financial and travelling issues. Furthermore, a monthly clinic may not be sufficient for repairs and rehabilitation. In addition, there will still be the issue of multilingualism as the audiologist will require an interpreter during the monthly visits. Clients may also not prefer aural rehabilitation to be conducted via group therapy. All of the above challenges will have to be addressed if the utilisation and maintenance of hearing aids is to improve.

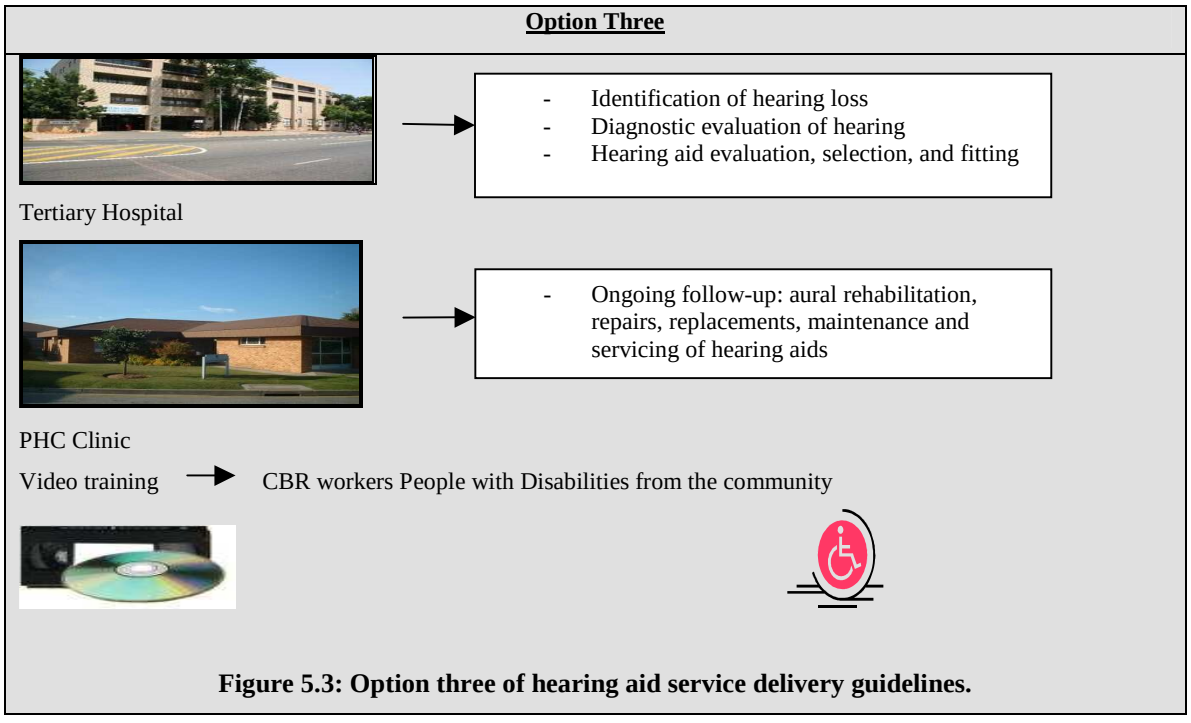

Figure 5.3: Option three of hearing aid service delivery guidelines.

Figure 5.3 represents Option Three which encompasses much of Option Two, in that some hearing services will be conducted at tertiary level. However the major difference is that instead of the audiologist or speech-language pathologist conducting the repairs and follow ups, this will now be done at community level by community based rehabilitation (CBR) workers and people from the community with disabilities. Furthermore, hearing aid training programs can be translated into all official languages and video tapes can be utilised as tools for rehabilitation at primary health care clinics.

However, in order for this option to be successful it will require the following:

- Collaboration with the community and its members
- Collaboration with hearing aid companies and audiologists, as training of the community members and rehabilitation workers will be required
- Collaboration with local government structures with regard to infra structure

The advantages of this option is that costs and waiting times for rehabilitation, repairs, and servicing of hearing aids would be reduced for clients, as services would be provided at community level. In addition, this option would promote job creation and skill development for members from the community and initiate an overall sustainable mechanism for hearing aid service delivery. Moreover, this option would alleviate the need for trained interpreters, as people from the community who can speak the predominant languages will now be providing services.

The challenges associated with option three include persuading members of the community to be involved, as well as collaboration with the hearing aid companies in order to provide the training needed. Hearing aid companies may view this as threat to their income if they are no longer solely responsible for the repairs and servicing of hearing aids. Furthermore, as with option two, clients will still have visit tertiary hospitals for diagnostic hearing evaluations and hearing aid fittings.

5.3 CRITICAL EVALUATION OF THE STUDY

It is necessary to critically evaluate the research conducted in terms of strengths and weaknesses, as this will provide guidelines for future research projects of a similar nature.

Strengths of the research study:

- Findings are considered to be reliable, as the study was executed according to sound research principles and methodological guidelines as discussed in Chapter Three.
- A pilot study was conducted before commencement of the main study to determine validity and reliability of the data collection instruments.
- Results from this study can be utilised as a basis for similar research in the future, since literature and data in this area is limited especially with regard to the South African context.
- The service delivery guidelines developed can be utilised by government officials and can be added to and improved upon.
- This is a unique study done using a specific population that has been known to be under-serviced.

Limitations of the research study:

- The geographic area of the sample for this research was limited to Tshwane thus caution should be taken when generalising findings to other provinces in the country.
- The interview schedule comprised of mainly closed set questions, which although is quick and easy to complete, may not always include all the alternatives for participants to answer.

- Participants were asked to comment on recommendations and suggestions for improvement of hearing aid service delivery. Although participants had no experience and knowledge regarding those areas, they nevertheless provided constructive insight and information that was incorporated into the development of service delivery guidelines.

Significance of the research study:

- This study is the first to be conducted in the area of hearing aid service delivery in South Africa, thereby providing a foundation for future research and improvement of hearing aid service delivery in the public health care sector.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

The current research focused on maintenance and utilisation of hearing aids fitted at government hospitals in Tshwane, in order to develop service delivery guidelines. However, there is still a need for additional research to supplement findings from this study. This information will provide necessary data needed for improving and establishing effective hearing aid services for the South African population.

The scope for research in this area is vast and it is recommended that future investigations should concentrate on the following areas:

- The development, use and effectiveness of Black African indigenous language video training with regard to hearing aid training programs.
- The development, use and effectiveness of pictorial hearing aid pamphlets and training manuals to aid illiterate and semi-literate adults who are fitted with hearing aids.
- The effectiveness of primary health care and community clinic hearing aid distribution and follow-up.

- Research regarding utilisation and maintenance of government hearing aids in other provinces of South Africa to establish similarities and variations in the findings.

5.5 CONCLUSION

The requirements of the South African adult population with hearing loss is immense and there is an urgent need to address issues that impact negatively on utilisation and maintenance of government fitted hearing aids. There is also a critical need for increased public awareness regarding acceptance and open-mindedness of individuals with hearing loss and hearing aids. Furthermore, the multilingual needs of the South African population must be catered for especially in the public health sector and this necessitates the training of more interpreters and the introduction of more Black audiologists and speech-language pathologists into the profession.

Speech-language pathologists, audiologists, interpreters, community based rehabilitation workers, community members, and government officials must collaborate in order to provide optimal hearing aid services for the South African population.

“Long-term care leaders have a tremendous opportunity to make a difference in their facilities by loosening boundaries and creating flexible environments. In doing so, they encourage and support teamwork. We know that any real change in health care depends on improving the ways in which we work together within and among organizations. Collective work and collaboration is the engine of transformation” (Dixon, 2002:32).