The perceptions of final year physiotherapy students and their clients regarding their experiences of home visits: an exploratory case study

by

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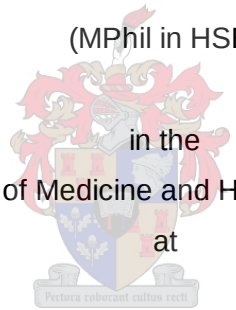
Research report presented in partial fulfilment of the requirements for the degree

Master of Philosophy

in

Health Sciences Education

(MPhil in HSE)



in the

Faculty of Medicine and Health Sciences

at

Stellenbosch University

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December 2014

Declaration

I, Dianne Parris, the undersigned, hereby declare that the work contained in this assignment is my original work and that I have not previously submitted it, in its entirety or in part, at any university for a degree.

Signature: _____ **Date:**_____

Dianne Parris

Abstract

Home-based rehabilitation (HBR) in under-resourced areas in a primary health care context exposes students to the real life situations of clients. The educational experience of HBR, underpinned by the theory of situated learning, promotes experiential and transformative learning. HBR leads not only to academic learning and personal development, but also to an understanding of social accountability and responsibility.

Physiotherapy students and their clients frequently have diverse lingual, socio-economic and cultural backgrounds which may hinder the provision of appropriate treatment to clients in their residences. Increased knowledge of HBR in the physiotherapy context could result in an enhanced experience for both student and client. This study sought to explore the perceptions of physiotherapy students and their clients regarding HBR as part of clinical training in resource-constrained settings. Whether the students felt adequately prepared to perform HBR was also explored.

A qualitative research design in the interpretivist paradigm was used. An exploratory case study was performed. Semi-structured interviews were conducted with clients (N=7) living in an under-resourced setting who had received HBR from physiotherapy students. Paired interviews were conducted with final year physiotherapy students (N=6) after their HBR placement. The data were subjected to inductive thematic analysis and themes developed.

The findings showed that while clients appreciated the students' services, there were communication barriers and unmet expectations. Students reported difficulty in adapting to the unfamiliar context, resulting in interventions not being sufficiently client-centred. They voiced a need for language competency to assist in communication. Earlier facilitated exposure to under-resourced contexts in the early clinical phase was suggested to reduce culture shock. An awareness of home environments in under-resourced areas influenced the students' interventions in other contexts.

To gain maximum benefit from the learning opportunities available through HBR, students require support for client management and client-centred problem solving in an under-resourced setting. Guided reflection should form part of the HBR placement to facilitate the construction of new knowledge, to promote deep transformative learning and to increase the students' awareness of their role as change agents.

Exposure to real life situations in under-resourced settings in the form of HBR provides valuable situated and authentic learning opportunities for physiotherapy students. The experience can be useful in preparing graduates to address the needs of the populations they will serve during community service.

Opsomming

Tuisgebaseerde rehabilitasie (TBR) in ondervoorsiende gebiede in die primêre gesondheidsorg-konteks stel studente bloot aan die werklike lewensomstandighede van kliënte. Die opvoedkundige ondervinding van TBR, gerugsteun deur die teorie van gesitueerde leer, bevorder ervarings- en transformasionele leer. TBR lei nie net tot akademiese leer en persoonlike ontwikkeling nie, maar bevorder ook insig in maatskaplike verantwoordbaarheid en verantwoordelikheid.

Fisioterapie-studente en hul kliënte het dikwels verskillende taal-, sosio-ekonomiese en kulturele agtergronde wat kan verhinder dat die toepaslike behandeling vir kliënte tuis verskaf word. ’n Toename in kennis van TBR in die fisioterapie-konteks kan lei tot ’n beter ondervinding vir beide die student en die kliënt. Die doel van die studie is om die persepsies van die fisioterapie-studente en hul kliënte met betrekking tot TBR, as deel van die kliniese opleiding in omgewings waar daar beperkte hulpbronne is, na te vors. Daar is ook nagegaan of die studente gevoel het dat hulle genoegsaam voorberei is om die TBR toe te pas.

’n Kwalitatiewe navorsingsontwerp in die interpreterende paradigma is gebruik. ’n Verkennende gevalle-studie is gedoen. Semi-gestruktureerde onderhoude is met die kliënte (N=7) wat in ondervoorsiende omstandighede leef en wat TBR van fisioterapie-studente ontvang het, gevoer. Onderhoude is in pare met fisioterapiestudente in hul finale jaar (N=6) gevoer nadat hulle hul TBR-plasing voltooi het. ’n Induktiewe tematiese analise van die data is gedoen en temas is ontwikkel.

Die resultate het getoon dat, alhoewel die kliënte waardering gehad het vir die dienste wat deur die studente gelewer is, daar kommunikasiegapings en onvervulde verwagtinge was. Die studente het gerapporteer dat hulle gesukkel het om aan te pas by die onbekende omgewing met die gevolg dat die intervensies nie genoegsaam kliëntgerig was nie. Hulle het ook aangedui dat daar ’n behoefte is om die nodige taalvaardigheid te ontwikkel om kommunikasie te verbeter. Die kultuurskok wat beleef is, kan moontlik in die vroeë kliniese fase reeds gefasiliteer word deur die studente aan ondervoorsiende kontekste bloot te stel. Die kennis van die tuisomgewings in ondervoorsiende areas het ’n invloed gehad op die studente se intervensies in ander kontekste.

Studente benodig ondersteuning in kliëntebestuur en kliëntgesentreerde probleemoplossing in ondervoorsiende omgewings ten einde maksimum voordeel te verkry uit leergeleenthede wat beskikbaar is deur TBR. Begeleide refleksie behoort deel te vorm van die TBR-plasing om die opbou van nuwe kennis te fasilliteer, diepgaande transformatiewe leer te bevorder en die student se bewustheid van hul rol om verandering teweeg te bring, op te skerp.

TBR voorsien nie net waardevolle, outentieke leergeleenthede ter plaatse nie, maar gee ook die fisioterapie-studente blootstelling aan die werklike situasies waarin mense hulle in ondervoorsiende omgewings bevind. Hierdie ondervinding kan waardevol wees om graduandi voor te berei om die behoeftes aan te spreek van die bevolkingsgroepe wat hulle tydens hul gemeenskapsdiensjaar sal bedien.

Acknowledgements

My grateful thanks go to SURMEPI for their generous funding without which the project would not have been possible.

Thank you to my very patient supervisors, Professor van Schalkwyk and Mrs Ernstzen for their input and constructive criticism. This project would not have happened without them.

To all the clients, students and my research assistants, thank you for your willing co-operation in this research study.

I wish to acknowledge my patient and supportive husband, Ken, for allowing me the freedom to pursue this challenge.

Table of Contents

List of Tables

List of Abbreviations and Acronyms

AJHPE	African Journal of Health Professions Education
CBE	Community based education
CBR	Community based rehabilitation
DoH	Department of Health
HBR	Home-based rehabilitation
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary health care
SU	Stellenbosch University
WC DoH	Western Cape Department of Health
WHO	World Health Organisation

Glossary

Advocacy – the act of pleading for, supporting or recommending an appeal for aid or defence (Cambridge Dictionaries Online, 2014.) In the context of this study the term is taken to mean that the professional will take a stand to ensure that the needs of the underserved are given serious consideration.

Audit trail – a record that is kept of the research process (Frambach van der Vleuten & Durning, 2013).

Client-centred care - (also called patient- or person-centred care). There is no universally accepted definition but most authors include respect for the client's choices and effective communication. The concept can differ according to profession (Kitson, Marhsall, Basset & Zeitz (2012). Mead and Bower (2000) suggest patient-centred care concerns five dimensions, namely bio-psycho-social perspectives, requiring an attention to all issues facing the patient besides their medical problems, patient-as-person referring to the individual's experience of the problem, sharing power and responsibility, the therapeutic alliance which includes the client's perception of the import and effectiveness of the intervention, agreement on the goals of the intervention as well as cognitive and emotional aspects, and the effect of personal characteristics on the health professional. Bardes (2012) suggests that it is rather two intertwined strands as opposed to either patient- or doctor- centredness.

Collaborative learning – working together with peers increases learning (Yardley et al, 2012).

Community-based education (CBE) – refers to the concept of academic training with experiential learning on site in the community, and includes the social, economic and environmental aspects of health, where learning and service occur together (Chang, Kaye, Muhwezi, Nabirye, Mbalinda, Okullo, Groves, Kennedy, Bollinger, Sisson, Burnham, & Mwanika, 2011; Hunt, Bonham & Jones, 2011).

Community-based rehabilitation (CBR) – a strategy which empowers people with disabilities and their families to be able to access health care, social services, education and employment. The focus is on improving quality of life. Stakeholders include the client, family, community, and providers of health, social and education services (WHO, 2014).

Confirmability – the findings reflect the views of the participants rather than those of the researcher. This is increased by peer debriefing, reflexivity and the maintenance of an audit trail. Evidence that refutes the findings is deliberately sought (Frambach van der Vleuten & Durning, 2013).

Credibility – the findings of the study are considered trustworthy and therefore readers can believe the findings. Using more than one source of data (data triangulation) and member checking are ways to improve credibility (Frambach, van der Vleuten & Durning, 2013).

Dependability - refers to the consistency of the findings. Data saturation, that is collecting data until no new themes emerge, will improve dependability. Collecting new data based on what is revealed in analysed data, that is iterative data collection and analysis, will also increase dependability. The researcher also needs to remain flexible in the research design and process (Frambach, van der Vleuten & Durning, 2013).

Home-based rehabilitation (HBR) - also known as home visits or domiciliary treatments. The term in this paper refers to the physiotherapy student performing physiotherapeutic evaluation and treatment within the client's home environment. Health education, screening and the management of chronic conditions form part of every physiotherapy treatment.

Interpretivist paradigm - a research paradigm refers to the basic assumptions and beliefs framework within which the researcher works. An interpretivist paradigm assumes that reality is socially constructed and subjective rather than one objective truth (Wahyuni, 2012).

Member checking - the participants are requested to provide feedback on the data or interpretation thereof (Frambach, van der Vleuten & Durning, 2013).

Peer debriefing - the research findings and process are discussed with a neutral peer (Frambach, van der Vleuten & Durning, 2013).

Perception – this term refers to the way someone views, thinks about or understands something (Webster's College Dictionary, 2014).

Phenomenology - the study of occurrences in everyday human lives from the perspective of those experiencing them (Somekh & Lewin, 2005).

Physiotherapy - the World Confederation of Physical Therapy (WCPT) defines physiotherapy as "providing services to people and populations to develop, maintain and restore maximum movement and functional ability throughout the life-span" (Higgs, Refshauge & Ellis, 2001).

Primary health care (PHC) - the term includes all aspects of life which can impact on health, such as environment, sanitation and food resources, in addition to medical care (WHO, 1978). However for the purposes of this study, only the physical health of people is considered. The World Health Organisation (WHO) includes the requirement for PHC to engender self-reliance and self-determination on the part of the patient and

community (WHO, 1978). PHC includes essential health care as well as prevention and health promotion (Western Cape Government Department of Health 2013).

Reflexivity - refers to the researcher critically considering the effect of her role, background, values and attitudes in the process of the research (Frels & Onwuegbuzie, 2012).

Rehabilitation - Rehabilitation assists people with functional limitations to live independently in their home or community, participate in education, the labour market and public life. It can minimise the consequences of disease or injury and improve quality of life health (WHO, 2014).

Rural - an area outside a town, pertaining to life in the country (Webster's College Dictionary, 2014). Frequently thought of in terms of what is lacking in terms of issues such as accessibility, infrastructure and so on (Reid, 2011).

Scaffolding - guided instruction, involving being aware of students' learning needs, a realisation of what they know and what they still need to learn, creating an appropriate learning environment, and supporting them as they transition to independence (Alfieri, Brooks, Aldrich, & Tenenbaum, 2011; ten Cate, Snell, Mann, & Vermunt, 2004).

Situated learning - a social learning perspective where learning is linked to the context. Learning occurs by doing, that is, actively participating alongside others. Other learning theories are incorporated, particularly experiential learning (Mann, 2011).

Social accountability - The World Health Organization defined the social accountability of medical schools as "the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve. The priority health concerns are to be identified jointly by governments, health care organizations, health professionals and the public" (Boelen & Woollard, 2009).

Social constructive learning - knowledge is constructed by integrating new and old knowledge. The social input of peers influences this learning (Torre, Daley, Sebastian & Elnicki, 2006).

Social learning - learning is influenced by observation of others (Merriam, 2007).

Social responsiveness - refers to the effectiveness and efficiency an individual shows in responding to the needs of society. Also social responsibility. (Cambridge Dictionaries Online, 2014).

Thick description - sufficient details of the participants are given, including demographics, background information and context of the study. This assists readers to have a better understanding of the study and its possible relevance to their own context (Frambach, van der Vleuten & Durning, 2013).

Transferability – the findings can be applied to different settings. This will be enhanced by providing a detailed (thick) description of the sampling and setting in order for the

reader to decide the applicability to their own setting (Frambach, van der Vleuten & Durning, 2013).

Transformative learning - learning that causes one to reassess one's assumptions and points of view and changes one's world view (Meizerow, 1997).

Under-resourced - refers to poor, underfunded areas with few or no resources (Webster's College Dictionary, 2014).

Chapter 1: Overview

1. Introduction

Primary health care (PHC) addresses the health needs of a population in the communities where they live (Western Cape Department of Health, 2011). PHC, including rehabilitation within communities, forms an integral part of the Western Cape Department of Health plan for 2030 (WC DoH, 2013). Therefore physiotherapists need to be able to provide effective rehabilitation for clients where they live. This includes treating a client in their own dwelling, referred to in this report as home-based rehabilitation (HBR) or home visits. PHC has also therefore become an important aspect in the education of health professionals (Frenk, Chen, Bhutta, Cohen, Crisp, Evans, Fineberg, Garcia, Ke, Kelley, Kistnasamy, Meleis, Naylor, Pablos-Mendez, Reddy, Scrimshaw, Sepulveda, Serwadda & Zurayk, 2010). Thus the training of physiotherapy students should include PHC and HBR.

The authentic exposure to HBR results in an intense experiential learning situation for students, promoting constructive and transformative learning (Maley, Worley & Dent, 2009). Certain skills are specifically required from a physiotherapist in HBR, such as respect for the home and family and the ability to cope in unfamiliar and uncertain, even risky, environments (Stainsby & Brannigan, 2012). Cultural competency, good verbal and non-verbal communication skills, observation skills and an ability to build rapport and trust with clients are also essential, more so than in other settings.

When in the client's home, interventions should follow a holistic and client-centred approach, addressing activities of daily living and considering quality of life (WC DoH, 2011). Thus the client's own goals and those of the family, within the community context, become important goals of treatment. In this context, students often need to make the paradigm shift from focussing on diagnoses and missing components of functional movement, as they would in a clinic or hospital setting, to addressing the client's needs within his personal environment.

Currently the socio-economic, language and cultural profiles of Stellenbosch University (SU), physiotherapy students are very different to those of the communities they serve as students and in community service as graduates. The client's context therefore may be quite different to the student's frame of reference. With the discovery of difference, adjustments need to be made to the goals and process of treatment to ensure client satisfaction.

Communication difficulties, the client's culture, beliefs and his or her understanding of physiotherapy may affect the process and outcomes of treatment (Barron, Klaber Moffett &

Potter, 2007; Ramklass, 2009). Likewise, the students' assumptions and beliefs may affect their interactions with their clients and awareness of this should be facilitated (Ancis & Marshall, 2010; Prose, Diab & Matthews, 2013). Therefore there may be greater potential for challenges during HBR, particularly regarding communication and goal setting. Developing cultural competency, that is the ability to treat people from a culture different to one's own with respect and as equals, has thus become critical in the physiotherapist's training (Chang, 2007; Deumert, 2010).

At SU, final year physiotherapy students spend six weeks at a community site learning to integrate and apply the principles of PHC and Community-based Rehabilitation (CBR). This PHC placement is part of the module entitled Clinical Physiotherapy which ultimately aims to facilitate the development of a physiotherapist who is able to function independently as a first line practitioner in South Africa (Clinical Physiotherapy 474 Guidelines, 2014). One of the assessed outcomes of this placement is that the students will be able to effectively evaluate and treat clients in their own homes. Prior to this placement, the students have mostly seen clients in community health care centres and hospital settings which are more structured and better resourced environments. They are accompanied by their clinical supervisor on their first home visit; otherwise they perform HBR in pairs unaccompanied by a qualified professional.

Previous informal interviews with both clients and students revealed new insights which could be used in the preparation of students for this placement. These enquiries, the reported gap in physiotherapy undergraduate training regarding PHC (Ramklass, 2009; Mostert-Wentzel, Frantz & van Rooijen, 2013a) and the lack of physiotherapy literature on HBR as a learning environment pointed to the need to explore the phenomenon further.

This study therefore explores the SU undergraduate students' and clients' experiences and perceptions of HBR. In particular, the students' perceptions regarding their preparedness for HBR in diverse settings are explored. The findings may be used to inform the preparation of future students prior to their PHC placement. Consideration of both students' and clients' perceptions will enable this preparation to take into account the needs of both groups.

1.1. Research question

What are the perceptions of final year physiotherapy students and their clients regarding their experiences of HBR during a PHC clinical training placement in a resource-constrained and diverse setting?

1.2. Aim

To describe the perceptions of physiotherapy students and their clients regarding their experiences of home-based rehabilitation in resource-constrained and diverse settings.

1.3. Objectives

- To explore the perceptions of clients receiving physiotherapy from students in their homes.
- To explore the barriers and facilitators to effective home visit treatments from a client's perspective.
- To explore the students' perceptions of treating clients in their homes in resource-constrained and diverse settings and the influence on learning experiences.
- To explore the barriers and facilitators to effective home visit treatments from a student's perspective.
- To explore whether students feel adequately prepared to perform home based rehabilitation.

1.4. Report outline

This chapter has provided an overview of the context. The following chapter expands on the contextual issues and discusses the theoretical perspectives and concepts underpinning the research. HBR will be presented as an authentic learning space for preparing graduates for CBR and for a future as change agents. Chapter 3 describes the research design and process with consideration of ethical issues as well as the assumptions inherent in the study. The manuscript prepared for submission to the African Journal of Health Professions Education (AJHPE) is contained within chapter 4. The article focuses on a portion of the data relating to HBR as a situated learning experience. Chapter 5 summarises the project, suggests areas of future research possibilities, discusses the limitations of the study and ends with a personal reflection. As the data generated many more themes than contained in the manuscript, a section of further findings of the research is presented in chapter 6, followed by a final chapter of discussion about the findings from the practical view of barriers and facilitators of effective HBR and the training of students for this placement. Supporting documentation is included in the Addenda.

Chapter 2: Context and Concepts

2. Introduction

The review of the context and relevant concepts relating to the study begins with the global and national view of PHC and community-based education (CBE) from both health and educational perspectives, and within the context of physiotherapy. The focus then turns to specific literature regarding communication and cultural competence in this same context. The learning theories related to the HBR experience are presented.

2.1. International and national PHC context

Since the 1970s there has been recognition of the importance of PHC, particularly after the World Health Organisation's Alma-Ata conference where health was confirmed as a basic human right (World Health Organization, 1978). The World Health Organisation (WHO) regards PHC as the basis for achieving their global aim of 'Health for All' urging governments to address the inequalities in health and make PHC universally accessible.

In its White Paper, the South African Department of Health (DoH) advocated improving the accessibility of health care (SA DoH, 1997), with an emphasis on rural and underserved areas. Compulsory community service to address the critical shortage of professionals in underserved areas was initiated as a requirement for registration for physiotherapists. In its 2030 Healthcare Plan (WC DoH 2030), the WC DoH subscribes to the national vision of strengthening community based services and PHC, to ensure equal access to health care in all sectors. The need for physiotherapists who are competent to respond to these imperatives is self-evident.

2.2. Health professions education

The WHO requires health workers to be trained to address the health needs of the communities they will serve in a practical, acceptable and scientifically robust manner (WHO, 1978). The Lancet Commission on educating health professionals for this century noted a widening gap between what communities require of health care professionals and what they provide (Frenk *et al*., 2010). The Commission strongly advocated education to incorporate PHC and CBE, referring to learning in the community, and indicating that current curricula were not doing so satisfactorily (Frenk *et al.,* 2010). The DoH (SA DoH, 1997) similarly called for socially accountable graduates who are competent to address the communities' needs. According to Boelen and Woollard (2009) social accountability means

that health education institutions need to address the needs of the society its graduates will serve, while Howe (2001) suggests that students will become better advocates if they are exposed to settings where the need is greatest. As a result, CBE is becoming a prominent feature in the education of health professionals globally. However, Burch and Van Heerden (2013), specifically referring to South African doctors, question whether graduates are in fact trained to be socially accountable and competent professionals, particularly for underserved areas.

Boelen and Woollard (2009) further warn of a divide between health educators and health systems leading to a decreased effectiveness of health care. A close relationship between health profession education institutions and the DoH is vital not only for service delivery but also for producing graduates who are competent to meet the community health service needs (WC DoH 2030). Therefore health education institutions must ensure alignment between society's health needs and the capabilities of the graduates produced (Maley, Worley & Dent, 2009).

CBE, with very varied clients and environments, can be a rich learning platform for students (Sen Gupta, Murray, McDonell, Murphy & Underhill, 2001). CBE affords an exposure to the socio-economic health determinants and clients' real life situations, particularly when the students enter the clients' homes. Students can develop confidence in their practice and a greater understanding of the clients' context (Mudarikwa, McDonnell, Whyte, Villanueva, Hill, Hart & Nestel, 2010). Furze, Black, Peck and Jensen (2011), in a study of American students' perceptions of a community engagement experience, found that this increased students' social responsibility. An Australian study found that clients are usually willing partners in CBE and serve to assist students to learn particularly during HBR in an unfamiliar context (Hudson, Weston, Farmer, Ivers, & Pearson, 2010). One of the challenges of CBE is the mismatch between the clients' and students' understanding of the interventions as well as between the clients' needs and the students' educational needs (Kristina, Majoor & Van der Vleuten, 2006).

CBE faces barriers due to ineffective co-operation between DoH staff, particularly resulting in poor continuity of care. The disparity in student and client frames of reference can result in significant challenges in CBE. It has been noted in some studies that it is a global phenomenon that students in health education institutions mostly come from higher socio-economic groupings (Frenk *et al*., 2010; Veras, Pottie, Cameron, Govinda, Dahal, Welch, Ramsay & Tugwell, 2013). For the most part SU physiotherapy students are currently of different socio-economic, ethnic, language and cultural groups to the communities they serve (See Addendum A).

The challenges students face in CBE may result in transformative learning and thus there is more likely to be growth both personally and professionally (Mezirow, 1997; Maley, Worley & Dent, 2009; Stickler, Grapczynski & Ritch, 2013). Transformative learning, that is, learning that changes our world view (Meizerow, 1997), should be a result of health professionals education, and lead to the development of leaders and agents of change (Wear & Kuczewski, 2008; Frenk *et al*., 2010; Reid, 2011). Exposure through PHC to the realities of the health care system can assist in producing graduates who can be accountable for making informed decisions to effect changes in health care (Boelen & Woollard, 2009; Frenk *et al*., 2010).

2.3. Cultural competence and communication

Futter (2003) found that undergraduate physiotherapy students in Cape Town lacked knowledge of the differences in underserved communities compared to their own, despite most of the students having grown up in South Africa. If a physiotherapist has limited knowledge of the client's situation, their understanding of the client's requirements will necessarily be affected (Roskell, White & Bonner, 2012). Care centred on the client includes an assimilated understanding of the whole client, their needs and expectations and their lived world (Mead & Bower, 2000; Little, Everitt, Williamson, Warner, Moore, Gould, Ferrier & Payne, 2001). Communication and cultural competence thus become important factors in physiotherapy CBE training.

Cultural competence can be defined as the translation of cultural knowledge into practice and attitude and is essential for improving client care (Chang, 2007). Lie, Lee-Rey, Gomez, Bereknyei and Braddock (2010), in a systematic review, suggest that more evidence is needed to positively link cultural competence and client satisfaction. Culture has been likened to an iceberg (Core, 2008) where what is visible is only a fraction of that which lies hidden. Culture dictates how a client views illness or disability and colours the client's response to a treatment intervention (Core, 2008; Grut, Mji, Braathen & Ingstad, 2012).

Cultural competency and sensitivity should therefore be core values of health profession education institutions (Taylor & Lurie, 2004). Educating students should include not only knowledge but responses to cultural situations, as cultural competency includes behaviours and attitudes (Chang, 2007). Cultural competency is by nature transformative and continuous (Chang, 2007). Allen (2010) also believes that training in both cross cultural care and antiracism will lead to positive attitude changes in students. New physiotherapy graduates in South Africa verbalised a need for more education regarding culture and how it impacts on physiotherapy practice (Ramklass, 2009; Mostert-Wentzel, Frantz & van Rooijen,

2013). Clearly some provision of basic cultural knowledge and exposure to people of various cultural backgrounds in the clinical training warrants attention (Core, 2008).

Cultural competence and effective communication appear to lead to better client satisfaction, improved outcomes and compliance (Mead & Bower, 2000; Taylor & Lurie, 2004; Little *et al*., 2001; Prose, Diab & Matthews, 2013). Effective communication, both verbal and non-verbal, which shows an understanding and acceptance of cultural differences, can result in increased trust between parties (Core, 2008). Compromised communication between the health care provider and the receiver, that is, the client, can result in a lack of understanding of medical conditions and treatment options, as well as affecting how interventions are received by the client and family (Core, 2008; Deumert, 2010). This can lead to non-compliance with prescribed treatment.

Clients will give a better history if they can speak in their own language (Taylor & Lurie, 2004). The ideal would be to match the language and culture of the therapist and client as this would decrease miscommunication (Mbalinda *et al*., 2011), however, this is seldom possible (Core, 2008). As Deumert (2010) reports, there is still a significant need for more language competency in South Africa's multilingual society. The need and desire to know an African language was an issue that was raised in many studies (Cameron, 2000; Mabuza, Diab, Reid, Ntuli, Flack, Mpofu, Daniels, Adonis, Cakwe, Karuguti & Molefe, 2013; Ramklass, 2013) and has particular relevance at SU. Ramklass (2009) stated that the lack of language and cultural education in physiotherapy curricula was linked to the previous medical model of education where PHC skills were largely absent.

Non-verbal communication is also part of building the potential relationship, and caring should be appropriately expressed. The therapist needs to know how to interpret non-verbal signals to gain understanding of the response to the intervention. Nonverbal behaviour is rooted in culture and so can be easily misinterpreted. This can present challenges in conducting an effective intervention, for example touch, a vital component of physiotherapy, can be easily misconstrued (Mabuza *et al*., 2013). The importance of sensitising students to these challenges is clear. Morton (2012) suggests that therapists ask questions in a variety of ways to try to discover the answers they need and then take time to reflect to ensure that they understand the client correctly. This is true even when a translator, a valuable communication option (Mbalinda, Plover, Burnham, Kaye, Mwanika, Oria, Okullo, Muhwezi & Groves, 2011; Chang *et al*., 2011), is used.

2.4. Physiotherapy context

As the health context changes from institution-based to community-based services, the role of physiotherapy must also change (Joseph, 2011). In community-based rehabilitation (CBR), the physiotherapist has many responsibilities in addition to treatment, such as skills transference, consultancy, health promotion and prevention, advocacy and developers of appropriate CBR programmes (Bury, 2005). According to Bury (2005), rehabilitation is a process actively involving all parties, such as the health care team, the client and the family. Physiotherapists, as rehabilitation experts, should be regarded as a resource for clients, their families and communities (WCPT, 2011).

Physiotherapy interventions in a home setting provide valuable rehabilitation opportunities for clients and at the same time important situated learning experiences for students. HBR exposes students to the real life situations of clients (Roskell, White & Bonner, 2012) and promotes the development of cultural awareness (du Plessis, Koen & Bester, 2013). An appreciation of the person as a whole within their family and community contexts is developed (Mudarikwa *et al*., 2010). Students witness firsthand the roles of poverty and society in health. The social determinants of health are thus learned more effectively than in any lecture (Reid, 2011; Mabuza *et al.,* 2013). However, students report feeling fearful, overwhelmed and helpless as sometimes witnessing the actualities of life in poor households can be overwhelming (Cameron, 2000; Mbalinda *et al*., 2011; Reid, 2011; du Plessis, Koen & Bester, 2013). Nevertheless, this exposure to their clients' reality is vital if they are to learn to provide effective treatments in under-resourced contexts and to develop social responsibility and advocacy (Mostert-Wentzel, Frantz & van Rooijen, 2013). Thorne (2011) agrees by stating that authentic experience is essential to competent health care. Roskell, White and Bonner (2012) add that 'getting into the clients' shoes' can be a valuable way to engender more client-centred interventions and to change attitudes, particularly when facilitated by reflection.

Physiotherapists, when planning an intervention from an evidenced-based standpoint, may have disparate expectations of the intervention from those of their HBR clients whose perception of their condition may be different (Kagawa-Singer & Kassim-Lakha, 2003). In order to offer an acceptable and effective service to clients, physiotherapists need to understand the clients' expectations. Setting treatment goals may be complicated by the fact that some clients may not necessarily be in their permanent home environment. Migrant labour and urban influx from rural areas are significant factors in underserved areas in South Africa. The client may travel back to another province once they have recovered sufficiently, and thus treatment needs to address these possibilities. The person's life history and future

plans therefore become a very important part of the history taking. The family itself becomes a disabled family when one member is disabled and therefore the family must be included in the assessment and intervention (Braathen, Vergunsta, Mji, Mannand & Swartz, 2013). Narrative reasoning regards the client's lived experience as being unique and requires the clinical insights to be built up from the individual's story (Edwards, Jones, Carr, Braimack-Mayer & Jensen, 2004). These stories will give the students clues to be able to adjust their plans according to what they discover in order to ensure that treatment will still be effective and relevant (Chang *et al*., 2011). Thus students need to become competent in cross-cultural communication so that they can elicit these narratives from their clients.

2.5. Learning value of home visits

Working in communities and particularly in clients' homes, which is the setting for this study, provides a more intense experiential learning opportunity (Mabuza *et al.,* 2013) than in other settings. These situated learning experiences enable the students to develop empathy and promote client-centred care (Roskell, White & Bonner, 2012).

Amongst the many skills a student gains at an increased level from HBR are: increased insight, coping with complexity, the ability to think on one's feet, assertiveness, building rapport, empowering others, observation skills, functioning in someone else's space, consideration of quality of life and function as applicable to the client, integrating services and the ability to function as a professional with limited resources (Twible & Henley, 2000; Ramklass, 2009; Stainsby & Bannigan, Tasker, 2012; Loftus & Higgs, 2012). Knowing when to stop treatment is an important skill (Stainsby & Bannigan, 2012) particularly as many HBR clients require long term treatments. The problem solving skills developed are more holistic than in an institutional setting. Clinical reasoning skills in a community setting must take the client's views into account (Tasker, Loftus & Higgs, 2012). Listening to the client with attention can increase the students' perception of all the factors that affect the client's health, goals and quality of life (Hudson *et al*., 2010; Tasker, Loftus & Higgs, 2012). Students not only acquire new skills while training in an HBR context, but also develop the confidence to cope in these settings, leaving them better prepared for future practice (Mabuza *et al*., 2013). In the SU context there is increased stimulus for self-directed learning when in a client's home due to the fact that students often do not have supervision (Stainsby & Bannigan, 2012).

In a focus group with American physiotherapy students doing pro-bono work with clients from diverse backgrounds in an underserved community, Stickler, Grapczynski and Ritch (2013) found that the students learnt to be open to difference, realise the hardships clients experienced, respect for another's space and not to allow personal prejudices to

influence them. These students reported becoming more active in their listening skills, not just listening for symptoms, but to the client as a whole. These students also found creativity and flexibility to be essential in under-resourced situations. This study found that this experience contributed to the personal growth of the students as well to their professional growth, developing ethics and critical thinking skills.

Tasker, Loftus and Higgs (2012) report on the complexity of the relationship between a therapist and client. She states that the personal nature of the interaction is more important than is usually acknowledged. In HBR situations, emotional responses experienced in coming face to face with the difficulties of some people's lives need to be addressed. Reflective practice becomes important in this context to enable the student to convert these experiences into learning (Torre, Daley, Sebastian & Elnicki, 2006). Guided reflection can facilitate the construction of new knowledge from old and promote deep transformative learning. Reflection is therefore an essential educational tool in CBE and particularly valuable in HBR (Roskell, White & Bonner, 2012).

2.6. Preparation for CBE

Since the introduction of compulsory community service, newly qualified physiotherapists have been placed in under-resourced areas (Ramklass, 2009). The first group of community service physiotherapists in Kwa-Zulu Natal reported that they were unprepared for this type of work, not only as effective practitioners, but also as socially accountable health professionals (Ramklass, 2009). Again in 2013, Mostert-Wentzel, Frantz and van Rooijen (2013a) and Ramklass (2013) reported similar findings. Ramklass (2013) suggested that undergraduate training include interventions in impoverished settings, specifically HBR which requires a more holistic assessment and intervention than in a clinic or hospital setting. However, a document analysis of all eight South African universities that train physiotherapists showed gaps in their curricula regarding community health education (Mostert-Wentzel, Frantz & van Rooijen, 2013b). Less than half the institutions stated that HBR was included in the community curriculum. It is, therefore, necessary to evaluate physiotherapy education strategies to ensure that physiotherapy students are adequately trained to be effective and relevant in such situations (Futter, 2003; Boelen & Woollard, 2009).

Preparation prior to cross-cultural clinical exposure to enable the links between theory, ethics and social responsibility (Watermeyer & Barratt, 2013) is therefore essential to the success of CBE (Sen Gupta *et al*., 2001; Core, 2008). Ernstzen, Statham and Hanekom (2014) reported that SU students felt unprepared for the activities and challenges that they

faced in CBE. There are no published studies specific to the experiences of SU community service physiotherapists. Most of the literature relating specifically to HBR concerns developed countries. No literature was found that addresses HBR in the South African context from a physiotherapeutic or educational point of view. Regarding HBR, neither the views of students, as learners and service providers, or clients, as receivers of the interventions, are known. Therefore this study seeks to begin the exploration in the local context.

2.7. Summary

Due to the changes in the DoH's health focus there is a need to ensure that physiotherapy graduates are able to address the client's needs at PHC level. Clinical learning experiences, including HBR training, provides students with a rich situated learning experience, enabling them to comprehend the realities faced by clients in resource poor environments. Such authentic exposure should impact their development into effective physiotherapists and change agents. Students' learning experience regarding HBR thus needs to be maximised to ensure that students, as well as their clients, benefit from this experience. This study aims to add to the body of knowledge in the realm of physiotherapy education for CBE with specific reference to HBR.

Chapter 3: Methodology

3. Research design

A phenomenological enquiry was conducted to allow an understanding of the real life experiences and feelings of the participants (Somekh & Lewin, 2005). Semi-structured interviews generated qualitative data within an interpretivist paradigm (Wahyuni, 2012); thus the clients' and students' perceptions can be taken as being their reality and therefore considered as important information (Maree, 2007; Ritchie & Lewis, 2003). The study was an exploratory case study, focussing on the phenomenon of HBR as a site for physiotherapy clinical training (Yin, 1999).

3.1. Research setting

The SU Division of Physiotherapy places students for their PHC rotation at one of three community placement sites. This study focuses on one of these areas, namely Stellenbosch Community. During this rotation, the students have other activities, such as conducting therapeutic and educational classes in various settings, and attending schools and services at community clinics. Occupational and home visits are also part of the learning activities. Within Stellenbosch there are three suburbs in which they work; the study was conducted in one of these suburbs. The students have one hour per week each of clinical supervision, which includes other block activities; therefore direct supervision for HBR is limited.

The research was conducted in Kyamandi where the researcher currently supervises physiotherapy students performing HBR. This under-served and under-resourced community is situated outside the town of Stellenbosch in the Western Cape, South Africa (du Plessis, Heinecken & Olivier, 2012). It has a predominantly isiXhosa speaking population, the majority of whom live in informal housing with minimal resources such as plumbing, electricity or furniture (du Plessis, Heinecken & Olivier, 2012). Students provide the only physiotherapy service in the suburb. The clients are seen in their homes due to the fact that they are mostly unable to access or afford transport to the nearest hospital where there is a physiotherapist. The students conduct between five and ten home visits per week.

3.2. Participants

Purposive sampling was used so that participants who could share their knowledge and experience of the phenomenon of HBR were invited to participate (Maree, 2007). The SU fourth year physiotherapy students who had completed their community placement in Kyamandi up to the end of June 2014 were invited to take part in the research. A total of six students were invited to be interviewed.

Clients living in Kyamandi who had received treatment in their homes by these students between February and June 2014 were approached. The sample size was twelve clients. The clients are usually referred via word of mouth from friends and neighbours, although some were referred from the third year physiotherapy students at the Stellenbosch Hospital. The clients' reason for referral and response to treatment were not factors in selection. Clients who were not able to be interviewed due to an inability to speak or comprehend, as per treatment records, were excluded.

A community member, employed by the Division of Physiotherapy, acts as a chaperone accompanying the students for two hours per week for the purposes of translation and assistance in finding the homes. A retired student chaperone, who had accompanied students to homes over the past five years, was interviewed to give insight on her experience. The current chaperone was not interviewed due to her limited involvement with the students to date.

3.3. Data collection

Prior to the commencement of each interview, written informed consent was obtained (see Addendum B). The consent form was translated into Afrikaans and isiXhosa once ethics approval had been confirmed. Validation of the translation is important to ensure that the meaning is correctly captured in the translation (Core, 2008) and therefore a Kyamandi community member was asked to read it to ensure that it would be easy for clients to understand.

The prospective participants were contacted by mobile phone or by a visit if they were not otherwise contactable. The interviews were conducted with each client in their own home at a time agreed to by the client and family, taking the availability of the interviewer into consideration. The use of open ended non-threatening questions began the discussion allowing the clients to express their own thoughts. Client interviews ranged from fifteen to forty five minutes. At the end of the interview the clients were thanked for their willingness to participate and given a grocery parcel to a maximum value of R150 as a token of

appreciation. As the clients are usually home-bound, a parcel of basic non-perishable foodstuffs, as suggested by a community member, was deemed the most appropriate gift.

The interviews with the students were conducted at the end of each placement in an agreed location. Refreshments were provided. The student interviews lasted between 25 and 45 minutes. The interviews were conducted after assessment procedures had been completed and feedback given to minimise potential bias.

Face-to-face, semi-structured, interviews were conducted with participants and were recorded with their permission. Client interviews were conducted individually as they are mostly home bound. Two isiXhosa speaking research assistants, who are not linked to the programme in any way, conducted these interviews. The interviewers were trained and orientated by the researcher. The interviews with clients were conducted in isiXhosa to ensure that clients would feel comfortable and provide more fluent answers.

The students were interviewed in pairs in order to utilize the inherent characteristics of such an interaction (Silverman, 2011). The paired interview is a blend of depth interviews and focus groups and is useful when participants have much in common (Ritchie & Lewis, 2003). The interviews were a reflective conversation between two students who, as required by SU guidelines, conducted the home visits together throughout each placement. Due to the dynamics of a conversation, one student's thoughts are stimulated by another student's contributions. They were given the freedom to explore any similarities or differences in their perceptions in an unthreatening environment (Onwuegbuzie, Dickinson, Leech & Zoran, 2009). This method was useful for exploring how the students experienced conducting HBR in a diverse under-resourced community (Maree, 2007). However, paired interviews may result in the interview being dominated by one participant, or a student's reluctance to voice an experience in front of a peer. Therefore students were e-mailed after the interview and given the option to add any comments confidentially if they so desired. No response was obtained in this regard from any student. The student interviews were conducted by an interviewer not connected with the Division either in English, Afrikaans or in both languages, according to the students' preference.

A discussion schedule (see Addendum C) guided the conversation to ensure that all aspects required to address the objectives of the study were covered. Open ended questions were used to stimulate conversation. Prompts were used as necessary to clarify or to trigger further thoughts. The questions covered the clients' or students' experience of HBR, what factors they deemed positive or negative about the experience and any suggestions they might have for improving the experience. The questions were derived from

research and from discussion with supervisors. The interview ended when the participants and research assistants felt that there was nothing further to add to the conversation.

Data were collected using a digital recording of each interview. This allowed the interview conversation to proceed unhindered. The sound files of the interviews were stored on a computer as Microsoft Word Media files and transcribed by an independent transcriber into a Word document. Each interview was given a code number, to protect the identity of the participants. The isiXhosa interviews were translated by the interviewer. This took place as soon as possible after the client interviews to ensure that the conversations were more easily remembered enabling indistinct words to be filled in. Randomly selected parts of the isiXhosa translations were checked by someone whose first language is isiXhosa to ensure accuracy (see Addendum D).

The English and Afrikaans audio files were also listened to by the researcher in order to verify the transcript and provide extra information regarding the dynamics of the interview (Onwuegbuzie, Dickinson, Leech & Zoran, 2009). Directly after each interview, the researcher discussed the interview with the interviewer and made field notes as appropriate. An audit trail in the form of a diary recorded the process of the research (Saldana, 2013).

3.4. Data analysis

The interview transcripts were read until the researcher was familiar with the data. The data were subjected to inductive thematic analysis (Cousins, 2009). Codes were assigned to the data by hand and categorised accordingly. Emerging themes were identified. Data were reviewed on a continuous basis as new themes appeared (Saldana, 2013). Iterative data analysis, that is repetitive observation of the transcripts, increases the dependability of the study (Frambach, van der Vleuten & Durning, 2013) however data saturation may not have occurred. The themes were interpreted to address the study objectives. To ensure credibility, the supervisors were asked to check the themes generated (Frambach, van der Vleuten & Durning, 2013). Member checking by a student, who found no discrepancies, assisted in data verification (Shea, McGaghie & Pangaro, 2001). Confirmability was increased by the researcher searching the data for evidence that might refute the findings, however none was found.

The researcher, a clinical lecturer at SU and the students' clinical supervisor, acknowledges her role as an instrument in the study through which data is interpreted (Frels & Onwuegbuzie, 2012) and therefore made use of peer debriefing, that is, her supervisors checked the data analysis at various points in the study (Frambach, van der Vleuten & Durning, 2013).

3.5. Ethical considerations

Ethical approval, number #S13/10/180, was obtained in November 2013. Prior to the commencement of the study, permission to interview students was obtained from the director of SU Institutional Research and Planning as well as the head of the Division of Physiotherapy at SU. The area of Kyamandi falls under the jurisdiction of the Cape Winelands District Department of Health. Therefore permission was obtained from the District's Research Committee, reference number RP m032/2014.

Prior to each interview, the translated participant information leaflets and consent forms were explained in a language familiar to the participant and he or she was given the chance to ask any questions. The participant was informed that participation was entirely voluntary and he or she had the right to discontinue the interview at any time. The interviewee was informed that they could stop the recording at any time and delete anything they were unhappy about, but this did not happen in any interview. The clients were informed that their participation would not influence continuation of treatment. The interviewers signed the consent forms which included a confidentiality clause. The interviews of students were conducted after each group had finished their placement and the students will not know of any comments made by the clients. Students were assured that their participation or lack thereof would not have any influence on their academic outcomes, present or future.

The data were transcribed in a way that respected confidentiality. The resulting text was stored under a codename in a password protected folder to ensure confidentiality. All sound files and recordings will be deleted at the end of the study to protect against voice recognition. The report resulting from the findings contains no identifying particulars of individual clients or students.

3.6. Assumptions

Qualitative research is an accepted form of research when one wants to understand how people perceive a certain phenomenon. Interpretivism assumes that reality is subjective, diverse and compound (Somekh & Lewin, 2005).The knowledge generated from the research is created from the interactions of the researchers and the participants.

A case study may have limited transferability as it explores only one area or situation and therefore cannot be generalised (Yin, 1999). This can be lessened by providing a thick description of the participants, setting and process of research as well as linking the findings

to previous research (Frambach, van der Vleuten & Durning, 2013). Readers can deduct from this information if the findings might be applicable to their specific situation.

Interviews are accepted as an appropriate way to gather narrative information from the participants regarding their lived experiences (Maree, 2007). The use of interviews enables participants to express themselves in their own language in a relaxed atmosphere potentially allowing more information to be gained. The situation utilizes people's natural desire to share their experiences with others; however there may be limitations as discussed in the concluding section.

3.7. Summary

The design and process of the research study were described in this chapter. Ethical factors were discussed as were the assumptions on which the study was based. Following this chapter is the manuscript for the AJHPE in the format requested in the journal author guidelines (Addendum E). The findings and discussion in the article address only a part of the data collected; further findings and discussion are presented in chapters 6 and 7.

Chapter 4: Manuscript

Home-based rehabilitation: physiotherapy student and client perspectives

Abstract

Background: Home-based rehabilitation (HBR) in under-resourced areas within a primary health care (PHC) context exposes students to the real life situations of their clients. There is a scarcity of literature on student and client experiences of HBR in the physiotherapy context. Increased knowledge of HBR could result in an enhanced experience for both student and client. This study sought to discover the perceptions of final year physiotherapy students and their clients regarding their experiences of HBR during a PHC placement in a resource-constrained setting.

Objectives: To explore the experiences and perceptions of physiotherapy students and their clients regarding HBR as part of clinical training in resource-constrained settings. To discover the barriers to and facilitators of effective HBR.

Methods: An exploratory case study was performed. A qualitative phenomenological research design in the interpretivist paradigm was used. Semi-structured interviews were conducted with clients (N=7) living in an under-resourced setting who had received HBR from physiotherapy students. Paired interviews were conducted with final year physiotherapy students (N=6) after their HBR placement.

Findings: Clients appreciated the students' services; however, data revealed communication barriers and unmet expectations. Students reported struggling to adapt to the context, resulting in interventions not being sufficiently client-centred. They voiced a need for language competency and earlier exposure to such contexts.

Conclusion: Exposure to real life situations in under-resourced settings in the form of HBR provides valuable situated and authentic learning opportunities for physiotherapy students. The experience can be useful in preparing graduates to address the needs of the populations they will serve during community service.

Word Count = 250

Introduction

The re-engineering of South Africa's health system places the focus on primary health care (PHC), which should include rehabilitation and be available to people where they live[1]. Physiotherapy education should produce graduates who are competent in addressing the health needs of the people[2]. Graduates need to serve as health advocates and be accountable for making informed decisions to improve health care[3]. To enable them to be more effective in this regard, graduates need exposure to the realities of the health care system, socio-economic health determinants and clients' real life situations through PHC.

In order to train students effectively, authentic learning opportunities are necessary in the communities they will ultimately serve, particularly during their compulsory community service year[2,4]. These communities are frequently in under-resourced areas. Experiencing the real life context of clients is vital for students so that they will ultimately provide effective interventions and develop social responsibility[2]. Students witness the roles of poverty and society in health first hand during home-based rehabilitation (HBR). Students report feeling overwhelmed when witnessing the realities of life in poor households[5-6.]

Developing cultural competency, which is the ability to treat people from a culture different to one's own with respect and as equals, has become critical in the physiotherapist's training[7]. Culturally competent and effective client-centred communication leads to improved client satisfaction, outcomes and compliance[8].

Different skills and clinical reasoning processes are required for physiotherapeutic rehabilitation within a home context compared to clinic or hospital based interventions. As reported by Tasker et al. [9] during interventions in a home setting, clinical reasoning should primarily consider the client and family needs. Therefore the physiotherapy student's focus should not be predominantly on diagnoses and missing components of functional movement, as would occur in a clinic setting. Students need to be able to adjust the goals and process of the intervention to ensure it is effective and relevant to the client[7]. Listening attentively to clients can increase the students' understanding of all factors affecting the client's health, goals and quality of life[8] and improve client satisfaction. Other skills students may develop in this context include: increased insight, coping with complexity, the ability to think on one's feet, assertiveness, building rapport, empowering others, enhanced observation skills, functioning in someone else's space, consideration of quality of life and function as applicable to the client, knowing when to stop treatment, integrating services and the ability to function as a professional with limited resources[4, 9-10].

The theory of situated learning, that is, learning through active participation within a community of practice[11] underpins the educational experience of HBR. Authentic exposure in a client's home environment can result in experiential learning promoting transformative learning[11]. Transformative learning, namely learning that changes ones view of the world,[12] is a desired outcome of health professionals' education. HBR leads not only to academic learning and personal development, but to an understanding of social accountability and responsibility[3]. However, to gain maximum benefit from the learning opportunities available, students should be prepared effectively prior to exposure to HBR[4].

Increased knowledge of HBR could improve the preparation of students for the placement, resulting in an enhanced experience for both student and client. There is a lack of literature on student and client experiences of HBR in the physiotherapy context. This study, therefore, sought to discover the perceptions of final year physiotherapy students and their clients regarding their experiences of HBR during a PHC clinical training placement in resource-constrained and diverse settings.

Method

Research design

An exploratory case study was conducted focussing on the phenomenon of HBR in an educational context. The phenomenological enquiry allowed an understanding of the real life experiences and feelings of the participants[13]. Depth interviews generated qualitative data

within an interpretivist paradigm[14] taking the clients' and students' perceptions as their reality.

Research context

At Stellenbosch University (SU), final year physiotherapy students each spend six weeks at a community site learning to integrate and apply the principles of PHC and community-based rehabilitation. One of the assessed outcomes of this placement is that the students will be able to effectively evaluate and treat clients in their own homes. Prior to this placement, the students have mostly seen clients in community health centres or hospital settings which are more structured and better equipped environments. In total students receive one hour of supervision per week from their clinical supervisor; therefore they mostly conduct HBR on their own. They have the assistance of a community member who acts as a chaperone and translator one afternoon per week.

The research was conducted at one of the community placement sites in an under-resourced community in the Western Cape, South Africa. The majority of residents are isiXhosa speaking living in informal housing with minimal resources[15]. Students provide the only physiotherapy service in the area. The clients receive HBR in their homes as they are unable to access or afford transport to the nearest physiotherapy department.

Participants

Purposive sampling was used to invite participants who could share their experience of HBR[14]. Final year physiotherapy students from SU were invited after they had completed their rotation in the area. Clients who had received treatment in their homes by these students were approached to participate.

Data collection

Face-to-face, semi-structured interviews with individual clients were conducted in their homes. The student interviews comprised a reflective conversation between pairs of students who, as required by SU safety guidelines, had conducted HBR together[14]. The interviews were conducted in the home language (English, Afrikaans or isiXhosa) of each participant to enable more fluent answers and were recorded with their permission. Open ended questions were used to stimulate conversation using a discussion schedule of questions covering the objectives of the study. The interviews were conducted by research assistants who were not associated with the SU Division of Physiotherapy.

Data analysis

The isiXhosa interviews were independently translated into English and then transcribed. They were checked for accuracy by an isiXhosa-speaking assistant. The transcriptions of the students' interviews were checked by the researcher. The data were subjected to inductive thematic analysis[14] by the researcher. Codes were assigned to themes identified in the data and categorised accordingly. Iterative data analysis occurred to increase the dependability of the study[16]. Member checking of data coding by a student assisted in data verification[16]. The researcher, who is the students' clinical supervisor, acknowledges her role as an instrument in the study and made use of peer debriefing with the co-authors at different points in the study to enhance the trustworthiness of the data[16].

Ethical considerations

Approval for the study was obtained from the SU Health Research Ethics Committee (S13/10/180) and the Western Cape Department of Health (RP032/2014). Signed informed consent was obtained from all interviewees. Participation was entirely voluntary and did not affect services to clients or have any influence on student assessment. The interviews were conducted after the students' examinations had been marked and feedback given in order to minimize any potential bias. Confidentiality was maintained during the process, with no identifying particulars of individual clients or students being kept.

Findings

Participants

A total of seven clients, of a potential twelve, were interviewed. Three patients were excluded due to their inability to converse, one client was not traceable and one was deceased. All patients were black isiXhosa speaking residents of the research site. All six students who had completed their HBR placement at the time of the study participated. Five students were white and one was coloured. Five students were female and one was male. Afrikaans was the home language of two students, with the others claiming English as their language of choice.

The data obtained from the interviews were analysed to identify themes and categories to promote understanding of the phenomenon of HBR. The major themes emerging from the client and student interviews are presented separately.

Client perspectives

The major themes of appreciation and client-centredness emerged from the client interviews. These themes are presented with supporting quotations, all translated from isiXhosa. The main theme related to their appreciation of the treatment received, being treated in their home and the attention paid to their goals (Table 1).

Table 1: Clients' appreciation of students

Category	Supporting Quotations
Impact of treatment	There is a difference since; I now am able to do things independently. (CL2) Since they came, I can do so many things that I was not able to do before. (CL2)
Treatment at home	I appreciate the fact that students come to the house for therapy; it's expensive to hire a car. Due the location of my house it's too difficult for the car to get there. (CL1)
Treatment goals	They would ask what they could do to help me. (CL1) I do want them to give me the exercises as is supposed to be. (CL2)

Categories under the theme of client-centredness (Table 2) related to communication, which was perceived as ineffective, the home programme and client expectations. Clarity and understanding were factors deemed to be important in the home programme. There was an expectation that the students would provide medication. Clients also expected to improve following treatment, as well as to know what to expect from the students. The attention by students was seen as a source of hope and motivation and more frequent attention was desired.

Table 2: Client-centredness

Communication	I wondered when they were coming back, or are they going away for good, so there was no communication. (CL5)
Home programme	The student that drew the pictures really helped me a lot. (CL2) The student made sure to show me until I understood. (CL6)
Expectations of physiotherapy	(I thought) they would come with tablets or something. (CL3) The experience of standing up with them makes me believe I can walk again. (CL7)
Frequency of treatment	If people come back, to know when and how many times. (CL3) Please come twice a week. (CL7)

Student perspectives

Data obtained from student interviews produced three main themes: differences; preparation for HBR; and learning. Differences noted in socio-economic, cultural and language domains were repeatedly mentioned in the student interviews (Table 3). Although the students reported culture and language as being difficult areas for them, clients were silent on these issues. Differences between formal and informal treatment contexts were also frequently mentioned.

Table 3: Differences

Category	**Supporting Quotations**
Location	What could this patient's home environment actually be like, because sometimes you can't even imagine. (ST1) You have to walk in between some interesting areas to get to your patient's house. (ST6)
Culture	Completely different cultural setting, socio-economic problems are completely different. (ST1) It gives you a culture shock; you do not expect what you see. (ST6)
Informal compared to formal treatment settings	Just because your patient can walk a little bit wobbly on tiles doesn't mean they are going to cope at home. (ST6) Techniques that we learn that would be good in the clinics, it literally does not work in the community. (ST4)
Language	There was a serious communication barrier. Getting them to understand that you need them to tell you what they're struggling with is a thing all on its own. (ST6) Even with my translator, it's difficult understanding them and getting my own point across. (ST3)

The theme of preparation for HBR was divided into the preparation the students desired from the Division of Physiotherapy and the advice they felt would be helpful to give to future students. The categories were subdivided to facilitate understanding of the data. The students felt that earlier exposure to resource-constrained settings would be beneficial preparation for HBR. They pointed out, however, that a PowerPoint presentation at the beginning of fourth year was not helpful. All students interviewed desired more language competency in isiXhosa. Handover of clients to new students was suggested to help prepare them for what to expect and to assist with logistics and strategies for overcoming barriers.

Table 4: Preparation for home-based rehabilitation

Category	Sub-category	Supporting Quotations
Student suggestions for preparation by the Division	Early exposure	I don't know if this would be viable at all, but to almost have a job-shadowing of a home visit [in third year]. (ST1) Having been exposed to it before you're very able to put the new setting and culture shock at the back of your mind and get on with why you were there. (ST3)
	Language	Being able to speak Xhosa would've made a very big difference. (ST6) In first year, even though you're learning the words, you don't realise why [isiXhosa is] so important. Once you see a patient you understand. More exposure to Xhosa in our third year would also be best. (ST1)
	Advance preparation	It's difficult to prepare someone a hundred per cent for something they've never seen before. A photo only says so much. The actual area of the house is completely different. (ST2 Translated from Afrikaans) [A lecture early in year] you forget or don't really take it in because it is so long until then. (ST2 Translated from Afrikaans)
	Handover	So that they know more or less what they can expect ... they can be better prepared and know more than absolutely nothing. (ST6) New students don't need to figure out all the barriers for themselves from scratch. (ST1)
	Strategies	Strategies to overcome the problem, because you see the problem but you don't know. (ST1)

Apart from preparation by the Division, the students had plenty of advice to give to future students. The advice particularly concerned setting specific client-centred goals and being adaptable and organised.

Table 5: Preparation for home-based rehabilitation – Advice to future students

Category	Sub-category	Supporting Quotations
Advice to future students	Professionalism	Make yourself comfortable in someone else's house whether it's a mansion or a shack. Be respectful of their environment. (ST2 Translated from Afrikaans)
	Goal setting	Just being goal-specific. (ST4) Put your patient's needs first. (ST3) Do a really in-depth subjective [evaluation] and get to know them and find out their goals etc. (ST5)
	Adaptability	Don't be so eager to try teach patients what you are taught in class perfectly step-by-step; not be so technique-driven in the community because that's not going to get you anywhere, it doesn't work. (ST3) The plan is never set in stone so don't forget that it should always have room to be adapted. (ST5)
	Communication	Discuss why we're only seeing you say once every two weeks.(ST1)

	Organisational skills	Just organising your patients better, making sure when to see who, and making sure you have everything with you that you need. (ST6)

The last major theme emerging from the student data concerned their learning. Underlying the situated learning experience, various other learning theories were evident in comments made by the students. The need to be able to adapt knowledge gained in the classroom and in other settings was sometimes a challenge in HBR. The students valued the learning opportunities afforded by working in pairs. The importance of learning from clients was also noted. Transformative learning experiences occurred from the experience of having to adapt to real life situations, including in one instance dealing with the death of a client.

Table 6: Learning facilitated by home-based rehabilitation

Category	Supporting Quotations
Authentic learning	In class you don't think of those kinds of things - an uneven path or it's steep. (ST1) Think bigger with your treatment. (ST3)
Social constructive learning	They always talk about tools in our toolkit, things that we've learnt and things that we can then apply to a patient, and that was sometimes a challenge. (ST1) It's not outputs and techniques that we learn that would be good in the clinics. It literally does not work in the community. Use your initiative and be creative. (ST3) Had to think out of the box a lot more. ... You learn to adapt – there were many life skills that you develop. (ST1)
Social learning	Your patients come up with the most interesting ways to do something. (ST6)
Collaborative learning	We helped each other a lot and discussed situations. (ST1)
Transformative learning	So you had to adapt to what the patient had. And it doesn't necessarily mean that your treatment is then poorer, it just means we had to think out of the box a lot more. (ST1) My biggest lesson from those weeks spent in the community - you must remember where your patients are going once they leave you. (ST3) The patient passed away very unexpectedly, we knew the story, we knew she had children; we had been in her home, so it's very different, like when you get into someone's living space. We learnt so much out of that. (ST1)

In summary, clients were grateful for the interventions received. There were, however, concerns regarding communication and unmet expectations. The students observed many differences between clients' socio-economic contexts, culture and language, and their own. Differences in interventions in HBR compared to a formal setting were noted. Preparation desired in the curriculum included early exposure to communities and better language competency. Assistance was required with management and strategies for dealing with problems encountered. Preparation for HBR was preferred just prior to entering the community and not in advance.

Discussion

This article contributes to the understanding of physiotherapy students' and clients' experiences of HBR in an educational context. The need for client-centred communication was highlighted in both client and student data. Early exposure to under-resourced and

culturally diverse settings was revealed as a prerequisite by students.

Clients' appreciation of HBR suggests that this is an important aspect of health care providing treatment to clients who may otherwise not be able to access physiotherapeutic rehabilitation. However, clients seemed uncertain of the students' plans for their rehabilitation, particularly regarding the frequency of visits and termination of treatment, and were left wondering if the students would return. This suggests a lack of client-centred communication and planning. Stainsby and Brannigan[10] see making decisions on frequency and cessation of interventions as a skill in itself and it appears that students need help with this aspect. The need for an in-depth and relevant subjective assessment to allow for appropriate collaborative goal setting with the client cannot be underestimated.

Mindful communication with clients and carers, as found by Tasker et al.[9], is highlighted in the home environment to ensure relevant interventions. The different socio-economic, cultural and language backgrounds of these SU physiotherapy students from their clients may have decreased efficacy during HBR, particularly regarding communication and goal setting as evident from students' comments on initial culture shock and the difficulty in client and therapist understanding each other. Reflection with peers and supervisors to address these issues should form an integral part of the placement. Development of the students' cultural competency and communication skills could enable the clients' understanding of the intervention and allow their desires to be heard. Although the clients did not comment on the fact that the students could not speak their language, this may have contributed to ineffective communication.

Language is an integral aspect of communication and HBR highlights its significance in health care[6]. The students stated that being proficient in isiXhosa would have helped in HBR to minimise the verbal communication barrier. They reported that an introductory isiXhosa course in their first year seemed irrelevant to them at that time. Once they started treating clients they realised the importance of learning the language. Therefore, agreeing with Prose[8], the possibility of a more timely course, which also promotes cultural competence, should be investigated. This study agrees with Mbalinda et al.[6] that a translator, who could also aid cultural understanding, can be a valuable communication tool. Although the participants in this study did have an interpreter with them on their home visits, there was still a barrier in communication with the client, suggesting that students should be taught how to facilitate better communication with clients through an interpreter or that lack of language competency was not the only communication barrier.

Contributing to communication barriers and unmet expectations may be the clients' lack of knowledge regarding physiotherapy, as seen in the common expectation that the students would provide medication. Thus client education is another aspect of client-centred communication. The rotation of students through the placement may contribute by affecting consistency of treatment and progress towards goals. As noted in a study[6] on education in a community, collaboration with peers is necessary to build on what previous students achieved.

Early exposure to the clinical environment as part of an integrated curriculum has been shown to increase student motivation and lead to deeper learning[3-4]. Students suggested that earlier exposure may assist in overcoming the initial 'culture shock'. Experience of under-resourced environments and seeing clients in their own contexts will also help to situate physiotherapy practice from the beginning of the students' clinical training.

Providing HBR is complex, requiring the integration of many different skills[4,9-10]. Therefore it is better suited to the final year of study. However, facilitated exposure at the beginning of the clinical phase could be considered. In this study students suggested that earlier exposure would assist in preparing them for the HBR context and help minimise the reported culture shock. Collaborative learning from accompanying final year students on home visits could be an option. Having a background of the clients' context may facilitate construction of more relevant knowledge at all the levels of care to which a student is exposed.

Students remarked on the differences between interventions in formal and informal settings. There is a paradigm shift in planning a treatment from a purely physiotherapeutic approach to one that considers the clients' context as paramount. This realisation of the need for a more holistic approach was also noted in other studies[2,9]. Grappling with these adjustments leads to constructive and even transformative learning, as the students begin to think beyond the application of learned techniques to solving a client's problem. Students reported using their experience of the realities clients face to influence interventions in other contexts.

Students were silent on the issues of social accountability and responsibility, as well as the need for change in health delivery and their potential involvement in these areas. Although they were not specifically questioned on this aspect, it was hoped that a realisation of the place of HBR in the context of health care would emerge. However, students in this study commented that they felt they were making a difference in clients' lives, and clients confirmed that students indeed make a difference by improving their function in their homes. This could indicate that clinical training in this context should specifically address the notion of social accountability. Adopting a more reflective practice could, as part of this placement, facilitate transformative thinking, stimulating students to embrace the bigger picture and see their role as future agents of change[2-3].

In summary, to ensure that students are able to gain full benefit from the exposure to HBR as a learning environment, they need effective and timely preparation just prior to entering the placement, as well as continuous support to cope with the day to day challenges they face. Communication competence and specifically isiXhosa instruction is also needed. Facilitated early exposure to under-resourced communities should be considered. Effective preparation and support will assist the students to overcome the challenges of HBR and enhance the experience for clients.

This study cannot be generalised as it focuses on the perspectives of a small sample in a specific setting[14]. The use of research assistants may have limited the depth of probing during interviews, thus some comments may not have been explored sufficiently. Translation can result in some meaning being lost during interpretation.

Further investigation into the client and student experience in other community settings is required to achieve more in-depth information on the learning possibilities imbedded in the HBR experience. The effects of earlier exposure to underserved areas should be explored in future to assess how this affects students' learning and practice. Follow up of SU graduates to explore whether their HBR experience prepared them effectively for community service should be considered and the findings compared to previous similar studies[2,4].

Conclusion

Exposure to real life situations in under-resourced settings in the form of HBR provides valuable situated and authentic learning opportunities for physiotherapy students. Client-centredness, cultural competence, communication and adaptability are just some of the skills that can be developed in the students and will ultimately lead to enhanced client experiences. The HBR experience can be used to prepare graduates to address the needs of the populations they will serve during community service in South Africa.

Word Count = 2908

Acknowledgments

This research has been supported by the President's Emergency Plan for AIDS relief (PEPFAR) through Health Resources and Services Administration under the terms of T84HA21652. Stellenbosch University Rural Medical Education Partnership Initiative.

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Chapter 5: Conclusion

5. Introduction

This research paper presents the findings of interviews conducted with physiotherapy students and their clients regarding their perceptions of HBR. From the data collected, the objectives of the research have been addressed. The main findings have highlighted the benefits and challenges students and clients faced in HBR in the underserved area of Kyamandi. Students provided their perspectives on the preparation for this placement. HBR emerged as an important situated learning opportunity for final year physiotherapy students. The authentic learning afforded is also an area much appreciated by students and can have an impact on the rest of their studies and interactions with clients in other settings.

From this study many themes have emerged, some of which have not been explored here, as they are beyond the scope of this research project. Other possible themes include inter-cultural communication, the relevance of early exposure in physiotherapy and CBE. There are also more concepts underlying the experience which have not been examined, such as the use of the International Classification of Function and Disability. Concepts such as CBR, CBE and client-centredness are vast areas which have been only briefly discussed here. These omissions open up possibilities for further more in-depth research into both client and student perspectives, but with a different focus.

5.1. Limitations

The study reports on the perspectives of a few participants in a specific site in a limited time period. Although a thick description of the setting has been provided, it may not be possible to generalise the findings of the project, and they may not be transferable to other situations (Yin, 1999). Research could also be conducted in other areas for comparison and to improve transferability.

The student data may be affected by the fact that the researcher is employed by the Division. Although the students did not have contact with the researcher before or after the placement, there is a possibility that some students may return to the area for their final evaluation examinations at the end of the year. The impact of this was reduced by ensuring that the interviews were conducted by a person who is not connected with the Division. The interviews were conducted once the students had finished the placement, after the placement examinations had been completed and feedback given. The students were

specifically asked to discuss any challenges in the placement with the view to making improvements.

The use of research assistants could also have limited the study as they are another instrument in the research process. The interviewer may not have probed the interviewee sufficiently for depth of meaning (Pederson & Poland, 1998; Ritchie & Lewis, 2003). The researcher interpreting the findings did not have the advantage of first-hand information or observation (Pederson & Poland, 1998; Ritchie & Lewis, 2003).

The data collection might have been limited by the possibility of clients being unwilling to give negative feedback out of politeness. The use of an interviewer unconnected with the Division of Physiotherapy should have limited such a biased response. Another challenge may be a client's decreased ability to express themselves adequately either due to a natural reticence or a minor cognitive impairment. Those with obvious impairments were not included in the sample. It is hoped that conducting the interviews in their home language reduced these difficulties. Translation could, however, have resulted in some meaning being lost during interpretation. Having the same person conduct and translate the isiXhosa interviews may have minimised this potential problem.

The scope of the study is also limited by virtue of the fact that it is a Master's research project, so time and the number of participants are restricted. Therefore iterative data collection may not have occurred. However, numbers of interviews are not important in qualitative research. Research ideally should continue only until data saturation is reached (Frambach, van der Vleuten & Durning, 2013), but in a small sample this cannot be certain.

The researcher, a white female from a middle class background, acknowledges that her own life and professional experience, as well as her upbringing and ethnicity will affect the study (Wahyuni, 2012). Reflexivity and the use of a reflective diary should have decreased this influence (Frels & Onwuegbuzie, 2012). The researcher also made use of peer debriefing with her supervisors (Frambach, van der Vleuten & Durning, 2013; (Frels & Onwuegbuzie, 2012).

5.2. Envisaged contribution of the study

The findings of the study will be provided to the Undergraduate Committee of the Division of Physiotherapy of SU. The information obtained could be used to inform effective preparation of students prior to entering a diverse community to conduct HBR. Consideration should be given to facilitated exposure to clients' home environments at the beginning of the clinical experience. Perhaps accompanying final years on a home visit could form part of a third year case study. The findings of the research will be incorporated into the orientation

session on the first day of the PHC placement. More effective hand over from one student group to the next must be facilitated. Improved preparation should enable students to be more effective from the start of their block and ultimately result in clients receiving more helpful and appropriate treatment. Particular emphasis must be placed on effective communication. Perhaps the teaching of communication must be addressed for the more senior classes. The need for improved isiXhosa competency must be addressed at Divisional and Faculty level. The importance of reflection with the supervisor will be emphasised to deal with culture shock as well as to facilitate learning and should occur throughout the placement. The findings will be made known to the other supervisors of final year students on their community placements. The findings will also be made known to the Cape Winelands District Research committee.

Publication of the article written from the findings will be sought in the African Journal of Health Professions Education. The abstract will be sent to SU Centre for Teaching and Learning, Rural Doctors Association of SA and SA Association of Health Educators conferences in 2015. The research will contribute to the body of physiotherapy literature in both the educational and practice domains.

5.3. Reflection

My personal motivation for the project has developed over the past few years as I have supervised SU students during HBR. Students sometimes ‘miss the mark’ when planning client-centred interventions in diverse situations. My informal observation of students having difficulty comprehending life in settings so different from their own frame of reference, combined with glimpses of clients’ frustration or amusement with these struggles, has sparked a curiosity to explore the thoughts of both parties.

The ultimate purpose of this study, therefore, is to enrich the experience of both the students and the clients. I am also responsible for the orientation session at the beginning of the placement. I hope to use the information gleaned from this study to become more specific with my supervision, facilitate better and more relevant reflections, as well as improving the effectiveness of the orientation session. These are partly the reasons for including the following two extra chapters which discuss further findings from a more practical orientation.

Chapter 6: Further Findings

6. Introduction

A total of seven clients, six final year students and one student chaperone were interviewed. Of twelve potential clients, three were not interviewed due to their inability to converse, one client was not traceable and one was deceased. All clients were black isiXhosa speaking residents of Kyamandi. Five students were female and one was male. Of the six final year students interviewed, five were white and one was coloured. Afrikaans was the home language of one student, one was fully bilingual, and English was the language of choice of the rest of the students. See Addendum A for more information regarding the subjects used in the data collection sample.

The data obtained from the client and student interviews were studied iteratively and analysed to identify themes and categories. The major findings of the client interviews will be presented first, followed by those from the students' interviews. The main themes identified in the chaperone interview are presented separately.

6.1. Clients' perspective on home-based rehabilitation

The main themes emerging from the client interviews are shown in Table 7. The major categories within each theme are elaborated on below with descriptive quotes. All quotes were translated from isiXhosa.

Table 6.1: Client interview themes and categories

Theme	Category
Appreciation of HBR	Impact of the intervention
	Home-based intervention
	Rapport with students
	Gender
Client-centredness	Communication
	Goals of the intervention
	Home programmes
	Personal Touch
Expectations	Expectations of the intervention
	Frequency of interventions

6.1.1 Appreciation of home-based intervention

The clients' perceptions of receiving rehabilitation in their homes are mostly positive with all clients requesting continued and more frequent treatment.

Impact of the intervention

All clients reported being happier due to the interventions by the students. An improvement in function and independence was the result most appreciated.

"They assisted me with many things I could not do by myself." [CL1]

"There is a difference since; I now am able to do things independently." [CL2]

The clients felt more positive after the intervention and receiving the attention gave them hope.

"The experience of standing up with them makes me believe I can walk again." [CL7]

Home-based intervention

The fact that students came to the clients' homes was appreciated. The reasons given were that hiring a car was expensive or that the location of the house made transport difficult. No client had any concerns regarding the students entering the home, even private areas such as bathrooms and bedrooms.

"I appreciate the fact that students come to the house for therapy; it's expensive to hire a car." [CL 1]

Rapport with students

The students were generally regarded as being friendly and caring, showing respect for the clients. Their patience was also noted. The clients appreciated the fact that they were prepared to listen to the clients' stories.

"I really appreciate their visits a lot; I have found them to be friendly and caring. We chat and laugh." [CL 2]

"It's wonderful when they arrive in my house, I take them in as if they were part of my family and it's so nice to have them in my house. When they leave I feel sad. I miss them a lot when they are not around." [CL 1]

"He played games with me." [CL1]

"Everyone was willing to listen to me, even if I can't speak – maybe they can't understand the speech, but they were willing to help me." [CL4]

Gender

Gender was an issue mentioned by the first client interviewed and therefore this topic was explored in other interviews. Female students were seen as being more empathetic and gentle with the strength of the male students being more appreciated by a couple of the men.

"I prefer men because they are strong and I can feel the tendons stretching." [CL2]

One client reported that female students seem to be scared when treating her. Unfortunately this comment was not further explored in the interview.

No client was troubled by a student of the opposite gender entering the bedroom as the students were seen as being there to do their work. Generally no client had any objections to being treated by either gender.

"I don't worry about girls or men - they are doing the same job. That's not a worry." [CL3]

A female client was impressed by the willingness of a male student to assist her with toileting.

"I once worked with a male student who was willing enough to show me how to use the toilet; he showed skills on how to use the toilet." [CL1]

6.1.2 Client-centredness

The second major theme to emerge from the data obtained in the client interviews relates to communication and respect for the client's needs.

Communication

The most serious concern expressed by some clients was that they did not know why the students had not returned to continue treatment. It appeared from the clients' comments that they did not realise that, as per student records, the rehabilitation had been terminated.

"…I wondered when they were coming back, or are they going away for good, there was no communication." [CL5]

"If people come back, to know when and how many times." [CL3]

One client seemed very concerned about how the students had found out about him, returning to this thought repeatedly during the interview.

"Who sent them to me – how did you know about me?" [CL3]

The reason for his concern was not explored. The interviewer reported in the post-interview debriefing that he was not distressed but rather curious.

At times the students came to check up on a client but this was not understood as such by the client. Thus there were a few references to the fact that students sometimes did not actually conduct any intervention with the client during a visit.

"They don't come near me; they just stand there and talk. ... Not just say hello and go. They mustn't come then that doesn't make a difference." [CL5]

However not all clients felt the same way.

"They must just come around and check how I am. I will be pleased." [CL4].

Goals of the intervention

All clients reported that attention to their specific needs was welcomed, particularly regarding interventions that would increase their independence.

"They gave me more skills. They asked me what I want." [CL5]

The client's need to be shown how to do the exercises correctly was emphasized by most clients.

"I do want them to give me the exercises as is supposed to be." [CL2]

Home programmes

Most clients seemed to expect to be given a home programme; those that consisted of pictures were most appreciated. "The student that drew the pictures really helped me a lot." [CL2] The need to have the exercises adequately explained was emphasised. "The student made sure to show me until I understood." [CL6] A few clients were honest in reporting that they did not do the prescribed exercises. The reasons given were that they were lazy or that they found them difficult to carry out on their own.

Personal Touch

One client voiced a concern in having students touch her as she was afraid that she was not as clean as she would like to be. "I worried that my feet were dirty or smelled and they told me not to worry about that." [CL1] No other client mentioned discomfort with allowing students to touch them but the issue was brought out in the chaperone interview.

6.1.3 Expectations

Expectations of the intervention

There seemed to be a definite expectation by the clients that they would "get better" by having physiotherapy. "I'm happy to see them because I want to be better." [CL3]

Students were also seen as providers of equipment such as walking frames but there was an expectation of education regarding the use of the equipment. "They mustn't just give it [walking frame] to me and walk away – they must show me how." [CL3]

A few clients seemed to expect the students to provide medication. "[I thought] they would come with tablets or something." [CL3] It was not clear whether they wanted the medication to be delivered as done by the community care workers or to be prescribed.

Frequency of interventions

Increased frequency of treatment was a recurring request. "Please come twice a week." [CL7] Clients did not want to be forgotten, wanting the students to continue to check in on them. "I wish that if they can, they can come back again, I want them to come one or two times a week. I would be very glad to see them!" [CL3]

6.2. Chaperone's perspective on home-based rehabilitation

The chaperone reported on both her observations of students and their interventions and on what past and present clients had said to her. The main themes are shown in the table below.

Table 6.2: Chaperone themes and categories

Theme	Category
Perspective on students	Student behaviour
	Personal feelings
	Perseverance
Perspective on clients' understanding of students' role	Team work
	Knowledge of physiotherapy
	Cultural considerations

6.2.1 Perspectives on students

The chaperone stated that in general, the students conduct themselves very well and show respect when working with clients.

"The students have respect and behave well when they work in Kyamandi." [CH]

It was reported that the students did not give up on their clients.

"The students didn't give up on her; they helped her until she was better." [CH]

They also showed a desire to assist clients in ways that were outside of physiotherapy. For example, wanting to fix a leaking roof or building a channel to direct water away from the house. Students would sometimes bring fruit for the clients.

"[A] wanted to use cement and bricks to prevent the water from going into the house when it rained." [CH]

"The students brought with them fruits to give to the patients when they visited them." [CH]

Most clients reported to the chaperone that they were happy with the students, asking when the students would be returning.

"Most patients are happy with students' visits so much they ask me when are students coming to visit us again." [CH]

However, there have been times students have shown their unfamiliarity with the living conditions.

"Some students are not used to working with black clients in severe conditions."[CH]

The chaperone stated that some clients are untidy, obese, unclean or helpless. There are instances of neglect. Sometimes this resulted in unwillingness of a student to associate with the client. Some students' facial expressions revealed disgust at the client's living conditions.

"The only thing I do not like is that the students show that they are disgusted with the patient's conditions, you can tell by the facial expression, and they keep their distance from them." [CH]

The chaperone was unhappy with this experience.

"They have to write reports after seeing the patient. What are they going to write about if they have distanced themselves from the patients?" [CH]

6.2.2 Chaperone's perspective about clients' understanding of students' role

Team work

The fact that the students work in teams of two seemed to lead to confusion for the clients about the role of the different students. Clients were sometimes concerned that one of the students would not contribute to the treatment, sitting away from the activity while the other student carried out the intervention.

"Sometimes one student would stand around doing nothing while the other was busy, they must help each other." [CH]

"If they worked like a team then things would be better." [CH]

Knowledge of physiotherapy

The chaperone stated that it was sometimes necessary to explain to the clients that the students did not provide medication. Before some clients were accepting of the students' services, the chaperone needed to clarify that the students were not doctors and would simply be assisting the client to become more functional by using exercises. The chaperone reported that at times she had had to explain to a client what the students were there for and that it would involve the student touching the client.

"I then tell the Xhosa males that these students are not doctors, and they don't have medication, they just want to know how long have you had the stroke, and offer advice at what to do when you are alone at home, and give a massage and exercises, and only then do they allow students to touch them." [CH]

Cultural considerations

Regarding cultural aspects, it was reported by the chaperone that it was mostly the male clients who were problematic.

"Xhosa males do not like to be touched by females, especially the students. It is a huge problem we encounter." [CH]

However they did become used to the students, even to the point of looking forward to their visits once they understood the purpose and scope of the intervention.

"In the long run the patients will get used to the students." [CH]

The chaperone therefore recommended that the students' gender matches the clients.

"I would advise male students to attend to male patients to lessen the problems we encounter when working with male patients. Even the female patient is not comfortable being seen by a male student." [CH]

6.3. Students' perspectives on home-based rehabilitation

The major themes and categories emerging from the data collected from the student interviews follow. Quotes translated from Afrikaans are designated by T.

Table 6.3: Major themes emerging from student interviews

Theme	Category	Sub-category
Difference	Location	
	Culture	
	Informal vs formal settings	
	Language	
HBR experience	Altruism –unselfishness felt by students	Satisfaction
	Insecurities - regarding the area	Security
		Preconceptions
	Impressions – general impact of HBR on students	Social aspects
		Inspiration
		Rapport with patients
		Community reactions
	Value of HBR to students	Feelings about HBR
Curricular preparation	Early exposure	
	Language competency	
	Advance preparation	
	Handover	
	Organisation	
Advice to future students	Professionalism	
	Client-centredness	
	Adaptability	
	Organisational skills	
Learning facilitated by HBR	Authentic learning	
	Social constructive learning	
	Social learning	
	Collaborative learning	
	Transformative learning	

6.3.1 Differences

The theme of Differences refers to the differences reported by students on this placement, compared to their previous frame of reference.

Location

Difference was a recurring theme in all the interviews. The physical environment of the suburb as well as the homes contributed to the experience of difference.

"You have to walk in between some interesting areas to get to your patient's house." [ST6]

Frequently there were many people residing in one small house and this, along with of lack of space and ventilation, provided interesting challenges for most students.

"Sometimes you can't even imagine." [ST1]

The environment could be a source of challenge and frustration in some instances. "What is the point of helping this lady so far that she can walk on her own but this terrain is always going to be there stopping her?" [ST3]

Culture

All students commented on the culture shock they experienced in the area.

"… completely different cultural setting." [ST1]

"It gives you a culture shock; you do not expect what you see." [ST6]

Despite this, the students found that in the prevailing cultural setting they felt more welcomed in the homes. However "Africa" time, referring to clients not keeping to arranged times, could be a source of frustration.

Informal compared to formal settings

The difference between interventions in formal hospital or clinic settings compared to the informal home environment was noted by all students. There was a realisation that the usual physiotherapeutic interventions, which they would provide in a formal setting, were not necessarily appropriate in the home environment.

"Techniques that we learn that would be good in the clinics, it literally does not work in the community." [ST4]

Along with this realisation came the need to adjust the treatment goals and to be truly holistic.

"Just because your patient can walk a little bit wobbly on tiles doesn't mean they are going to cope at home." [ST6]

One pair of students had the experience of one of their clients passing away. They were struck by the impact that had on them compared to the same occurrence in a hospital setting as they felt more involved knowing the family and home situation personally.

"If your patient dies in hospital you feel very sad for them, because you think of them, but you don't think of the family because you don't have any connection to them." [ST1]

Language

Along with culture, the difference in language was a common challenge.

“There was a serious communication barrier. Getting them to understand that you need them to tell you what they’re struggling with is a thing all on its own.” [ST6]

6.3.2 HBR Experience

Altruism

Some students were aware of the impact they could make on a family as well as on the community. They stated that they were “giving back” and making a difference even if in small ways, which was gratifying.

“Nice to see that going into someone's home can really make a difference to them – it's satisfying.” [ST3]

“[I] felt like I really made a difference.” [ST6]

They felt that the clients and community regarded them in a positive light and respected them as they were there to help someone.

“People in the community have a big respect for you if you're wearing a uniform. People respect the fact that you are a health care professional and that you're going to help people.” [ST3]

Insecurities

Security in the under-served areas is a common worry for students.

“We are really quite nervous.” [ST2 T]

Most students were concerned about safety and felt unsure until they had been in the area. Usually after the first week they reported not feeling unsafe but needed to be certain to identify landmarks to prevent themselves getting lost. Not all students, however, felt that the experience in an under-resourced area was necessarily negative and their preconceptions were often challenged.

“You see that it's not as scary.” [ST3]

“Everyone is on the same level.” [ST 2 T]

Impressions

The experience of seeing how clients function in their own environment was regarded as important in understanding what is really meant by holistic interventions. They realised that there is more to treatment than just the physical techniques they employ.

“It’s actually more the talking, the social and psychological part that for them is more important than the physical treatment.” [ST2 T]

“The success has almost got to do with more personal things than it has to do with exactly what you’re going to do.” [ST1]

Rapport with clients was enjoyed.

‘‘There was good interaction. Still professional...” [ST2 T]

The willingness of some clients to work hard to achieve their goals was motivating.

“It was an amazing experience to see that there are patients that will do anything to try get better and this was a great inspiration.”[ST3]

There was awareness that not all clients had any knowledge of physiotherapy or the process of rehabilitation.

“He had no idea what was going on, no experience with rehabilitation.” [ST6]

Value of HBR

The students reported that conducting home-based rehabilitation was a very positive experience despite some challenges.

“It’s a very interesting experience and definitely worth it.” [ST4]

“The home visits were really nice; I enjoyed the way you get to see your patients function in their own environment.” [ST3]

6.3.3 Curricular preparation for home-based rehabilitation

Many suggestions were forthcoming regarding preparation for the placement not only prior to the placement but in earlier years.

Early exposure

Students requested earlier exposure to an under-resourced environment. It was suggested that a home visit could be incorporated into a third year case study.

“A job-shadowing of a home visit [in third year].” [ST1]

A reason given was that earlier exposure would lessen the culture shock before the student being responsible for HBR in fourth year.

“Having been exposed to it before you're very able to put the new setting and culture shock at the back of your mind and get on with why you were there.” [ST3]

Language competency

The inability to communicate in isiXhosa was highlighted.

“Being able to speak isiXhosa would’ve made a very big difference.” [ST6]

Classes in the language would be more meaningful in third year as opposed to the current course in first year.

“More exposure to isiXhosa in our third year would also be best. ... In first year, even though you’re learning the words, you don’t realise why it’s so important. Once you see a patient you understand.” [ST1]

Advance preparation

It was agreed that having a supervisor with them on home visits is preferable to any preparation prior to the placement.

"It's difficult to prepare someone a hundred percent for something they've never seen before." [ST2 T]

Being shown photographs, even of real clients' homes did not appear to benefit the students.

"A photo only says so much. The actual area of the house is completely different." [ST2 T]

Having a lecture early on in the year was not regarded as helpful.

"You forget or don't really take it in because it is so long until then." [ST2 T]

Handover

A thorough handover from one group of students to the next was requested.

"So that they know more or less what they can expect - Just so that they can be better prepared and know more than absolutely nothing." [ST6]

No suggestions were made of how the handover should happen.

Organisation

There was also a suggestion that new students have assistance with working out the logistics.

"The logistics part so that it's figured out for them before the time." [ST1]

"Just organising your patients better, making sure when to see who, and making sure you have everything with you that you need." [ST6]

"New students don't need to figure out all the barriers for themselves from scratch." [ST1]

A need to have strategies to overcome the problems encountered was reported.

"Strategies to overcome the problem, because you see the problem but you don't know." [ST1]

6.3.4 Advice to future students

Professionalism

The students interviewed were keen to give advice to future students. Professionalism was emphasised. Good manners, such as introducing oneself, and explaining the reason for the visit can set the tone of the encounter. Recognising that one is entering someone else's space and waiting to be invited in helps establish a positive relationship.

"I found not being forceful but rather asking their opinion was extremely beneficial." [ST5]

"Barging into the house, taking over and saying what you are doing is wrong, this is how you should be doing it and therefore this is how you must do it and then leaving." [ST 5]

Respect for the home was a repeated idea.

"Make yourself comfortable in someone else's house whether it's a mansion or a shack...Be respectful of their environment. [ST2 T]

Client-centredness

A good rapport between the student and client as well as the family was acknowledged as a foundation for an effective intervention.

"If you are negative, they can pick it up and something will get lost." [ST2 T] "Not involving their caregivers can lead to an ineffective visit." [ST5]

Regarding goal setting, the students advised new students to be very specific and client-centred.

"Do a really in-depth subjective and get to know them and find out their goals etc." [ST5]

"Put your patient's needs first." [ST3]

"I found listening to what their story is and doing a good subjective helped a lot." [ST5]

"Not so much what you think they need, but actually what they want." [ST2]

Communication regarding frequency and termination of treatment emerged as a need.

"Discuss why we're only seeing you say once every two weeks." [ST1]

"If you just go in there and ask a few questions say are you happy, and the patient says yes, ... then you leave assuming everything is okay and you come back the next week and it's the same thing, you don't see progress." [ST3]

"I think that if you can ... get them to take charge and continue the treatment while you are not there then you have done the job." [ST5]

Different clients require different approaches not only in the intervention itself but from a relational aspect.

"Also preparing yourself – how am I going to behave during this session, how do I need to be with this patient to make it successful. Different people get motivation from different things."[ST1]

Adaptability

The students should be aware that they must be adaptable.

"The plan is never set in stone so don't forget that it should always have room to be adapted." [ST5]

They should expect to apply physiotherapy treatment techniques but adapt them to suit the client and environment.

"Don't be so eager to try to teach patients what you are taught in class perfectly step-by-step; not be so technique-driven in the community because that's not going to get you anywhere, it doesn't work." [ST3]

Organisational skills

Being better organised could assist future students to make the most of the limited time they have in which to see home-based clients.

"Just organising your patients better, making sure when to see who, and making sure you have everything with you that you need." [ST6]

"What did we do last time? Let's recap quickly, ... what is my plan for today? That kind of thing." [ST1]

6.4. Learning facilitated by home-based rehabilitation

Authentic learning

The students' comments regarding learning related mostly to the need to adapt to the situations in the homes and not to applying techniques as they were taught in the classroom.

"In class you don't think of those kinds of things - an uneven path or it's steep." [ST1]

"Think bigger with your treatment." [ST3]

Social constructive learning

Students needed to build on their previous knowledge and adapt it to construct new ways of thinking for a community setting.

"They always talk about tools in our toolkit, things that we've learnt and things that we can then apply to a patient, and that was sometimes a challenge." [ST1]

"[I] had to think out of the box a lot more." [ST1]

"It's not outputs and techniques that we learn that would be good in the clinics. It literally does not work in the community. Use your initiative and be creative." [ST3]

They were also aware of the need for developing management and organisational skills, particularly referring to time and logistics.

"You learn to manage it."[ST1]

Social learning

There was an awareness of learning from the clients.

"Your patients come up with the most interesting ways to do something."[ST6]

"Nine times out of ten they have developed ways to cope with their surroundings - if you just take the time to ask them to show you and to watch - you can learn from them, learn coping mechanisms that they use to overcome the obstacles in their surroundings." [ST3]

Collaborative learning

Conducting HBR in pairs was an aspect of the block valued by the students as in other placements they mostly see clients individually.

"We helped each other a lot and discussed situations." [ST1]

Transformative learning

The experience of working in under-resourced areas required the students to consider different ways of coping.

"So you had to adapt to what the patient had. And it doesn't necessarily mean that your treatment is then poorer, it just means we had to think out of the box a lot more." [ST1]

There was also an understanding of the need to consider more carefully the interventions in other settings to ensure they are appropriate.

"My biggest lesson from those weeks spent in the community - you must remember where your patients are going once they leave you." [ST3]

The learning in terms of skills and thinking outside of physiotherapy was also an important result of HBR.

"There were many life skills that you develop." [ST1]

The personal connection with the clients and their families brings home the real life situations in sometimes unexpected ways as evidenced by the students who experienced the death of a one of their clients.

"The patient passed away very unexpectedly, we knew the story, we knew she had children; we had been in her home, so it's very different, like when you get into someone's living space. But, I think that was almost, you can almost make it a positive experience because we learnt so much out of that." [ST1]

6.5. Summary

In this chapter, the major findings from all interviews were presented. From the client interviews the main themes referred to the clients' appreciation of HBR, client-centredness and their expectations of the students. The views were mostly positive and accepting of having the students enter their personal space in order to perform the intervention. Rehabilitation that addressed their goals towards independence was preferred. Clients expected more frequent attention and most expressed a desire not to be forgotten. Some clients preferred the strength of the male students; however, most did not have any objection

to either gender. There were issues of inadequate communication mentioned, particularly regarding termination of treatment.

The student chaperone was of the opinion that the students were respectful and hard working. However, she described incidences of what appeared to be unprofessionalism. She reported a need to explain to clients the purpose and scope of the students' interventions, particularly to male clients, before they were accepting of the intervention.

The themes emerging from the student interviews were described under the headings of difference, the HBR experience, preparation required by the Division and advice they would give to future students. The differences in the types of homes, the environment, culture and language were noted. The difference between interventions in hospital or clinic settings compared to the home environment was noted by all students. Rehabilitation occurring in the client's home within a community was a satisfying experience; however, insecurities were expressed. Holistic interventions became a reality for the students. Much advice was given to future students. Suggestions for preparation for the placement mainly involved early exposure and language acquisition at third year level.

The situated learning experience of HBR provided a matrix for many rich learning opportunities. Adaptability and management skills were learning triggers. Clients were seen as an important source of learning. Learning was not limited to physiotherapy alone but to personal development. The findings will be discussed in the following chapter.

Chapter 7: Further Discussion

7. Introduction

The research question sought to explore the perceptions of both students and clients regarding HBR in resource-constrained and diverse settings. In the literature survey no articles were found detailing this experience from either perspective. From the research question came the objective of discovering the barriers to and facilitators of home visits from the point of view of the clients receiving this intervention, and from the students' view as learners and as providers of the service. This chapter, therefore, discusses the findings from the perspective of facilitators of and barriers to effective HBR. The discussion is from a practical standpoint, underscoring factors to be considered to improve the HBR experience for both client and student.

Another objective of this study was to discover whether the students felt they were adequately prepared to perform HBR. Knowledge of the factors contributing to effective HBR will be used to improve student preparation and support in the placement. The major findings relating to student preparation and the learning resulting from HBR are the focus of the manuscript written for the AJHPE which was presented in Chapter 4, although there is of necessity some overlap.

There were some themes that did not emerge as expected and these will be presented as silences (Pederson & Poland, 1998). The findings regarding the situated learning experience of HBR will also be discussed.

7.1. Effective home-based rehabilitation: facilitators and barriers

7.1.1. Clients' perspective

Soft skills

The clients appear to have a positive response to the students and to their interventions. This agrees with Mostert-Wentzel, Frantz & van Rooijen (2013a) who state that community service physiotherapists received positive feedback from their clients. In Uganda, Mbalinda *et al*. (2011) reported that the community was very appreciative of home visits as they were a rare occurrence. The appreciation of clients should be acknowledged by the students. The positive comments related to the impact of the interventions as well as to the social contact. The clients appreciated the visits and looked forward to them and do not wish to be 'forgotten'. This social aspect of HBR needs to be explicitly acknowledged.

This is an aspect that may not be as significant in a formal setting such as a clinic and therefore students may not realise the importance, and indeed the necessity, of the interaction. An element of fun in the intervention is also valued.

An attitude of respect and kindness towards the client is more essential in HBR than in other settings as the students are guests in a client's home. Interaction with the client's family and home leads to a more personal and relevant intervention. Therefore a good rapport between student and client needs to be established and maintained, while retaining boundaries and professionalism.

Unprofessional attitudes are a barrier to effective treatment. Students need to mask feelings of shock or distaste regarding anything about the client or the environment. Expectations of client needs or of the scope of the intervention should be clarified at the outset. Hopes of equipment or medication must be acknowledged and appropriately addressed, avoiding empty promises.

For reasons of safety, students are required to work in pairs. The chaperone reported that this worried some clients. The reason for the presence of a student who is perhaps not involved in the intervention should be made clear to the client. Although often both students will be involved in treating a client, one student assumes primary responsibility for the client. In some cases the assistance of a peer may not be necessary. The uninvolved student then assists by writing up the evaluation notes and the home programme.

Goal setting

Setting goals collaboratively for the client's rehabilitation allows students, clients and carers to plan for each session. The clients require attention to their specific needs so that an intervention will be provided to assist them in acquiring skills to increase independence in their own situation. The environment inside and outside the home, as well as the resources the client has available, are part of effective planning. As noted by Grut *et al*. (2012) and by some students, the environment can be more of a limitation than the diagnosis itself. Listening is therefore a critical skill in the home setting, more so than in a formal setting as the client's goals override those of the students. Clients appreciate students' willingness to assist even with less pleasant but necessary tasks such as toileting. Breaking the goals down into manageable steps, with the client being educated in their responsibility in the attainment of the steps, is essential in the home environment.

Frequency of treatment

All clients desired more treatment. The health service, however, is overburdened, with one qualified physiotherapist covering an area of 900 square kilometres with a population in excess of 156 000 (Stellenbosch Municipality, 2013). There are simply too

many clients, too few students, no clinician in Kyamandi and very limited time. Clients want to know when and how often to expect the students. The students therefore must be aware of this need and involve the clients in the planning and frequency of the interventions. Poor communication regarding frequency or continuation of treatment can become a barrier if not handled explicitly. Clients should not be left wondering when, or even if, their next session will take place as seems to have occurred. Promises of return visits must be honoured. Appointments should be made in advance. Unfortunately students may occasionally 'forget' about clients, particularly at the end of a placement, when they are focused on their own goals. As different students rotate through the placement the client should be made aware that changes in treating therapists will occur. The times when there are no students in the area, due to holidays or examination periods, must be communicated.

Termination of treatment and the reasons for this are not always understood by clients, leaving them with unfulfilled expectations. Sometimes the students may check up on a discharged client and this has caused some confusion with some clients wondering why no treatment occurred. Checking up on a client usually refers to students briefly visiting the client to ensure that they are continuing with the home programme, answering any questions the client may have and finding out if any equipment is needed. If students do make an appointment with the client to check up on their health or progress, the purpose of the visit must be made clear in order to prevent unfulfilled hopes.

The provision of a manageable home programme to enable the client to continue with the rehabilitation in the absence of the student is a necessity, particularly in view of the minimal treatment sessions available. The client requires patient explanations of both the purpose and content of the programme, ensuring their full understanding. Mead & Bower (2000) refer to the therapeutic alliance, referring to the client's perception of the significance of the goals of the intervention. Linking the treatment prescribed directly with the client's stated goals and giving a structured understandable home programme are necessary to minimise lack of client buy-in. Instructions in the form of pictures are most appreciated and facilitate compliance.

"Think bigger"

The statement "When female students work with me they seem to be scared." [CL2] suggests that there may be an element of hesitation on the part of female students to push the scope of the treatment further, perhaps for fear of causing pain or disappointment. Aiming too high with a functional goal will cause disappointment on the client's side if the goal is unattainable and on the student's part if the client does not wish to work hard enough to attain the goal. However, there is a need to not limit the outcomes of the interventions. Motivated clients can achieve greater functional skills than may be assumed at first. Most of

the clients require long term rehabilitation, and with the frequent changes of therapists, new students may not know the extent to which they can encourage a client and therefore achieving a higher level of independence may be hindered. The treatment notes need to be comprehensive to facilitate the transition from one student to another. Clients should expect treatment plans to continue despite student turnover, and repeated assessment should be avoided. A thorough hand over, either verbally between students or with comprehensive documentation, is recommended to assist students' preparation and decrease client uncertainty.

7.1.2. Students' perspective

Client-centredness

The students were convinced that effective communication was an essential part of building rapport and trust with the client in HBR but did not elaborate on what this meant or how to ensure efficacy. There was not always a realisation that giving an explanation to a client was not necessarily effective communication. Students seemed to feel they were communicating but clients' comments show there is a gap. Neither students nor clients made any reference to non-verbal communication.

Deumert's (2010) study revealed that language competency is still a major area of need in the South African health services and this is certainly true in the current student body. Therefore, as also found by Mbalinda *et al*. (2011), the assistance of a translator seems to be a very necessary part of the placement. Understanding the client's culture was considered part of effective communication and HBR increases this awareness. Therefore a translator could educate the students on the local culture and ensure that the clients comprehend the students. The students and translator should therefore be trained to work effectively together to maximize cross-cultural communication.

Cultural competency is enhanced through HBR. Du Plessis *et al.*'s (2013) study of nursing students also noted that visiting clients in their homes facilitated the process, particularly when reflection is included in the experience. Chang (2007) suggested that competence develops from the external to the cognitive and then to the contemplative. Therefore active cultivation of cultural competence should be an integral part of HBR if it is to be an outcome of this facet of CBE.

An interesting dynamic of client-centredness brought up by one student was the idea of deciding 'how to be with a client' [ST1]. A strict approach was necessary with some clients whereas others responded better to encouragement. The skill is in knowing the difference and requires a level of maturity that not all students have yet attained. Tasker *et al*. (2012)

describe this as ‘craft’ knowledge, an instinctive subjective understanding of a situation. Reflection can also develop this skill.

Good caregivers were a source of motivation for the students. The students enjoy interacting with supportive families. They recognised the need for holistic interventions and to consider the family when planning as well as involving the family in the client’s treatment. As Braathen *et al*. (2013) commented, the whole family becomes disabled not just the client. The family’s social interests and their beliefs must be considered, including the value the client and family place on indigenous health systems.

Goal setting

All students interviewed were cognisant of the importance of setting appropriate goals for the client’s rehabilitation. Some, however, still phrased their comments in a way that implied that they were the ones deciding on the goals, as opposed to working out these goals with the client and family. Paraphrasing the motto of Disabled Peoples Organizations (WHO, 2014) ‘nothing about me without me’, students should consider the client as the primary member of the rehabilitation team.

A thorough subjective evaluation of the client, family and environment is the key to planning an effective intervention. Good listening skills are again essential here. It is also necessary to evaluate the client’s daily activities as opposed to asking only about their function, as an individual’s ways of living may be different to the student’s. Exploring the details of their struggles avoids assumptions and assists in planning a specific treatment.

Having specific objectives for individual treatment sessions as well as setting longer term goals was considered paramount. A well planned treatment session is seen as an effective use of limited time. However, every session must be flexible as clients sometimes can change their goals or even, in clients with recent diagnoses, their functional status between sessions.

Adaptability

The ability to think on ones feet and be adaptable was a theme that came through strongly, supporting observations by Stainsby and Bannigan (2012) Tasker *et al*. (2012) and Twible and Henley (2000). In under-resourced areas there are limited supplies in the home which can be utilized in treatment, thus the students’ creativity was tested. The environment itself can provide numerous challenges for treatment. Space in the homes is frequently very constrained which can affect optimal treatment, for example in gait retraining when the available space may be less than one metre. The environment outside the home can affect the client’s functioning and be demotivating for both student and client. Students need

support in dealing with these seemingly insurmountable issues, not forgetting that the main source of information for a solution is often the client or family.

Compliance

The active participation of a client in a treatment session, as far as he or she is able, is fundamental to success. One student suggested that the clients who did not work well with her seemed to lack understanding of rehabilitation or physiotherapy in general. Non-compliance of clients is reported as one of the main barriers to effective interventions and a source of frustration for most students. As in any physiotherapeutic setting, some clients expect treatment to improve their situation without any action on their part. Again this points to improving communication and setting very specific objectives for clients between visits. A lack of effort of either party, or 'laziness' [CL1, ST3], will also lead to a poor outcome.

According to previous studies in rural South African communities (Grut *et al*. 2012; Braathen *et al*., 2013), one reason for non-compliance could be that the client and family members may have been disillusioned by previous encounters with health professionals. Lack of client participation may also be rooted in lack of knowledge of diseases and health care processes as well as poor delivery (Braathen *et al*., 2013). These factors put non-compliance in a different light which needs to be considered in the HBR scenario. Grut *et al*. (2012) suggest that, besides cultural beliefs and poor understanding of the medical issues, the effort, both real and perceived, of carrying out a home programme must be considered. This is of particular relevance when the family has many other responsibilities to contend with, particularly if immediate improvement is not seen. Students did not show any awareness of these factors.

Home programmes

Home programmes were seen as a prerequisite of HBR, particularly in view of the limited time the students are able to spend with each client (Tasker *et al*., 2012). They realised that a successful outcome was unlikely if a client was not seen an optimal number of times. The students had numerous suggestions in this regard, but there were no comments on whether these ideas were effective. A student suggested choosing only the three most important areas of treatment to include in the programme to facilitate compliance. The methods of communicating the home programmes were given fair consideration. Some students realised that few words and clear pictures were most appreciated by the clients.

Client education

Along with the home programme, most students felt that education was an important part of each visit. For many clients, physiotherapy appears to be an unknown entity, hence the frequent expectation of medication. This presents a novel educational opportunity. Explanations as to the correct ways to do the exercises as well as the reasons for doing

them are crucial as is confirming that the client really does understand what has been said. The challenge of language arises here. Educating the chaperone will be influential in facilitating compliance. Clients are valuable resources in educating the students too. A wise student will observe, listen with attention and thus learn from each situation. New learning should be recorded in the client's treatment notes and transferred to other students and clients as appropriate.

7.2. Silences

Three issues were noticeably absent in the data (Pederson & Poland, 1998), namely client comments on cultural diversity, students' own preparation and aspects of social accountability.

Cultural diversity

Students' reported lack of knowledge regarding the Xhosa culture or language did not emerge as problematic in client interviews. One can perhaps assume that they were more concerned with the treatment they were receiving than about who was providing the service. Possibly they were accepting of the fact that it is still the norm to have students of a different ethnic and cultural background attending to them. Students also did not report feeling unwelcomed by the clients or being aware of any type of negative reactions to their presence. However it is not known if these silences in the client interviews were as a result of a wish not to give offense or perhaps a fear of compromising the continuation of rehabilitation. At this stage, I would agree with Lie *et al*. (2010) who suggested that more evidence is needed to convincingly link cultural competence with client satisfaction.

Preparation by students

Students were very forthcoming with ideas to make the transition into HBR smoother for future students. However, there was no mention from any of them regarding anything they themselves could do to prepare. Self-directed learning is an expectation in the home intervention setting according to Stainsby and Brannigan (2012), so this is somewhat disappointing. Students report not knowing what to expect of the placement, so it is reasonable to suppose they would make an effort to investigate via research or simply conversing with their colleagues. The reliance on faculty to provide all the preparation and guidance is perhaps an indicator that the expectation of self-directed learning may be currently too progressive. It may be that students do not have the maturity for this or that the expectation is not made explicit. The answers to this question are outside the scope of this study. What is certain is that the students need to be challenged more in this regard.

Social accountability

Possibly the most disillusioning silence was the absence of anything regarding social accountability. Although the literature purports that exposure to the diverse settings will affect their social responsibility and accountability, this was not evident. No student made any observations as to how their experience of resource constrained settings would influence their future practice, other than affecting their planning for client discharge from formal settings as they had an awareness of the type of environment the client may have at home. Their role as potential agents of change in the health delivery arena must therefore be another aspect that needs to be explicitly drawn out in the reflective sessions that should form part of the PHC placement.

7.3. Home-based rehabilitation as a learning platform

The students seemed aware of the fact that HBR was above all a very rich learning experience although perhaps they were not aware of the extent of the possible learning to be gained. Homes provide an authentic learning environment, and afford the opportunity to bridge theory and practice in a new way. Transformative learning resulted from the differences experienced, particularly due to the more personal involvement with the client and family. The learning affected the students' growth as physiotherapists and also as people. The greater learning potential of HBR needs to be facilitated by reflective discussions rather than being left to chance.

The impact of the HBR experience should influence future interventions. With the focus of health care on PHC, as noted by Tasker *et al*. (2012), the continuation of care becomes an important aspect of treatment interventions. Physiotherapy students need to realise that their thinking must move away from a hands-on only approach to a more encompassing service to the community and the client as an active member of the society in which they live.

Scaffolding is required in this placement to maximize student learning (Alfieri, Brooks, Aldrich & Tenenbaum, 2011; ten Cate, Snell, Mann, & Vermunt, 2004). The students require assistance with their organisational and management skills. In addition strategies to address the needs of clients in under-resourced areas are needed and a supervisor can encourage the lateral thinking that is sometimes required to find solutions. Support from a supervisor is also required to overcome the insecurities experienced at the beginning of the placement.

7.4. Summary

The perceptions of clients and physiotherapy students regarding their experiences of HBR were discussed in this chapter with a view to improving the experience for both parties.

From a client's perspective effective HBR requires active listening paying attention to their specific need for independence and explicit communication of plans for the intervention. The importance of the social facets of such interventions should not be underestimated.

Effective interventions in the home necessitate client-centred communication with attention to culture. A translator emerges as an important aid for both clients and students, but must be trained to offer maximum value. Goal setting needs to be undertaken with equal input from student and client. Students need a greater understanding of non-compliance, and home programmes must be tailored with greater input from clients and relevance to their goals. Every home visit should be an opportunity for education, not only for clients but for students as they learn from the experience.

The issue of cultural diversity was not brought up by clients and they seemed appreciative of the students' services. Another silence was the absence of student preparation for the placement bringing into question the issue of self-directed learning.

HBR provides an opportunity for authentic experiential learning as well as transformative learning. Learning leading to social accountability and responsibility was not noted and the need for facilitated reflections was highlighted to make the students aware of their potential input in the wider community setting.

Acknowledgments

This research has been supported by the President's Emergency Plan for AIDS relief (PEPFAR) through HRSA under the terms of T84HA21652. Stellenbosch University Rural Medical Education Partnership Initiative

Conflict of interest

The author declares no conflict of interest

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Addenda

Addendum A: Participant demographics

Client sample

Client	Code	Included	Excluded	Ethnic group	Gender	Age Group	Home language
1	L	Yes		Black	F	50-60	Xhosa
2	A	Yes		Black	M	40-50	Xhosa
	T		Expressive aphasia	Black		60-70	Xhosa
3	M	Yes		Black	M	30-40	Xhosa
4			Deceased	Black		30-40	Xhosa
5	V	Yes		Black	F	50-60	Xhosa
6			Un-contactable	Black		30-40	Xhosa
7	S	Yes		Black	M	30-40	Xhosa
8	U		Dementia	Black		60-70	Xhosa
9	MM	Yes		Black	M	60-70	Xhosa
10	M	Yes		Black	F	40-50	Xhosa

Chaperone Sample

Code	Included	Ethnic Group	Gender	Age Group	Home language
CH	Yes	Black	F	60-70	Xhosa

Student Sample

Student Code	Included	Ethnic Group	Gender	Age Group	Home language
ST 1	Yes	White	F	20-25	English
ST 2	Yes	White	M	20-25	Afrikaans
ST 3	Yes	White	F	20-25	English
ST 4	Yes	Coloured	F	20-25	English
ST 5	Yes	White	F	20-25	English
ST 6	Yes	White	F	20-25	Afrikaans/English

Addendum B: Consent forms

STUDENT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF PROJECT: The perceptions of final year physiotherapy students and their clients regarding their experiences of home visits: an exploratory case study. # S13/10/180

INVESTIGATOR: D. Parris CONTACT NUMBER: 084 825 3529

This research study hopes to gain information that will be used to improve our service to home visit clients and train the students to be more effective when treating people in their homes.

You will be asked about your experiences, both good and bad, of treating patients in their homes. The interview will be recorded with your permission and written out afterwards. A report will be written about the information gained from all interviews. Your interview will be kept anonymous. Please ask any questions about any part of this project that you do not fully understand. Your participation is **entirely voluntary** and you can say no.

You can contact me on 084 825 3529 if there are any problems.

Declaration by participant

By signing below, I ……..……. agree to take part in this research study. I declare that:

•I have read this information and it is written in a language I can understand.

•I have all my questions adequately answered.

•I choose to take part in this study and I have not been pressurised to take part.

•I agree to the audio-recording of the interview.

Signed at (*place*) .....…..…….. on ……..…….. 2014

Signature of participant Signature of witness

Declaration by research assistant

I *(name)* ……..…… declare that:

•I explained the information in this document to ……

•I encouraged him/her to ask questions and took time to answer them.

•I am satisfied that he/she understands all aspects of the research.

•I will keep this interview confidential.

Signed at (*place*) .....…..…….. on ……..... 2014

Signature of research assistant Signature of witness

CLIENT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF PROJECT: The perceptions of final year physiotherapy students and their clients regarding their experiences of home visits: an exploratory case study. #S13/10/180

INVESTIGATOR: D. Parris, from the Division of Physiotherapy, Stellenbosch University.

You will be asked about your experiences, both good and bad, of being treated by physiotherapy students. The interview will be recorded with your permission and written out afterwards. A report will be written about the information gained from all interviews. Your interview will be kept anonymous. Please ask any questions about any part of this project that you do not fully understand. Your participation is **entirely voluntary** and you can say no.

You can contact me on 084 825 3529 if there are any problems.

Declaration by participant

By signing below, I ……..……. agree to take part in this research study. I declare that:

•I have read this information and it is written in a language I can understand.

•I have all my questions adequately answered.

•I choose to take part in this study and I have not been pressurised to take part.

•I agree to the audio-recording of the interview.

Signed at (*place*) .....…..…….. on ……...…….. 2014

Signature of participant Signature of witness

Declaration by research assistant

I *(name)* ……..…… declare that:

•I explained the information in this document to ……

•I encouraged him/her to ask questions and took time to answer them.

•I am satisfied that he/she understands all aspects of the research.

•I will keep this interview confidential.

Signed at (*place*) .....…..…….. on ……..... 2014

Signature of research assistant Signature of witness

Addendum C: Discussion guides

The following questions serve as a guideline and further questions may be asked depending on the responses.

Discussion Schedule - students

- Can you describe your experiences with home visits?

Prompt – best experience; worst experience; resource poor homes; culture; language

- What would you say makes an effective home visit?
- What would you say makes an ineffective home visit?
- Do you have any suggestions that could improve the home visit experience?

Prompt: what would you change and what would you keep the same?

- What advice you would give to future students or the Division that could help the preparation for home visits?

Discussion Schedule - clients

Thank you for allowing me into your home to conduct the interview.

- You were treated by physiotherapy students in your home, can you tell me about your experience?
- How did you feel about the experience of having people come into your home?

Prompts: interpersonal factors (respect; consideration of your needs, family); language; culture; space; organisational factors; addressing your goals; strangers in your home?

- What did you like most about the experience?
- What were the problems? Or things that you did not like?

Prompts: as above

- What suggestions would you like to give to help us improve the experience of home visits for other people?

Do you have anything else you would like to say?

Addendum D: Verification of the Xhosa transcripts

Transcript check

The perceptions of final year physiotherapy students and their clients regarding their experiences of home visits: an exploratory case study

I, as someone whose first language is isiXhosa, have listened to randomly selected parts of the interviews of clients. I am satisfied that the English transcripts accurately reflect the content of the Xhosa interviews.

Signed at: Kayamandi on 18-06-2014 2014

Addendum E: Journal guidelines

African Journal of Health Professions Education Author Guidelines

Accepted manuscripts that are not in the correct format specified in these guidelines will be returned to the author(s) for correction, and will delay publication.

AUTHORSHIP

Named authors must consent to publication. Authorship should be based on substantial contribution to: (i) conception, design, analysis and interpretation of data; (ii) drafting or critical revision for important intellectual content; and (iii) approval of the version to be published. These conditions must all be met (uniform requirements for manuscripts submitted to biomedical journals; refer to **www.icmje.org**).

CONFLICT OF INTEREST

Authors must declare all sources of support for the research and any association with a product or subject that may constitute conflict of interest.

RESEARCH ETHICS COMMITTEE APPROVAL

Provide evidence of Research Ethics Committee approval of the research where relevant.

PROTECTION OF PATIENT'S RIGHTS TO PRIVACY

Identifying information should not be published in written descriptions, photographs, and pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) gives informed written consent for publication. The patient should be shown the manuscript to be published. Refer to **www.icmje.org**.

ETHNIC CLASSIFICATION

References to ethnic classification must indicate the rationale for this.

MANUSCRIPTS

Shorter items are more likely to be accepted for publication, owing to space constraints and reader preferences.

Research articles (including shorter research reports) must not exceed 3 000 words, with up to 6 tables or illustrations. These articles are usually observations or research of relevance to education in the health professions. References should be limited to no more than 15. Please provide a structured abstract not exceeding 250 words, with the following recommended headings: *Background, Objectives, Methods, Results,* and *Conclusion.*

Forum articles must not exceed 1 500 words, must be accompanied by an abstract. References must be limited to no more than 15.

Editorials (1 000 words or less) are by invitation only.

Review articles are by invitation only.

Letters to the editor, for publication, should be about 400 words with only one illustration or table, and must include a correspondence address.

Abstracts should be no more than 500 words in length, and structured according to the follow subheadings: *Context and setting*, *Why the idea was necessary*, *What was done*, and *Results and impact*.

Obituaries should be about 400 words and may be accompanied by a photograph.

MANUSCRIPT PREPARATION

Refer to articles in recent issues for the presentation of headings and subheadings. If in doubt, refer to 'uniform requirements' - **www.icmje.org**. Manuscripts must be provided in **UK English**.

Qualification, affiliation and contact details of ALL authors must be provided in the manuscript and in the online submission process.

Abbreviations should be spelt out when first used and thereafter used consistently, e.g. 'intravenous (IV)' or 'Department of Health (DoH)'.

Scientific measurements must be expressed in SI units except: blood pressure (mmHg) and haemoglobin (g/dl). Litres is denoted with a lowercase 'l' e.g. 'ml' for millilitres). Units should be preceded by a space (except for %), e.g. '40 kg' and '20 cm' but '50%'. Greater/smaller than signs (> and 40 years of age'. The same applies to ± and º, i.e. '35±6' and '19ºC'.

Numbers should be written as grouped per thousand-units, i.e. 4 000, 22 160...

Quotes should be placed in single quotation marks: i.e. The respondent stated: '...' Round **brackets** (parentheses) should be used, as opposed to square brackets, which are reserved for denoting concentrations or insertions in direct quotes.

General formatting The manuscript must be in Microsoft Word or RTF document format. Text must be single-spaced, in 12-point Times New Roman font, and contain no unnecessary formatting (such as text in boxes, with the exception of Tables).

ILLUSTRATIONS AND TABLES

If tables or illustrations submitted have been published elsewhere, the author(s) should provide consent to republication obtained from the copyright holder.

Tables may be embedded in the manuscript file or provided as **'supplementary files'**. They must be numbered in Arabic numerals (1,2,3...) and referred to consecutively in the text (e.g. 'Table 1'). Tables should be constructed carefully and simply for intelligible data representation. Unnecessarily complicated tables are strongly discouraged. Tables must be cell-based (i.e. not constructed with text boxes or tabs), and accompanied by a concise title and column headings. Footnotes must be indicated with consecutive use of the following symbols: * † ‡ § ¶ || then ** †† ‡‡ etc.

Figures must be numbered in Arabic numerals and referred to in the text e.g. '(Fig. 1)'. Figure legends: Fig. 1. 'Title...' All illustrations/figures/graphs must be of **high resolution/quality**: 300 dpi or more is preferable but images must not be resized to increase resolution. Unformatted

and uncompressed images must be attached as '**supplementary files**' upon submission (not embedded in the accompanying manuscript). TIFF and PNG formats are preferable; JPEG and PDF formats are accepted, but authors must be wary of image compression. Illustrations and graphs prepared in Microsoft PowerPoint or Excel must be accompanied by the original workbook.

REFERENCES

Authors must verify references from the original sources. *Only complete, correctly formatted reference lists will be accepted.* Reference lists must be generated manually and **not** with the use of reference manager software. Citations should be inserted in the text as superscript numbers between square brackets, e.g. These regulations are endorsed by the World Health Organization,[2] and others.[3,4-6] All references should be listed at the end of the article in numerical order of appearance in the **Vancouver style** (not alphabetical order). Approved abbreviations of journal titles must be used; see the List of Journals in Index Medicus. Names and initials of all authors should be given; if there are more than six authors, the first three names should be given followed by et al. First and last page, volume and issue numbers should be given.

Wherever possible, references must be accompanied by a digital object identifier (DOI) link and PubMed ID (PMID)/PubMed Central ID (PMCID). Authors are encouraged to use the DOI lookup service offered by **CrossRef**.

Journal references: Price NC, Jacobs NN, Roberts DA, et al. Importance of asking about glaucoma. Stat Med 1998;289(1):350-355. [http://dx.doi.org/10.1000/hgjr.182] [PMID: 2764753]

Book references: Jeffcoate N. Principles of Gynaecology. 4th ed. London: Butterworth, 1975:96-101. *Chapter/section in a book:* Weinstein L, Swartz MN. Pathogenic Properties of Invading Microorganisms. In: Sodeman WA jun, Sodeman WA, eds. Pathologic Physiology: Mechanisms of Disease. Philadelphia: WB Saunders, 1974:457-472.

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Other references (e.g. reports) should follow the same format: Author(s). Title. Publisher place: publisher name, year; pages. Cited manuscripts that have been accepted but not yet published can be included as references followed by '(in press)'. Unpublished observations and personal communications in the text must not appear in the reference list. The full name of the source person must be provided for personal communications e.g. '...(Prof. Michael Jones, personal communication)'.

Submission Preparation Checklist

As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

1. Named authors consent to publication and meet the requirements of authorship as set out by the journal.
2. The submission has not been previously published, nor is it before another journal for consideration.
3. The text complies with the stylistic and bibliographic requirements in **Author Guidelines**.
4. The manuscript is in Microsoft Word or RTF document format. The text is single-spaced, in 12-point Times New Roman font, and contains no unnecessary formatting.
5. Illustrations/figures are high resolution/quality (not compressed) and in an acceptable format (preferably TIFF or PNG). These must be submitted as 'supplementary files' (not in the manuscript).
6. For illustrations/figures or tables that have been published elsewhere, the author has obtained written consent to republication from the copyright holder.
7. Where possible, references are accompanied by a digital object identifier (DOI) and PubMed ID (PMID)/PubMed Central ID (PMCID).
8. An abstract has been included where applicable.
9. The research was approved by a Research Ethics Committee (if applicable)
10. Any conflict of interest (or competing interests) is indicated by the author(s).

Copyright Notice

Addendum F: Example of a transcript

I: Any poorly resourced homes?

P1: Yes. The area itself is generally like that. We were lucky in the sense that we had two patents who had very well-resourced homes, but there were two or three that had poor resources and you just kind of had to work with what you have - whatever they've got lying around, whatever their sitting or sleeping arrangements are, that's what you have to work with. Most of the homes that were like that we saw that toilets and bathrooms weren't inside. One room, one bed, a sink if you were lucky.

P2: There's no space. For the one patient we were trying to immobilise and then it's like the bed is here, the door is there, and you're trying to move with two therapists in the room. We weren't falling over each other but it was not the optimal environment.

I: Was language ever a problem?

P1: We were lucky that we had patients that could generally speak either English or Afrikaans. The one lady that did sometimes struggle to speak to us, even though she understood us speaking English or Afrikaans to her, she had a carer with her so the carer was able to translate. Not specifically in the home visits. We did have a couple of patients in Kyamandi that we had a problem with the language. We had to resort to demonstration and as much sign language as we could.

P2: I think we didn't have any difficulty. The one patient P1 referred to the carer was there and then she would tell her what to say to us and then she would just explain it again. It issues a better understanding I suppose, or more clearer instructions.

I: Any cultural problems, differences?

P1: I don't think anything that stood out. I felt that I was always aware of being in someone else's home, being in their environment and always waiting to be invited in, even if it's the 5th or 6th time you're seeing that patient. There were no incidents or anything that stood out that I can recall.

P2: Yes, I agree. I think that just going to someone's home in the community in Kyamandi is in itself is like a culture shock. Not so much like the cultural barrier. That was a bit different, but I don't think there were any challenges or incidents.

I: What would you say makes an effective home visit?

P2: Definitely communication, so I think from day one just having clear communication with your patient and a clear understanding. I think together with that, trust. You're going into someone's home and they don't know you, they just know you're a physio student, so building relationship with your patient in terms of them trusting you, especially

those patients who are in bed and now they need to be transferred and they're probably fearful, so building that kind of trust with your patient. I also think compliance with your patient is very important for effectiveness, because we only there for a certain time once a week, maybe twice per week. So if you only see that patient for 30-40 minutes once a week and they don't do anything else, and you give them exercises but they don't comply to what you taught them, and you come back the next week there is actually no effect of your treatment because they haven't done anything. What you do for 40 minutes is not enough to make a significant difference. ...

Addendum G: Example of coding table – Clients

Theme	Category	Supporting Quotations
Clients' Appreciation of Students	Impact of treatment	There is a difference since; I now am able to do things independently. [CL2] Since they came, I can do so many things that I was not able to do before. [CL2]
	Treatment at home	I appreciate the fact that students come to the house for therapy; it's expensive to hire a car. Due the location of my house it's too difficult for the car to get there. [CL1]
	Treatment goals	They would ask what they could do to help me. [CL1] I do want them to give me the exercises as is supposed to be. [CL2]
	Rapport with students	I have found them to be friendly and caring; when they come to see me, we chat and laugh. [CL2] Its wonderful when they arrive in my house, I take them in as if they were part of my family and it's so nice to have them in my house. When they leave I feel sad. I don't have any complain about these students instead I miss them a lot when they are not around [CL1]
Client-centredness	Communication	I wondered when they were coming back, or are they going away for good, so there was no communication. [CL5] Not just say hello and go. They mustn't come then that doesn't make a difference. [CL5]
	Home programme	The student that drew the pictures really helped me a lot. [CL2] The student made sure to show me until I understood. [CL6]
	Gender	Females are more empathetic and gentle than males. [CL1] I prefer men because they are strong and I can feel the tendons stretching [CL2]
Client Expectations	Expectations of physiotherapy	[I thought] they would come with tablets or something. [CL3] The experience of standing up with them makes me believe I can walk again. [CL7]
	Frequency of treatment	If people come back, to know when and how many times. [CL3] Please come twice a week. [CL7]

Addendum H: Example of coding table - Chaperone

Theme	Category	Subcategory	Supporting Quotations
Perspective on students		Student behaviour	The students brought with them fruits to give to the patients when they visited them. The students conduct and carry themselves very well with the patients and their cultures. The students have respect and behave well when they work in Kyamandi.
		Personal feelings	These students like to work with me and they call me Gogo
		Perseverance	The students didn't give up on her; they helped her until she was better. We would leave when they understood what they should do when we are not around
			The only thing I do not like is that the students show that they are disgusted with the patient's conditions, you can tell by the facial expression, and they keep their distance from them. Some students are not used working with black patients in severe conditions.
Perspective on clients' understanding of students' role	Team work		Sometimes one student would stand around doing nothing while the other was busy, they must help each other." [CH] "If they worked like a team then things would be better.
	Knowledge of physiotherapy		These students are not doctors, and they don't have medication
	Cultural considerations		Xhosa males do not like to be touched by females, especially the students. It is a huge problem we encounter. I would advise male students to attend to male patients lessen the problems we encounter when working with male patients. Even the female patient is not comfortable being seen by a male student.

Addendum I: Example of coding table - Students

Theme	Category	Sub-category	Supporting Quotes
Difference (Differences reported by students, compared to their previous frame of reference)	Location		Sometimes you can't even imagine. [ST1] You have to walk in between some interesting areas to get to your patient's house. [ST6]
	Culture		…completely different cultural setting. [ST1] It gives you a culture shock; you do not expect what you see. [ST6]
	Informal vs formal settings		Just because your patient can walk a little bit wobbly on tiles doesn't mean they are going to cope at home. [ST6] Techniques that we learn that would be good in the clinics, it literally does not work in the community. [ST4]
	Language		There was a serious communication barrier. Getting them to understand that you need them to tell you what they're struggling with is a thing all on its own. [ST6]
HBR experience	Altruism – unselfishness felt by students	Satisfaction	Nice to see that going into someone's home can really make a difference to them – it's satisfying. [ST3] Felt like I really made a difference. [ST6]
	Insecurities - regarding the area	Security	We are really quite nervous. [ST2 T] I was quite nervous as I did not know what to expect. [ST5]
		Preconceptions	You see that it's not as scary. [ST3]
	Impressions – general impact of HBR on students	Social aspects	It's actually more the talking, the social and psychological part that for them is more important than the physical treatment. [ST2 T]
		Inspiration	It was an amazing experience to see that there are patients that will do anything to try get better and this was a great inspiration.[ST3]
		Rapport with patients	There was good interaction. [ST2 T] Everyone is on the same level. Still professional. [ST2 T]
		Community reactions	People in the community have a big respect for you if you're wearing a uniform. People respect the fact that you are a healthcare professional and that you're going to help people. [ST3]

	Value of HBR to students	Feelings about HBR	The home visits were really nice; I enjoyed the way you get to see your patients function in their own environment. [ST3] It's a very interesting experience and definitely worth it. [ST4]