

Moving towards social accountability in pharmacy education: Exploring service-learning outcomes and opportunities with Cape Town community health forum representatives



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Vuyo Buhle Zamathole Cwati

Moving towards social accountability in pharmacy education: Exploring service-learning outcomes and opportunities with Cape Town community health forum representatives

A dissertation submitted by

Vuyo Buhle Zamathole Cwati

In fulfilment of the requirements for the degree of Masters
in Pharmacy

The logo of the University of the Western Cape, featuring a classical building with columns and a pediment, with the text 'UNIVERSITY of the WESTERN CAPE' below it.

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Supervisor: Dr Mea van Huyssteen

Co-Supervisor: Prof Angeni Bheekie

School of Pharmacy, Faculty of Natural Science

University of Western Cape

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ABSTRACT

Background: The University of the Western Cape (UWC), School of Pharmacy has embedded service-learning in the undergraduate curriculum in an attempt to align activities with the social accountability values. Third-year pharmacy students are expected to provide pharmaceutical services for a week per semester at local community healthcare centres located across the Cape Town Metropole region. This study explored the experiences, opinions, input, and challenges of the service-learning in Pharmacy (SLiP) program from local communities' perspective. An objective of the study was to also elicit the community representatives' recommendations for pharmacy curriculum re-design where student activities are directed towards addressing health concerns of the local communities.

Methods: The study was qualitative and explorative in design. The target population of the study was Community Health Forum (CHF) representatives, who were recruited via a key informant who was associated with the community health forum structure, formally embedded in the provincial health system.

Data was collected from a semi-structured interview with the one key informant, two focus group discussions with CHF representatives (n=17), and, field observations at 6 service-learning sites of student interactions with the community. Thematic analysis of the transcribed interviews, videos recordings of focus group discussions and field notes was done through the *Atlas. ti 8* software package. Social accountability formed the conceptual framework for the final interpretation of results.

Results: Four main themes emerged from the data that was collected. The themes pertained to the community, students' influence on the community, the pharmacy curriculum, and pharmacy in the healthcare system. Community health forum representatives explained the structure of the community health forums in the health system and their role as patient advocates at the local facilities. They also shared their perceptions, views and experiences of being served by pharmacy third year students during their service learning at the facilities. They thought that pharmacy students were respectful communicators with patients and that their educational activities regarding the rational use of medicines were outstanding activities that benefitted the

community. CHF representatives' reported that overall the service learning programme had benefits for the community and decreased waiting times at facilities. However, they suggested that the time that student spent at facilities were inadequate to make a sustainable difference in the community. They also recommended that students spend more time in the community as opposed to the facility, because health needs might not be very apparent at the facility level.

In terms of the health system, CHF representatives highlighted structural and cultural problems in the health facilities. They mentioned the physical barrier of the pharmacy wall, which impeded communication between pharmacists and patients. They also noted that the overload of patients at facilities contributed to poor services provided by the pharmacy personnel. They recommended that the chronic clubs were a good intervention from the Department of Health and that this should be rolled out and standardised across all facilities.

Conclusion: This study demonstrated the valuable feedback that community members can contribute to strengthen and align pharmacy educational institutions in their aspiration of becoming more socially accountable. Participants' insights and interpretations of service learning activities performed by students affirmed its benefit to the community. However, it also highlighted limitations of the programme and the health system, and, suggested ways to strengthen the programme. Further research should focus on measuring the impact of the UWC-SLiP experiential curriculum and its relevance to the community, by including every facility and community where students provide their services.

Key Words

Clinic committees, community health forums, community participation, health system, pharmacy students, service learning, social accountability, pharmacy education, university-community partnerships

DECLARATION

I, Cwati Vuyo Buhle Zamathole, declare that this thesis entitled “*Moving towards social accountability in pharmacy education: Exploring service-learning outcomes and opportunities with Cape Town community health forum representatives*” is my work and that it has not been submitted for any degree or examination to any university. I further declare that the work I am submitting for assessment contains no section copied in whole or in part from any other source unless explicitly identified in quotation marks and with detailed and accurate referencing.

..... (Signature)

November 2019



DEDICATION

This thesis is dedicated to God (Jehovah) my only source of strength. Oh Lord and my God had it not been for your Words of courage, motivation, wisdom, love, peace, and patience I would not have completed this degree (MPharm). Your ability to love and embrace me in moments where I felt defeated, fractured and hopeless, you relentlessly spoke life upon me until I believed that, I have it in me to succeed.



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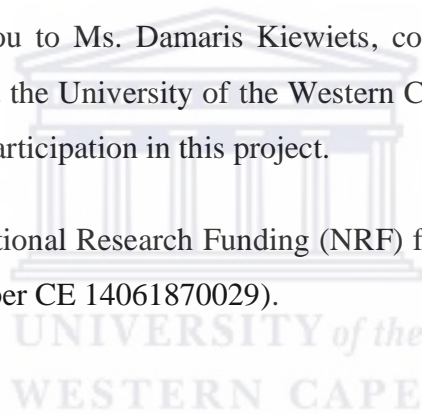


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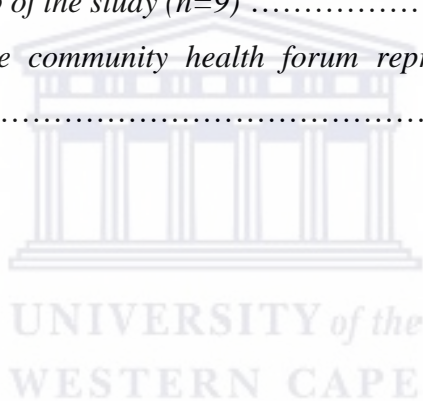
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LIST OF ABBREVIATIONS

CHC:	Community Health Centre
CHESP:	Community Higher Education Service Partnership
CHF:	Community Health Forum
DoH:	Department of Health
EDL:	Essential Drugs List
ELO:	Exit Level Outcomes
FGD:	Focus Group Discussion
GPP:	Good Pharmacy Practice
GMP:	Good Manufacturing Practice
KI:	Key Informant
SA:	South Africa
SAMF:	South African Medicines Formulary
SAPC:	South African Pharmacy Council
SLiP:	Service Learning in Pharmacy
TSDHF:	Tygerberg Sub-District Health Forum
UWC:	University of the Western Cape
WHO:	World Health Organization

CHAPTER 1

INTRODUCTION

This chapter begins by discussing the background and context to the study. Then follows the problem statement, rationale for undertaking this study, research questions, objectives, as well as the operational definitions of terms underpinning this study. The chapter concludes with a summary and chapter outline for the rest of the thesis.

1.1 Setting the scene

University of the Western Cape (UWC) School of Pharmacy embedded service learning in the undergraduate curriculum in an attempt to align its undergraduate program towards social accountability (Bheekie et al., 2011; Van Huyssteen & Bheekie, 2015). The World Health Organization (Boelen & Heck, 1995) defined social accountability for health education institutions as *“the obligation to orient education, research and service activities towards priority health concerns of the local communities, the region and/or nation (schools) have a mandate to serve. These priorities are jointly defined by government, health service organisations, the public and especially the underserved.”* (Boelen & Heck, 1995, Pg. 3).

This study argues that even though, service learning in pharmacy (SLiP) at UWC aspires towards social accountability and has embedded service learning in the bachelor of pharmacy undergraduate program, it is still unclear if the undergraduate students are sufficiently prepared for the realities and the fluid work environment that awaits the students in the public healthcare system once they graduate. As a result, this study explores, ways in which the School of Pharmacy may partner with surrounding local communities in attempts to improve the existing service learning in pharmacy curriculum, having in mind the ultimate goal of producing socially accountable pharmacy graduates. The possibility of producing socially accountable pharmacy graduates in the future may be made possible by redesigning the existing service learning in pharmacy curriculum, by being informed by the community partners about the health realities and priorities in their communities.

This suggests that, as UWC-SLiP aspires to produce socially accountable graduates, undergraduate students must therefore be adequately prepared in their undergraduate experiential learning courses to work with communities and identify the gaps in the public health system and relevantly address the priority health concerns that exist in local undeserved communities (Ward & Wolf-Wendel, 2000). This will further prepare the pharmacy undergraduate students, for the future work place (fluid environment) where they will be working as pharmacists and have a responsibility of driving the desired change that is needed to improve public health care services.

The university that aspires to be socially accountable needs to dig deeper in understanding social accountability values, which are: relevance, equity, quality and effectiveness. Relevance is defined as the “*degree to which the most important problems are tackled first and most vulnerable receive priority attention*” (Boelen et al, 2012: Pg. 183). Equity is defined as “*a state where by opportunities for health gains are available for everyone*” (Boelen et al, 2012: Pg. 183). Effectiveness is defined as value: “*that ensures that greatest impact on people’s health is sought, making an optimal use of available resources*” (Boelen et al, 2012: Pg. 183). Lastly, quality is defined as “*is a measure by which satisfactory responses are provided to a person’s health concerns*” (Boelen et al, 2012: Pg. 183). This therefore suggests that the UWC-SLiP in its attempt to align its service learning program to social accountability, these values must be embedded and upheld by the undergraduates (who are the beneficiaries of the improved service learning in pharmacy curriculum) while performing services at local communities.

Larkins et al. (2013) published an evaluation frame work that may be used to assess social accountability standards. Where the emphasis is on how universities may carry the responsibility of producing future graduates who possess abilities and boldness to address health inequities and respond to priority health needs of local communities. This therefore means that universities carry the responsibility to train its undergraduates to understand and subscribe to the values of social accountability. It is with the ambition of the university, to obligate itself to encourage its undergraduates to place value in partnering with local communities as a means to improve the health status of the residents of the community. There are transformational benefits that may occur when universities equally partner with communities, due to the transformation that results

from the partnership between community (community leaders, community residents and stakeholders) and the university (faculty, administrative staff and students) (Bringle et al., 2012; Bringle et al., 2009; Bringle & Hatcher, 2002). If partners agree to embrace change, it yields the sustainability which may improve and address health priority needs of local communities.

The equal and reciprocal partnerships between universities (through service learning) and local communities are the core propelling and balancing force for service learning in universities (Erasmus, 2005). Accordingly, service learning in pharmacy (SLiP) has been embedded in the aforementioned reciprocal partnerships.

1.2 Problem statement

Inequalities in the South African health care system do not only exist when comparing the private sector against public sector, but they are noticeable just by observing the public health care sector as a singular entity. In 2014 the estimated population of South Africa was 54 million, of whom (80.2%) self-identified themselves as blacks (Gray et al., 2016). The 8.6 million (17%) are privately insured, beneficiaries of a medical scheme. The rest is of the population relies solemnly on public health services (Gray et al., 2016). In 2015 the number of registered pharmacists in South African Pharmacy Council (SAPC) was recorded as 13 416. Two-thirds (68.3%) of these pharmacists were registered at the SAPC were working at community pharmacy in the private sector, leaving public sector pharmacies with (31.7 %) (Gray et al., 2016).

Medical insurance coverage, which gives patients access to private sector health facilities, is lowest in these local underserved communities. The lack of service delivery in public health care centres does not make it any easier, but rather worse (Hunter. 2014). Local communities are often neglected and underserved and subsequently face the worst health care outcomes, some of which include the following: extremely; high infant mortality rates; HIV prevalence and the concomitant high rates of mother to child transmission of HIV; and high TB treatment defaulter rates including very low TB cure rates (Hunter. 2014). The relatively high levels of poverty, and the lack of health care services in these underserved communities, illustrate how individuals and

families are “locked into [a highly] marginalised state of existence” (Duncan & Fielden, 2011: Pg. 56. *Emphasis mine*).

Nyerere (1968) speaks about education being a tool to fight poverty in local communities. Nyerere alludes that, in principle, educational training of any discipline should not be traditionally based on theory, it must also prepare the future graduates for the work they will do in the future working environment. However, in a developing country like South Africa, at university level pharmacy training is still largely centred on laboratory techniques and individualised pharmaceutical care. Efforts to bridge the gap (Hess, et al., 2016) between pharmacy experiential training hours and community engagement have been minimal in the context of South Africa, especially in comparison with other health professional schools. The concept of social accountability has been explored in other health professional schools, but not in pharmacy education. There is a lack of literature that speaks to social accountability in pharmacy education. There is also a lack of university-community transformational partnerships where the voice of the community is heard, represented and embraced in projects of curriculum design. This could be done to ensure that the aspiring social accountable pharmacy schools are aligned and relevant in research and services which serve priority health needs of the local community first.

This extant reality has, to a great extent been accompanied with a simultaneous lack of published literature on research that shows local community (grassroots-level) as an equal partner that is represented service learning in universities (Alperstein, 2009) The university’s means of engaging local community as an equal partner in designing its pharmacy practice, particularly the experiential service learning curriculum might have been very minimal – at both the curriculum design and health service levels.

As a concept, experiential service learning is continuously finding appreciation in various quarters. To Ward and Wolf-Wendel (2000), for instance, experiential service learning helps students meaningfully engage with local communities, creating partnerships in the process, and, consequently, improving the primary health needs (Ward & Wolf-Wendel, 2000). Literature argues that in actual fact service learning should not merely be a “Band-Aid service”; that is, it

must be geared towards eradicating cycles of dependence in communities (Levison, 1990; Walker, 2000).

1.3 Rationale for the study

Community participation is universally acknowledged as a pillar of effective primary health care and it underpins the right to health. The quality of an institution's teaching, service and research activities has been suggested to be benchmarked according to the degree of social accountability of health training institutions (Boelen et al., 2012). Boelen et al. (2012) distinguishes between social responsibility, responsiveness and accountability. The authors provide distinct differences between the three concepts by locating each on a continuum entitled the social obligation scale in which social responsibility occupies the lowest part and social accountability the highest. The six elements that measure an institution's social accountability status are: (1) the way in which a school identifies the social needs of the community; (2) the way in which role players (partners) are involved in defining the school's objectives, (3) the position of the community in the execution of educational programmes, (4) the quality of graduates (5) the way in which a school evaluates their programmes and (6) the affiliations of the assessors of the programme (Boelen et al., 2012). In essence, collaborative partnerships between the UWC School of Pharmacy and the local communities form a foundation for the school to meet these social accountability indicators. Boelen et al. (2012) agrees that the establishment of partnerships between universities and communities as role players may clearly define institutional objectives, and the profession skills' framework required for future graduates.

Local communities have first-hand experiences with public health services, making them a valuable partner to engage with universities when local community's health needs are being addressed. Partnerships which establish community members as equal partners and that assign these members to assess students during experiential service learning courses add authenticity to the teaching programme (Bringle, et al, 2009).

This study seeks to explore the value that a local community partnership might add towards improving the present pharmacy curriculum and perhaps find ways in which the pharmacy

curriculum at UWC could be shaped to meet the expectations of citizens at grassroots level of society.

1.4 Background to the study

The service learning programme which was initiated (2002) has been supported through the Community Higher Education Services Partnerships Programme (CHESP) fulfilling higher education's mandate towards national reconstruction and development (Bheekie & Bradley, 2016). The complete reform of the pharmacy curriculum in 2013 provided the School of Pharmacy with the opportunity to embed service learning from the first year of study (Figure 1.1). Service learning comprises a cycle of events, starting with (1) on-campus orientation, which introduces students to service and community partnerships, learning objectives, assessments and facility requirements, (2) the service experience at the assigned facility, (3) on campus guided group reflection and (4) a reflection report (Bheekie & van Huyssteen, 2015).

As per the expanded 2013 programme, the first year service learning programme was designed to sensitize first year pharmacy students to the social determinants of health during the first semester. The second semester programme was focused on learning about environmental health and in particular focuses on addressing the seasonal high incidence of diarrhoeal disease in Cape Town. During 2014 the second year SLIP programme was launched. The theme of relevance was cemented into this programme with the first semester programme focussing on TB screening and cardiovascular risk assessment and the second semester programme focusing on maternal and child health, which covers three of the four major disease burdens in South Africa. The third-year programme focuses on patient and population centred pharmaceutical skills development and include activities such as stock control, compounding and dispensing of medication, group education to patients, and, the conducting of a medicine use evaluation at facilities. The fourth-year programme is called Patient Care Experience (PaCE) offers hands-on experiences with the primary goal developing students' skills in identifying, solving and preventing medicine therapy problems on individual patient cases.

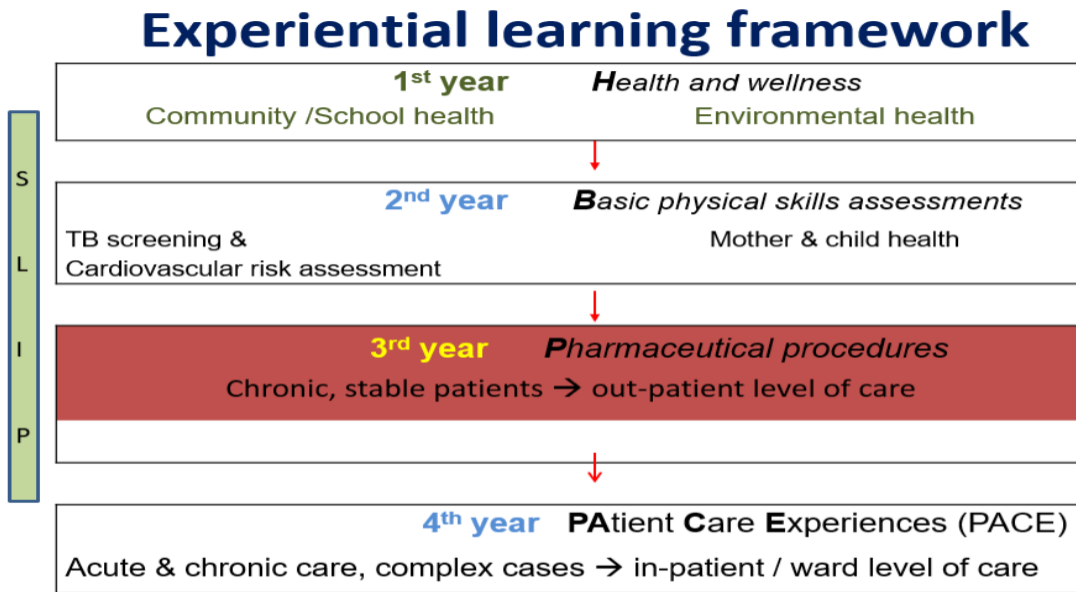


Figure 1.1 UWC experiential learning framework for undergraduate pharmacy students from first to fourth year

Figure 1.1 shows the service-learning triad partnership which forms the bedrock of the experiential service-learning program. Service learning in pharmacy (SLiP) exist in a triad partnership between three partners namely pharmacy services, pharmacy students and community.

This research study focuses on the third-year service learning programme to explore the community partner's perception. Third year SLiP requires students to work a minimum of 54 hours over a period of two weeks under the supervision of a designated in-house pharmacist facilitator at a public sector health facility. Facilities are approved by the Department of Health as learning sites and pharmacists are invited to an annual on-campus orientation workshop about program objectives and expectations relating to student facilitation on site. Facilitators are required to assess students' competence in dispensing medication to a patient, which include assessing the prescription, selecting and labeling the medication and counselling the patient.

The partnership with the community was initially steered solely through the community liaison officer from the Community Engagement Unit (CEU) at UWC, who is also the key informant of this study. She would engage with community leadership structures in communities as means of making sure that patient's voices are heard at facilities. In order to expand this partnership with more community stakeholders, workshops with community health forum (CHF) representatives were organised in 2012 and 2013 to explore health concerns of various local communities to direct student learning activities and ways in which the CHF representatives could become more active in the assessment of students at the learning sites (van Huyssteen & Bheekie, 2015).



Figure 1.2 UWC-SLiP triad partnership between school of pharmacy, pharmacy service providers and the community (patients).

1.5 Research questions

In light of the preceding exposition on the apparent significance of social accountability in service learning which forms part of the pharmacy curriculum, this proposed study poses the following broad questions:

- What has been the role, if any, of local communities in pharmacy curriculum design at UWC?

- What are the local community's views about the current pharmacy curriculum?
- In what ways, can the UWC's pharmacy curriculum be adapted to best prepare pharmacy graduates as change agents for the fluid environment found in local communities they aspire to serve?

1.6 Research aim and objectives

The aim of this study was to explore the perceptions, experiences, challenges and input from community representatives regarding the services provided by third year pharmacy students in public health care facilities in Cape Town during their service learning in pharmacy experience.

The objectives of the study were to:

- Identify community representatives (participants) via the community liaison officer of UWC (key informant),
- Gather information on community representatives' experiences and perceptions of student service delivery during service learning at their facility, and
- Elicit recommendations from community representatives for pharmacy curriculum re-design and aligned student activities to better address local health concerns.

1.7 Operational definition of terms

Community engagement: refers to “... initiatives and processes through which the expertise of the institution in the areas of teaching and research are applied to address issues relevant to its community” (Higher Education Quality Committee, 2004; p19, 26)

Community health forum: Chapter 6 of the National Health Act (no 61 of 2003) does not define in words what a community health forum is (South Africa, 2003). For the purpose of the current study I refer to the local community health activists whose back ground in the health system may include the following: street committee, medicine runner (collector), home based carer , directly observed treatment (DOT) promoters, and activists against substance abuse.

Community health forum members are informed about the realities of health issues occurring at grass root level.

Community participation: is defined as *“a social process whereby specific groups with shared needs living in a defined geographic area actively pursue identification of their needs, take decisions and establish mechanisms to meet those needs”* (Rifkin et al., 1988, p.933).

Explorative study: This kind of research is conducted in order to determine the nature or an atmosphere of the problem, it is not intended to provide conclusive evidence, but help the researcher and research audience to have a better understanding of the problem. During the process of an exploratory research, the researcher is ought to be willing to change his/her direction as a result of revelation of new data and new insights (Saunders et al., 2012).

Local community: I refer to local communities (grassroots-level) who are residents in South Africa at the Western Cape Province located in the Cape Town Metropole health district.

University-community partnership: relationships that are reciprocally beneficial possessing qualities such as; closeness, equity and integrity, that are formal, long term agreed to by communities, universities and service organisations to achieve common outcomes (Van Schalkwyk & Erasmus, 2011; Bender et al., 2008).

Service learning: is defined as a *“course based credit –bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs, and (b) reflect on the service activity in such a way as to gain further understanding of course content, in a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility”* (Bringle & Hatcher, 1995, P. 112)

Social accountability: is defined as *“the obligation [of health education institutions] to orient education, research and service activities towards priority health concerns of the local communities, the region and/or nation (schools) have a mandate to serve. These priorities are jointly defined by government, health service organisations, the public and especially the underserved.”* (Boelen & Heck, 1995)

Socially accountable change agent: refer to a pharmacy graduate possessing attributes which include a clear vision, is patient yet persistent, ask tough questions, is knowledgeable and leads by example, builds strong relationships based on trust with colleagues and challenges the status quo.

1.9 Chapter Outline

This thesis consists of five (5) chapters as described below:

Chapter 1: Introduction

The introductory chapter comprises the introduction, background to the research study, objectives, statement of the problem and the research questions. In addition, the chapter provides definitions of key words.

Chapter 2: Literature Review

In this chapter, theories that speak to the study aims are discussed and examined with regard to how they contributed to the study.

Chapter 3: Research Methodology

This study employed an explorative qualitative research design underpinned by a phenomenological interpretative frame work, where the researcher explored the perceptions, views and insights of local CHF representatives who were able to observe third year pharmacy students while doing service learning at local service learning sites located in the Cape Town metropole.

Data collection included an interview with the KI, two focus group discussions with the local community health representatives and field notes compiled by the researcher to document observations of students at facilities. Lastly, the ethical considerations are discussed.

Chapter 4: Results

The data that was collected is presented and analyzed in this chapter. The chapter pays attention to displaying the themed lived experiences of the key informant in the interview. The chapter also displays the community representatives perceived experiences, opinions, challenges, concerns and future recommendations about UWC-SLIP which are based on the services offered by pharmacy students at SLIP sites. Interpretations and explanations are given in order to answer the aim of the study at hand.

Chapter 5: Discussion

Findings of the research are discussed in comparison to other similar studies and framed in the context of social accountability.

Chapter 6: Conclusions, and Recommendations

This chapter presents conclusions drawn from the study and finally, some recommendations arising from the findings are given.

1.10 Chapter Summary

This chapter discussed the concept of social accountability that have been explored in health education and how service learning in pharmacy might be a significant tool for community engagement between UWC and the surrounding local communities (grassroots-level). It also highlighted the health concerns and priorities that exist in local communities where primary health services are most needed.

It closes by highlighting the need for UWC School of Pharmacy to embrace and align its undergraduate curriculum towards social accountability. The following chapter will look at the literature review and the conceptual framework informing this study.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

This chapter reviews literature in the field of social accountability in the context of pharmacy education and the prominent role that partnerships between communities and universities could play towards the training of undergraduate pharmacy students. The five main sections of this review include social accountability, community university partnerships, service learning, community participation in the health system, and pharmacy practice and education. The final section of this literature review attempts to synthesise a conceptual framework for the study from the five sections.

Integrating social accountability values into pharmacy undergraduate training programs may fulfil the aspirations to produce graduates that are fit for purpose and who are socially accountable agents of change that may address the priority health needs of communities. Social accountability can simply be defined as the capacity to respond to society's priority's health needs and health system challenges to meet such needs (Boelen, 2016).

2.2 Social accountability

Since the 1980s Charles Boelen and colleagues at the World Health Organization (WHO) developed the principle of social accountability, firstly applied to medical education and over the years incorporating it into health education in general. This was in response to the Flexner report release which pointed towards an initiative that suggested health schools should be held accountable for their products (graduates), research results and should demonstrate how these products contribute to improving inter alia: relevance and equity in health services. Over the years models for health education institutions were proposed as means of determination towards measuring social accountability status, and a social obligation scale was developed including indicators which are based on the Conceptualization, Production and Utilization (CPU) framework (Boelen & Heck, 1995; Boelen, 2002; Boelen, 2004; Boelen, 2008; Boelen &

Woollard, 2009; Boelen & Woollard, 2011; Boelen et al., 2012; Larkins et al., 2013; Boelen, 2016; Preston et al., 2016; Boelen, 2018). Since 2000, until presently there has been trending interests on social accountability research which focuses on measuring and evaluating social accountability in health schools (Bhutta et al., 2010) with the different models to assist aspiring health education institutions (Boelen et al., 2012; Reddy et al., 2013; Alizedeh, 2015; Boelen, 2016; Boelen, 2018).

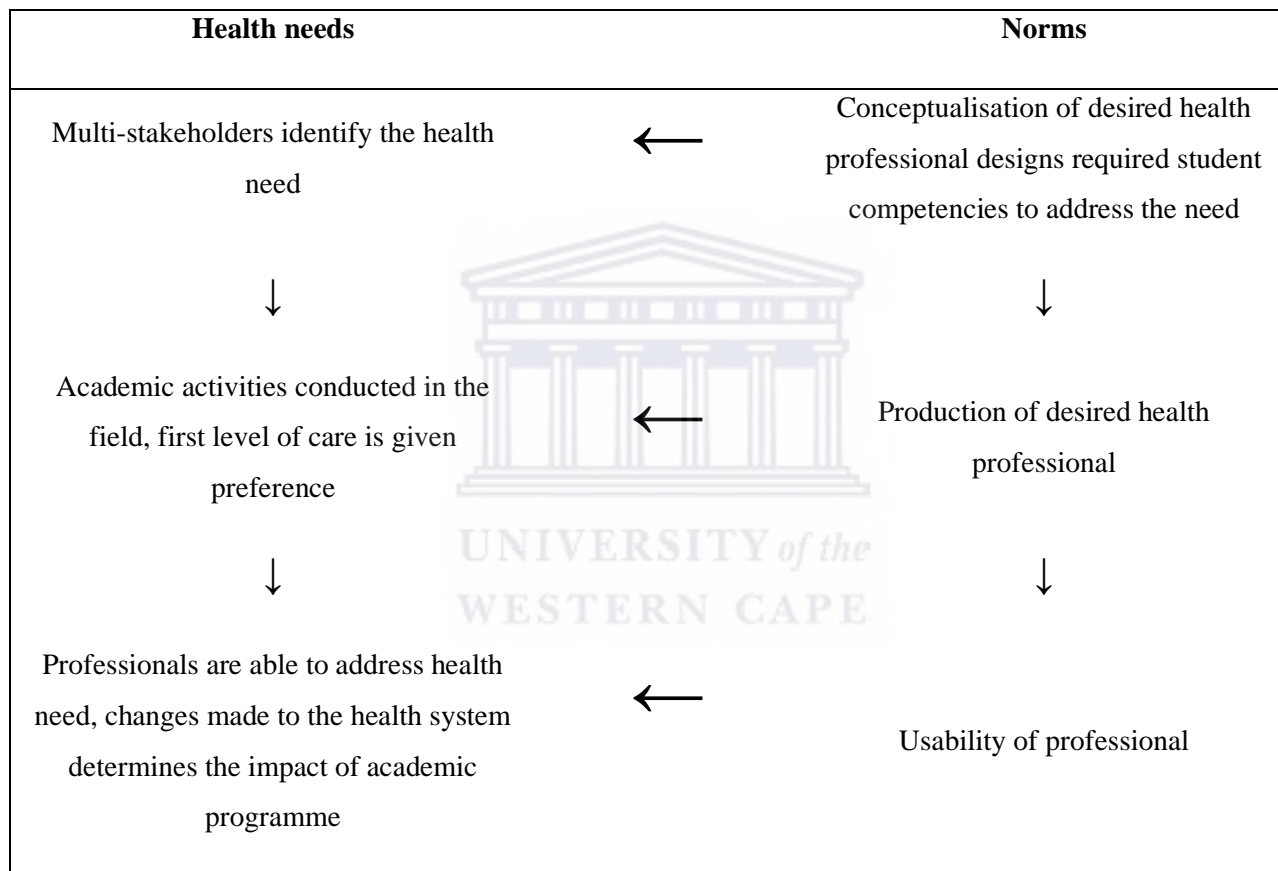
The social obligation scale places importance of the of health schools that aspire to be socially accountable to evolve from being the socially responsible school to being socially responsive and lastly take a leap of excellence into being socially accountable. This means that health schools must make efforts towards an outcome-based education, with an assessment performed by an external evaluation team (such surrounding local community representatives) of peers and finally focus on the impact of the school's products (Boelen, 2012). Table 2.1 Social obligation scale as it relates to this study for it shows where UWC-SLiP aspires to be the production of future social accountable graduates (Boelen et al., 2012).

	Responsibility	Responsiveness	Accountability
Social needs identified	Implicitly	Explicitly	Anticipatively
Institutional objectives	Defined by faculty	Inspired from data	Defined with society
Educational programs	Community oriented	Community based	Contextualised
Quality of graduates	Good practitioners	Meeting criteria professionalism	Health system change agents
Focus of evaluation	Process	Outcome	Impact
Assessors	Internal	External	Health partners

Table 2.1 Social obligation scale (Boelen et al., 2012)

The CPU model was designed to constructively encourage health schools towards having a critical-reflective moment on their performance, progress, knowledge, skills and capacity towards social accountability. It was designed to encourage health schools to begin with local community's priority health needs that need improvement and is based on the CPU framework (Figure 2.2) (Boelen & Woollard, 2009; Larkins et al., 2013; Brown-Luthango, 2013)

Figure 2.1 Norms that guide health professional education and the health system to meet identified health needs (Boelen & Woollard, 2009)



Social accountability indicators are used to monitor and evaluate social accountability in health schools that aspire to produce social accountable future graduates. The department or faculty must imagine, reflect and ask themselves this question: how would social accountability look like at their health school (Boelen et al., 2012). The process of critically reflecting on social accountability and asking in-depth questions to undergraduates should also be encouraged as part of the evolving process towards social accountability (Ritz et al., 2014). Social accountability at

health schools seems to be experiencing environmental barriers which include economic instability, potential instability in partner organisations, success defined in terms of degree results and rankings while graduates become tertiary specialists, staff personal pressures and level of interest due to lack of conceptual understanding, emphasis on laboratory research, need to ensure financial viability of social accountability of research departments, funding sources, social accountability viewed as distraction, difficulty of selecting students on their values, change in students values over time in education, uncertainty of geographical location in which students should be trained, relative newness of the concept, difficulty of developing metrics to gauge progress and assessment fatigue (Leigh-Hunt et al., 2015)

Now the reasoning behind the thought of integrating social accountability with the curriculum of universities is to train undergraduate health professionals and these are merely efforts towards producing graduates who are agents of change in the health system. Graduates who are trained with a retentive capacity to demonstrate evidence of improving the social determinants of health in local communities also contribute towards improving the health system (Boelen, 2012). Social accountability is an adoptable principle for developing countries such as South Africa [*emphasis mine*] that are striving for better quality of service delivery in the health system (Boelen et al., 2012).

The emphasis on social accountability in health professional training schools could be the bedrock required for transformational partnerships between health schools and local communities. Transformational partnerships between health schools and communities may enlighten the organized health education, at the same time yield relevant outcomes when solving the realities of health needs of the local communities (Cruz & Giles, 2000; Erasmus, 2005; Alperstein, 2007).

2.3 University community partnerships

Community engagement in the form of university community partnerships in South Africa at higher education institutions were an untapped resource until the late 1990s. The 1997 White Paper on the Transformation of Higher Education made a call in response to pilot research

programs which explored the feasibility of community service in higher education (Lazarus, 2008). The Joint Education Trust (JET) then launched the Community Higher Education Service Partnerships (CHESP) initiative 1999. This initiative was aimed at helping the South African higher education institutions conceptualize and implement community engagement as a fundamental function of the academy (Lazarus, 2008). Community engagement was implemented through the development of service learning programmes and these became a point of entry to the local communities for university community partnerships. Three pillars of academia thus became research, teaching and learning, and, community engagement.

The implementation of service learning brought into academia critical reflection as a means of learning. Critical reflection is required to be done by students after a session of service learning done in local communities. In service learning critical reflections students are re-engaged in the curriculum by prompting forms of social accountability and social justice relating to burning issues in their field of study (Vickers et al., 2004). According to Bowen (2014) social justice is defined as society's movement toward greater equality, economic fairness, acceptance of cultural diversity, and participatory democracy. The goals of social justice include empowering marginalised communities and addressing unjust institutional arrangements through social change that would benefit and advance society (Bowen, 2014). This relates to the current study because it aims to engage the community on their view of SLiP and the service done by third year students at local health facilities. Community engagement and social justice are linked by service-learning at UWC that seeks to produce future pharmacy graduates which are socially accountable change agents. This may only be done by inviting the all partners of the triad partnership to one table where each partners' voice is heard when designing the UWC-SLiP curriculum.

Credible and reciprocal partnerships between the university and communities have been very seldom in the 20th century. Boyer (1996) challenged higher education to bring new dignity to community engagement by connecting resources *"to pressing social civic and ethical problems, to children, to schools, teachers and cities"* (Boyer, 1996, Pg.19-20). Giles & Cruz (2000) noticed the gap that was caused by the absence of the community's voice and role in academic

research which at the time, was focused was on service learning, which is why this research explores the voice of community in UWC-SLiP curriculum.

Giles and Cruz (2000) asked a question that raised awareness about the reciprocal and equal role of the community in service learning; this question was addressing the lack of community's voice in service learning research and curriculum decisions, "*where there is the community in services learning?*" [Pg. 28]. Giles and Cruz thus recommended that the voice of the community must be considered as informative towards decision making (Giles & Cruz, 2000).

When looking into university community partnerships, one needs to understand that building a relationship involves interactive planning between the partners that requires a significant amount of time for the partnership to yield optimal results. Community partnerships are seen as satisfying when partners perceive the outcomes as being proportionate to what each partner put into a relationship (Bringle & Hatcher, 2002). The depth and complexity of a partnership develops over time. Most partnerships begin on a transactional basis, which means that interactions happen once and are set for short-term events or placements (Dorado & Giles, 2004). With time these sustained partnerships can grow to be transformational, which implies that the partnership becomes more characterized by the joint creation of knowledge. The leap of faith in reciprocity is when the partnership becomes transformational, where it is characterized by the higher common goal (Bushouse, 2005; Brown-Luthango, 2013).

However, university community partnerships are complex and they include a series of interpersonal relationships between campus administrators, faculty, staff and students, community leaders, agency personnel and members of the community (Bringle & Hatcher, 2002). Yet, when partnerships are built on the foundational components of reciprocity, trust, transparency, clear communication and well considered expectations, they may thrive and yield transformational results that may empower both universities and local communities (Bringle & Hatcher, 2002). Bringle and Hatcher are advocating that university community partnerships can empower both campus and community resources to address critical issues in local communities (Bringle & Hatcher, 2002).

As a means towards building a solid partnership foundation, the university and local community [in this case] ought to develop and use effective means of gaining regular feedback from community partners and students about the perceived nature of the campus – community partnership’s equity, satisfaction and common goals (Lazarus et al., 1998; Gelmon, 2000; Freeman, 2000). Giles and Eyler (1998) agreed that the art of developing better partnerships between the campus and the community is at the heart of renewing interactions with the community (Giles & Eyler, 1998). It is therefore important that universities should include community partners in decision making, the unheard voices of the community in service learning must be considered. When a university frequently interacts with the local community, this therefore creates better opportunities for running relevant research and exposing university learners to real issues of real communities. Lastly, it is ideal to affirm the value of a partnership between campus and local community through events such as public representations of partnership, sharing of space and public awards (Keener, 1999).

Reciprocity in partnerships between universities (campus) and the community has been advocated as key and strengthening the principle of good practice in service learning since its inception (Honnet and Poulsen, 1989; Sigmon, 1979). Reciprocity is a foundational principle amongst other components wherein partnerships maybe sustained in longevity. Partnerships that are not reciprocal brands universities as “ivory towers” when perceived with the eyes of the community members. The lack of reciprocity discredits the authentic nature of equity in partnerships and creates dependency. Without reciprocity between university and community partnership, the social justice element is compromised and a charity orientation dominates. Ward and Wolf-Wendel (2000) were advocating that reciprocal partnerships actually move universities from “*doing for the community, to doing with the community*” (Ward & Wolf-Wendel, 2000. Pg.1; Smith-Tolken & Bitzer, 2017). Service learning is a pedagogy of reciprocity, but when expressed as a joint effort, minds shift from charity mindset “*volunteering*” to social justice perspective (Jacoby, 1996).

Pompa (2005) agrees with Jacoby and goes on to emphasise that, the absence of reciprocity in service learning is like charity and it lacks shared experience and a “*progressive social change orientation*” for partners and that service learning is imperative for partners to reciprocally learn

from each other. Reciprocity is a principle that is underpinned by equity (Bringle & Hatcher, 2002). Lack of equity in partnerships leads to university community partnerships that are rooted in charity rather than justice, which leads to fights between the academia and community about how academics do business internally or externally (Morton, 1999; Bringle & Hatcher, 2002; Enos & Morton, 2003).

When equity and reciprocity are absent the community feels like their voice is marginalized in universities. This may lead to community partners feeling, less valued or disregarded by the university partner. Yet, communities want to make a real contribution. The concept of building the joint-knowledge creation while dismantling the “ivory tower” mentality, is an important perspective and approach when establishing service-learning programs that are characterized by a high degree of reciprocity. To truly have reciprocal partnerships between campus and community would mean finding relevance, prioritizing and respecting partnerships and recognizing the community as a co-teacher of the student (Dorado & Giles, 2004).

This means the community has to have a voice that represents their health needs when universities are designing curriculum for service learning and the community must be engaged as an equal partner in strategic planning meetings where changes in curriculum design are made. The community participation should be planned, well resourced, achievable, and evaluated. This shows evidence of engagement between the health school and the local community (Cruz et al., 2000; Ward & Wolf-Wendel, 2000; Chirenje et al., 2013).

In general, the university should also partner with community-based or civil minded organizations that already work with communities as means to address and provide teaching, research and services in health needs projects. This will make the community aware of the equitable power of influence the university, community and organizations have together. Such realization may help facilitate this process (Dickens et al., 2016). The university needs leadership and champions to transform the traditional scientific ways of education towards relevance (Neusy & P’alsdottir, 2008; Neusy & P’alsdottir, 2011; Murray et al., 2015; Abma & Stake, 2014).

2.3 Service learning

What makes service-learning different from other experiential learning approaches is its focus on civic engagement, underpinned by reciprocity among students, educators, and the community (Flecky, 2011). It is, therefore, a requisite for students to experience a level of critical service learning that stirs and empowers pharmacy students to act towards social change (Mitchell, 2008).

Service learning was not a known term in South Africa until around the 1990's (Lazarus et al., 2008). Knowledge about service learning in South Africa came as a call of response to White Paper on the Transformation of Higher Education (South Africa, 1997) by exploring community service. As a result, the Joint Education Trust (JET) launched the Community- Higher Education –Service Partnership (CHESP) initiative in 1999. CHESP facilitated the implementation of community-based learning programs across academic institutions to address priority needs in underserved communities. Service learning in South Africa is defined by Community-Higher Education Service Partnerships (CHESP) and Joint Education Trust (JET) as a responsively organized and reflective service-oriented education. Service learning is defined as : *“course-based, credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs, and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility”* (Bringle & Hatcher,1995 Pg. 112) looks back at the 20th century where the patriarchs of service learning shared their perceived concept of service learning. Julius Nyerere and John Dewey shared a common ground of reasoning when looking at service learning, even though they were from different native backgrounds. Service learning theories of John Dewey and Julius Nyerere mutually agreed that educational values should focus on developing civic-minded graduates. However, in South Africa (SA), service-learning is a part of state mandated transformations for higher education, yet in United States of America (USA) service learning is supported primarily by non-profit associations and stakeholders within higher education (Hatcher & Erasmus, 2000).

Julius Nyerere and John Dewey's reasoning of service learning emphasized the imperative role of universities to prepare civically minded graduates to navigate the scholarly adventure, which is akin to the recent new era of scholarly literature that advocates for “critical” service learning

as opposed to traditional service learning (Hatcher & Erasmus, 2008). The concept of “critical” service-learning first appeared in Robert Rhoads’s (1997) exploration of “critical community service.” Rice and Pollack (2000) and Rosenberger (2000) employed the term “critical service learning” to describe academic service-learning experiences with a social justice orientation. Mitchell (2008) alludes to the “*A social change orientation, working to redistribute power, and developing authentic relationships are most often cited in the literature as points of departure from traditional service-learning*” (Mitchell, 2008: Pg. 50). This era was accompanied by an emerging body of literature that also reasoned that the traditional service-learning approach alone was not adequate to produce civic-minded graduates working towards social justice (Marullo, 2000; Robinson 2000a, Robinson2000b; Walker, 2000; Brown, 2001; Butin, 2005; Cipolle, 2004; Stanton and Erasmus, 2013). The focus on critical service learning was spurred due to academic institutions merely implementing service-learning as a pedagogy for students to “*apply and master traditional disciplinary knowledge ... through active and engaged learning in the community*” instead of as “*a way to examine complex issues related to service and social justice, equity and diversity*” (Pollack, 2014: Pg. 9).

Critical service-learning differs from the traditional service learning approach in the way that the critical approach is unapologetic in its aim to dismantle structures of injustice (Mitchell, 2008). It possesses three elements that underpin the social justice aim, which are: aiming at redistributing power amongst all participants in the service-learning partnership, developing authentic partnerships in the classroom and in a community, and working from a social change perspective (Mitchell, 2008). This is how curriculum, experiences, and outcomes of a critical service-learning course differ from a traditional service-learning course. The critical approach re-imagines the roles of community members, students, and faculty in the service-learning experience. The ultimate goal is to deconstruct and dismantle systems of power that perpetuates inequalities in the roles played by partners of service learning. With critical service learning, the classroom experiential service learning for undergraduates results in students becoming active learners, bringing skills and information from community work and integrating them with the theory and curriculum of the classroom to produce new knowledge (Mitchell, 2008).

University community partnerships are re-imagined this way, students are placed in communities for experiential learning and critically reflect on the experiential service learning encounters. Reflection should include realities of the current health concerns and students must be challenged to consider to challenge status quo and engage as means of addressing the health concerns of patients. The community therefore must be able to challenge the service learning curriculum and recommend prospects of where students may best serve the community and be assessors of students' experiential service learning (Mitchell, 2008).

Robinson (2000a) promoted a perception that, when service learning (traditional service learning, in this case) was depoliticized, it then became a “*glorified welfare system*” (p. 607) instead of transforming the mindsets of students. If students were not engaged to actively draw attention to the root causes of social problems, and involved in actions and initiatives that addressed these root causes, traditional service learning did not instil any other value but that of charity in the professional grooming stage of undergraduate students (Mitchell, 2008).

The social justice orientation in critical service learning aims to produce a way of thinking that grooms service learning students to think in a multifaceted way, as opposed traditional service-learning curriculum. The social justice approach influences students to serve the community with a perspective of addressing and challenging the passive norms of the health system which may result in a lack of health service delivery (Wang & Rodgers, 2006). Students therefore learn to keep leaders accountable by challenging and addressing the real health concerns in local communities.

Boyle-Baise (2007), Wade (2007), and Marullo (1999) agree on the fact that to yield the expected results and maximize the potential of critical service-learning, the emphasis must be on skills, knowledge, and experiences required for students, as opposed to “passively”, [*emphasis mine*] participate in communities. Undergraduate students must be engaged for longer timeframes with community as partners so that undergraduates may learn to cohesively join forces with communities to transform and address needs of communities as civic minded and active citizens (Mitchell, 2008).

Universities need to realize that grooming a social change-oriented service approach in the minds of undergraduates takes time, and it cannot be done in one semester. Training students to partner with communities in solving social injustice issues cannot be done in two weeks or in two months of service learning, it requires few years of being intentional. This also requires universities to be explicitly clear about its long-term goal of transforming communities through service learning (Forbes et al., 1999).

Despite the fact that both the USA and SA service learning philosophies were historically based on a critical perspective the difference in how democracy is perceived in each country influenced the structure of the proposed university community partnership models. In this case the US has a dyad model and South Africa has a triad model that underpin their partnerships. The triad partnership model was conceived and implemented post-apartheid in South Africa (Stanton & Erasmus, 2013) and is known as the “*CHESP service-learning model*”. It is formed by 3 partners that include the service provider, community and the higher education institutions. The addition of the third partner, namely the community, reinforces the importance of an independent community voice due to the historical marginalisation of certain communities from service delivery in the apartheid system. The US dyad model assumes the voice of the community as part and parcel of that of the service partner (Stanton & Erasmus, 2013).

Similar to the partnership model of service learning, social accountability in health education advocates for the partnership between the higher education system and health system that are shaped by the health needs of the populations they are mandated to service (Figure 2.2). The collaborative monitoring and evaluation of the change in health needs thus necessitate the voice of the community.

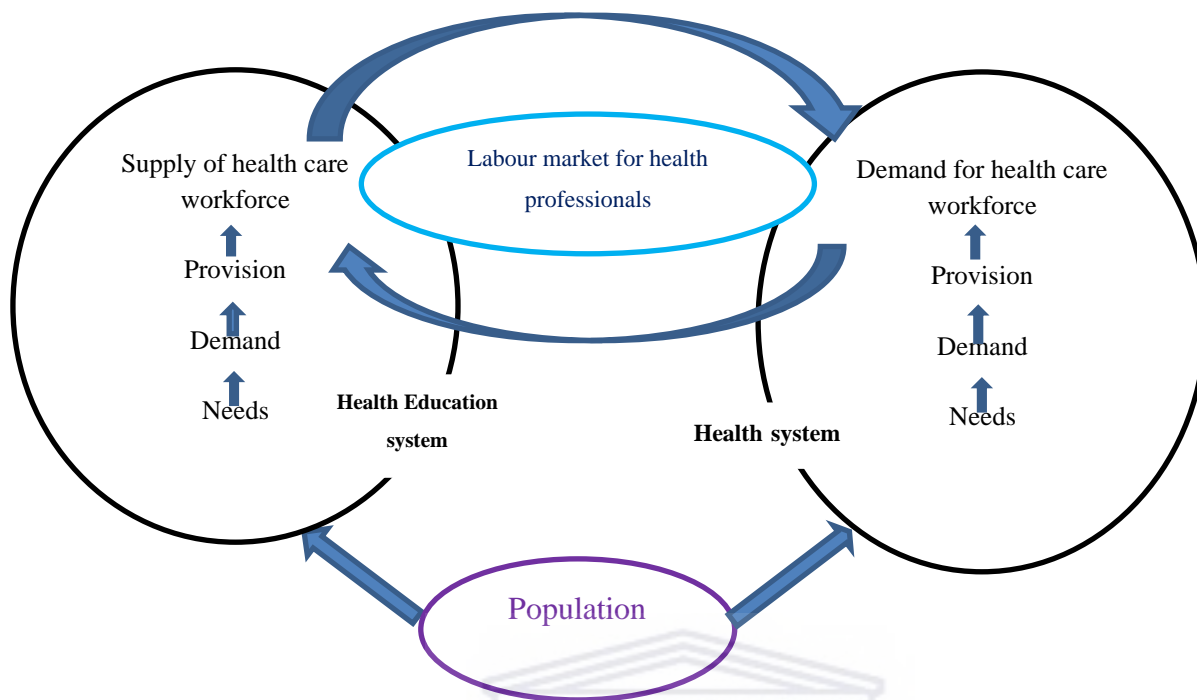


Figure 2.2. Systems framework illustrating health care and health education linkages with influences from population and labour market forces (Frenk et al, 2010, p5).

2.4 The health system and community participation

Community participation philosophies were developed around 1970s, primarily owing to the health system's inability to provide dignified health services (Haricharan, 2012). The ultimate solution was to decentralize the health system from an influx at hospital level, where people were already sick to a district-based local health system that would operate at grassroots level. This system was based on a primary health care approach, which is a tool that provides decentralised health care services and also addresses the underlying socio-economic determinants of health. In 1978 the Alma Ata declaration was adopted and it defined primary health care as follows: *“Indispensable health care that is founded on practical, socially and scientifically recognized approaches made collectively accessible to individuals and families in communities through complete participation and offered at a cost that a country may afford to maintain at every stage of development...”* (WHO, 1978: Pg. 45).

The Alma Ata declaration further brought an in-depth understanding of the principle of community participation in health service provision. The Alma Ata declaration recommended that community participation means that individuals, families and communities enjoy the right to health responsibly, locating participation in functions of systems in planning, service delivery, budget and other processes (WHO 1978). Mulumba et al. (2018) puts it clearly in their article that *“community participation is not a only human right in itself but an essential underlying determinant for realizing the right to health, since it enables communities to be active and informed participants in the creation of a responsive health system that serves them efficiently”* (Mulumba et al., 2018: pg.11).

The White Paper on Transformation of the Health System (National Department of Health, 1997) positioned community participation as an integral and indispensable part of a primary health care approach. It thus stipulated that the health system pursued active participation and involvement of all sectors of the South African society (including local community) on health-related activities. South African citizens must be made conscious about their right to health and their active participation and involvement towards improving their health status (National Department of Health, 1997). The White Paper further explained that participation should be inclusive of the communities and it emphasized on the importance of establishing ways to promote dialogue and feedback between the public and health service providers.

Community participation has further been endorsed in The National Health Act 61 of 2003 (South Africa, 2003) with provisions of instituting health committees, hospital boards and district health councils. Health committees were envisioned to serve as a link between the health services and the communities they serve. The Act required that each clinic/community health care centre or a cluster of these should have a health committee. The Act also stated that health committees should be constituted by one or more local government councillor(s), the head(s) of the health facility/facilities, and one or more members of the community in the area served by the health facility/facilities. The Act furthermore required that provincial governments develop local legislation that stipulates the functioning of health committees in the provinces (South Africa, 2003).

The Western Cape government have two local Acts, which made provision for community representatives to have input into two levels of the health system, namely: (1) The Western Cape Health Facility Boards Act (number 7 of 2001), which provided for the establishment, function, power and procedures of such a board at health facility level and the more recent (2) The Western Cape District Health Councils Act, (number 5 of 2010), which provided for matters relating to District Health Councils to give effect to section 31 of the National Health Act, 2003. The District Health Council Act allowed for the structured engagement between Local Government and other local representatives with the Department around district health services. However, health facility boards have not been uniformed in their implementation and vary in functioning from very well to non-existent.

The Western Cape Government amended the Act pertaining to health facilities in 2016 i.e. Western Cape Health Facility Boards and Committees Act (no 4 of 2016). Western Cape provincial ministry of health instituted the 2016 Act to clarify what makes a health committee and how facility managers could work with health committees and the powers thereof. The difference between the CHF and Health Committee is the Act that governs at that time. The CHF are predecessors of Health Committees so the role and function is still the same grass-roots accountability structure of health status, needs and service delivery to each patient at a local community level.

In terms of the previously mentioned National and Provincial Acts, literature pertaining to the implementation and structure health committees and actual community participation described a three-tiered system in terms of community participation at clinics and community health centres in the Greater Cape Town Metropole. *“Health Committees (sometimes called clinic committees) constitute the first layer [facility level]. The second layer consists of eight sub-districts health [forums]... with representative from all health committees in that sub-district. The last layer consists of the Cape Metro Health Forum (also called the Cape Metropolitan Health Forum), an umbrella body for all health committees, represented by members of the eight sub-district health [forums]”* (Haricharan 2012: page 12-13). At this time, it is not clear if all these bodies are voluntary structures with any formal status.

The primary health care values and National Health Insurance (NHI) policy in South Africa may lead to a health system transformation such that local community health committees represent formal structures in participatory action in the health system at local government level (Potts & Hunt, 2008). Re-engineering the primary health care will set a tone for NHI implementation in South Africa (South Africa, 2015).

2.5 Pharmacy practice and education

Universities or colleges which offer pharmacy professional training for undergraduates have traditionally focused on grooming its students on scientific concepts that are centred on the study of drugs and its uses (Elvey et al., 2013; Noble et al., 2014). Over the years pharmacy practice has steadily moved from the orientation of “medicines only” to patient-centred services (Kritikos et al., 2003). Pharmacy training for health professionals has advanced its training and integrated elements (behaviours, beliefs and perceptions about pharmacy profession) that will further prepare undergraduates to understand, perceive and have extensive time to engage with the future working environment as part of the pharmacy undergraduate curriculum. This means that the university must allocate a significant amount of time towards service learning, as a means to align under graduate students with the realities of the fluid work environment (Hafferty, 1998; Kritikos et al., 2003; Phillips & Clarke, 2012; McLaughlin et al., 2013; Van Huyssteen & Bheekie, 2017).

To register as a pharmacist with the South African Pharmacy Council, requires a four year bachelor’s degree in pharmacy (BPharm), followed by a year of internship under the supervision of a registered tutor pharmacist. After this a year of compulsory community service. This is why this dissertation argues that, the training of pharmacy profession in South Africa, including universities that offer undergraduates pharmacy practice training need to subscribe to the principle of social accountability and align its long-term goals towards social accountability values. The universities must engage and interact with communities around, to understand by being taught by the community members and by observing the health realities which are caused by political gaps such as “poor service delivery”. (Department of Education, 1997; Howe, 2002;

Gupta et al., 2008; Godolphin, 2011; Hunter et al., 2011; Kelly et al., 2014; Jerkins et al., 2015. Pg.1; Strasser, 2015; Preston et al., 2016;) when training future graduates who will serve the same communities.

The pharmacy training curriculum and the manner in which it is taught to undergraduates should be inclined towards producing civic-minded graduates who have been given enough time to engage with the communities while aiming at nurturing a social justice mindset that leads to a social change orientation (Einfeld & Collins, 2008). Such a curriculum may mentally prepare undergraduate students for the “fluid work environment” (Burch & Reid, 2011).

2.6 Study conceptual framework

The primary purpose of the SLiP program is to prepare students to become socially accountable future graduates. Social accountability requires two primary shifts away from the traditional conduct of higher educational institutions. Firstly, there should be involvement of a wide range of internal and external role-players in the development and assessment of the school’s activities. Secondly, a monitoring and evaluation framework is required to track educational outcomes in the health system in defined local populations, which the school services (Larkins et al., 2013; Bheekie et al., 2019). These shifts should enable an educational institution to align more closely with the values of social accountability which include relevance, equity, quality and effectiveness.

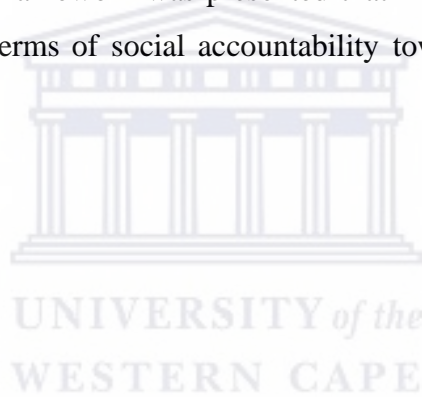
In terms of the first shift, this study investigates the university community partnership by engaging with community representatives that may direct relevance of educational interventions through their recommendations for the curriculum based on health needs in the local communities. In order for the university community partnership to promote equity, partnership engagements have to be systematic and long term. All activities of the institution needs to be done to promote social justice, thus a critical perspective is imperative.

In terms of the second shift, monitoring and evaluation should focus on strengthening the health system. This study aim to utilise existing resources of community participation in the health

system i.e. community health forums. By drawing on these existing structures this research aspires to strengthen the system, thereby enhancing quality of primary health care services. Recommendations constructed from this study will be used to strengthen the SLiP programme and gradually improved pharmaceutical human resource and future pharmacy graduates could be change agents.

2.7 Chapter summary

This chapter presented the relevant literature for infusing social accountability in pharmacy education through exploring desirable features of university community partnerships that could be implemented through service learning programmes. It also drew a parallel between the importance of including community participants in both the higher education system and health system. Finally, the conceptual framework was presented that might guide the interpretation of study findings and frame it in terms of social accountability towards community in pharmacy education.



CHAPTER 3

METHODOLOGY

The purpose of this chapter is to describe and discuss the methods used in this research study. This chapter helps the reader navigate through the steps of: what was done, when, how and why? This chapter describes the study design, research setting, target population, sampling and the chronology of data collection, data analysis, triangulation and lastly validity. I close this chapter with the ethical considerations that were undertaken to deem this research study fit to take place.

3.1 Study design

This study employed an explorative qualitative research design. Burns and Bush (2006) refer to exploratory research as, a study where information is gathered in an informal and unstructured manner. The exploratory research study is most appropriately used in research projects that are addressing a subject that has high levels of ambiguity, has been disregarded and mostly not understood (because very little is said about it in literature). It is a flexible study design and its aim is to identify the boundaries of the environment in which the problems or opportunities of interest are likely to be considered. This design is very useful for it also identifies the traits of variables that might be found relevant for future research (Stebbins, 2001; Denzin & Lincoln, 2008).

3.2 Research setting

The third-year service learning programme was conducted at public sector health facilities, which included both hospital and community health centres (CHCs) in the Cape Town Metropole. Students are expected to engage in pharmaceutical service delivery under the direct supervision of the pharmacist at the facility. Pharmacist facilitators are invited to bi-annual workshops hosted by the School of Pharmacy to receive information about the service learning programme and give feedback on their experiences of the programme at their sites.

Public sector health facilities in South Africa provide services to 84% of the population who cannot afford medical insurance and are served by 29% of pharmacists who work in this sector

(South African Pharmacy Council, 2011). Working conditions are characterized by a high patient load and facilities are for the most part understaffed and under resourced (Mayosi & Benatar, 2014). Communities served at facilities are largely poverty stricken with high levels of unemployment, violence, gangsterism and substance abuse, and, have poor access to basic services such as water supply and sanitation – all of these conditions predispose these communities to a high disease burden (Mayosi & Benatar, 2014). These communities are prone to (often violent) service delivery protests from time to time.

All public sector facilities in South Africa require clinic committees where the community and facility can interact regarding community health issues as per the National Health Act (no 61 of 2003). The latest amendment by the Western Cape government to implement clinic committees was in the form of the Western Cape Health Facility Boards and Committees Act (no 3 of 2016), which created a space for new health committees to be appointed by the Western Cape Minister of Health.

In terms of the community partnership, the KI has been a long-standing member and the current chairperson of the Cape Town Metro Community Health Forum. A memorandum of agreement was signed between UWC and the Cape Town Metro Community Health Forum in 2016 to formalize the partnership with CHF representatives.

3.3 Target population and recruitment

The target population of the research study included CHF representatives from the Western Cape province who resided and served in the Cape Town metropole. CHF representatives were recruited via the KI who has been part of experiential service learning programme for 15 years working as a community liaison officer at UWCs community engagement office. Valentine et al, 2010, p. 114) defines and outlines snowball sampling as a method of recruiting where the researcher “*contacts one participant via the other*”. The key informant as a participant in the study had a role of recruiting other participants who will represent the community’s voice. This strategy provided the researcher with a platform and opportunity to involve participants who were thought to be suitable for giving information that might lead to the research questions being

answered (Burns & Grove, 2001). The KI identified individuals who were informed about the wellness and health issues occurring at the grass-root level of the communities to participate in the study. This study had a small group of CHF representatives and the benefit was that a small group is easy to work with and the researcher was able to manage the data being collected (Tjale & De Villiers, 2004).

The CHF representatives were requested to evaluate the experiential service that was given by third year pharmacy students to patients during the service learning week 2. The CHF representatives were requested in the FGD1 to observe the third year pharmacy students during service week 2. CHF representatives were requested to observe pharmacy students at the local health facilities for the purpose of this research only. However, with the KI informant it was a different case for the KI is a community liaison officer at service learning in pharmacy department for fifteen years.

3.4 Data collection

Data was collected using a key informant interview, focus group discussions (FGDs) with CHF representatives, and observations during service learning blocks. The researcher was trained in asking open-ended questions, fine-tune listening skills and to be aware of focus group dynamics. Table 3.1 summarises the overlap of the service learning programme activities with the data collection process.

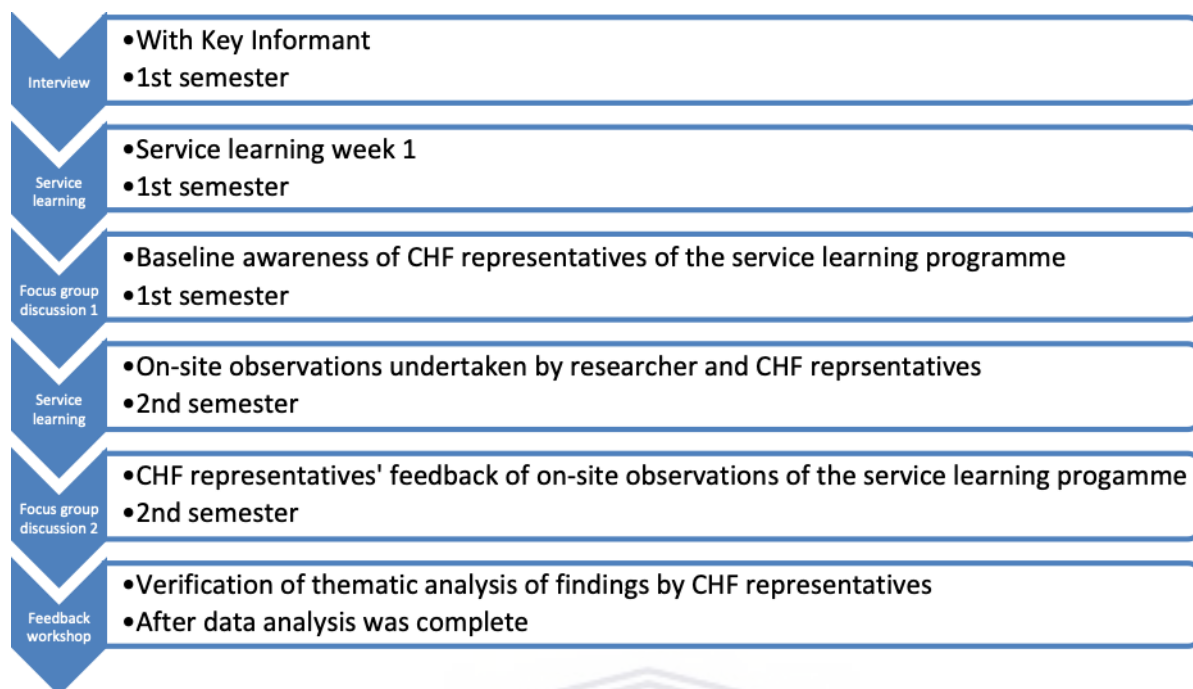


Figure 3.1. Overlap of service learning programme activities with data collection timeline and techniques.

The purpose of the key informant (KI) interview was to get a perspective of the service learning programme that would combine that of the university and CHF representatives, because she was a member of both communities. The KI thus had a dual function; she was familiar with the academic framework of SLiP (university perspective) and served as the chairperson of the Cape Town Metropole Community Health Forum (community perspective). Secondly the aim was to get insight into the stories told by the community about the significance of having the third-year pharmacy students serving patients at their local health facility. Lastly, she had to suggest and recruit individuals from the CHF representatives who could voluntarily share their knowledge that could benefit this study. The following questions were posed during the interview:

- What is your role in UWC School of Pharmacy service learning?
- How long have you been involved with experiential service learning?
- How would you describe your experience with pharmacy experiential service learning?
- How would you describe the service that pharmacy students are rendering to the community during the experiential service learning?

- In your opinion, what is the outcome of the services rendered by students and the service learning programme for the local community, student learning and health needs in the community?
- In your own perspective and view would you say the service learning program prepares pharmacy under graduate students for the real and fluid work environment? If yes/no why and how?

After the KI interview, the first focus group discussion (FGDs) was scheduled with the CHF representatives after the first week of service learning was completed in the first semester. The purpose for this FGD was to firstly get a baseline understanding of the awareness of the CHF representative about the service learning program and its influence (if any) on the local communities, and secondly, to understand how the health system hierarchy levels of authority were demarcated and influenced service delivery.

For the second FGD CHF representatives were primed to observe the students at their facilities during the second week of service learning in the second semester. The basic components that CHF representatives were asked to observe, included the tasks students were conducting at the facility, the manner in which students served local community members, the interaction between the patient and the pharmacy student at the facility, and their influence on the patient and community.

FDGs has been defined as: *“A group of interacting individuals having some common interest or characteristics, brought together by a moderator, who uses the group and its interaction as a way to gain information about a specific or focused issue”* (Marczak & Sewell, 2007). Focus group discussions were effective for this study, considering the fact that the researcher sought to explore the concept of social accountability in pharmacy education, for which at present literature that speaks to this research is rare. Focus group discussion have been considered to be effective when used by a researcher who seeks more insight and who want to explore the concept that needs to be addressed yet there is very little knowledge in literature about it (Krueger & Casey, 2000). Stokes and Bergin (2006) agree that focus groups are a common tool

used in qualitative research data collection process because of the advantages named in Table 3.1.

FGD1 questions that were posed to CHF representatives:

- Is the community aware of when pharmacy students are at the CHC's? Can you differentiate between the pharmacy students and the rest of the staff in the pharmacy? Do you think the patients in the community know what Service learning in pharmacy (SLIP) is?
- What is your opinion on the presence of pharmacy students from UWC at the facility? (Probe: benefit, do they have knowledge, skills, competence, bring change, improve services, variation of competency among students)
- How do patients or communities feel about services being offered by students at the facility? (Probe: Age, competency, student preparedness, language skills) Do you think they are appreciative, detest, unnoticed, not welcomed etc. Do you think that the students were a waste of time?
- How can you best describe your relationship with the students who provide service at the CHCs during the SLiP week? Do you feel distant or are they open enough and willing to engage in dialogue? What would you rather they did?
- What skills/core abilities do you think a pharmacy student should have and what do you think a pharmacy student should be able to do and know? (Probe: language skills, School principals, career guidance, parent and community meetings)
- Do you think that pharmacy students have contributed to change within the community?
- In your opinion how have students changed patients' attitudes towards adherence to medication?
- What would you recommend or do to see to it that students are attending to the real issues facing the community? Are we addressing the needs of the community? If so, in what way are we doing this? (probe: what are the needs of the community)
- Has SLIP as a whole bridged a gap between the school of pharmacy and your community? If so, how?

- What do you think are some of the problems of the currently established SLIP program?
- Tell me about these communities' experiences at the facilities during the SLIP program: (Probe, management, personally, is it different in the pharmacy as compared to other areas/professionals of the facility practice level, health system level.) ///After question about awareness.
- Universities/Training institutions traditionally operate very independently from the rest of society. In your opinion how better can the universities work with community?
- What are the biggest challenges the community faces with respect to the current health system/structures How can this be addressed?
- What are some of the resources that you would like to see implemented in the community in order to make the general health system more readily accessible?
- Have you ever had or witnessed a personal interaction with a pharmacy student at the clinic? If yes, please describe the experience.
- How important do you think is communication between different health care professionals?
- In what way does the Community Health Forum facilitate or inhibit your roles as a community partner in service learning? How does the facility inhibit or facilitate your role? (Probe: what does service learning mean for the communities? What value if any does this bring to the communities?)
- In your opinion what role should communities play in service learning? (Probe: program/curricular design, project- identify problems and devise solutions with students, liaise with management about challenges in pharmaceutical service delivery.)
- If you find that there are problems within the community, how is it addressed? What is your channel of communication with regards to challenges?
- In order to improve your participation in the service learning in pharmacy program, suggest ways on how this could be achieved. (Probe: what support should be offered from the school, community and health services? Access to facilities on campus? Regular meetings. Etc.
- What is your general impression about the students admitted into UWC as a whole and the school of Pharmacy in particular? Do you think it is a privilege only a few people enjoy? Do you

think that we there can be more students from your community to address the issues in your community?

- What is your opinion on the recent events in December of last year where students took it upon themselves to speak out and act against the social ills (racism, unequal resource allocation especially in healthcare, etc.) in our society?
- There is a lot of talk currently about unequal distribution of resources between different racial groups in South Africa. One of the greatest areas where the impact of this is felt is in healthcare delivery. What has your experience been in this regard if any?
- From you experience, how can students work closely with the community towards a common goal to address the communities' needs?
- How can we lessen the barrier that distinguishes the students from the community members as servers and receivers? If you could teach the students?

FGD2 questions that were posed to CHF representatives:

- Were all the participants able to visit the local health care facility to observe students?
- Describe the activities that you observed pharmacy students doing during service learning week?
- How would you describe the engagement between pharmacy student and community members and pharmacy staff members?
- Did pharmacy students serve patients differently from the health staff, did student set a different tone or attitude ?
- Based on the FGD1 questions : about health system , how could we work collective to dismantle the correct structural constraints within public health sector structure?
- The service pharmacy students gave, how different was the service one that the pharmacist offer or the health staff offer , were students more attentive than health staff?
- How do community members feel about being served by pharmacy students, what is their perception about ?

- How did students conduct themselves and what tasks were students observed to be doing?
- What were the challenges you came across when you were observing students during service learning week?
- What other activities do think students should be doing at the local health facilities, other than the activities you observed pharmacy students doing during SLiP second week?
- What does SLiP mean to you as CHF representatives?
- Where do you see SLiP and the service pharmacy students give during service learning week? Where do see SLiP serving the local community best in ten years?
- What kind of collaborations do you think SLiP and local community should have that would enhance the partnership and address pressing health needs of local communities?



Table 3.1. Advantages and disadvantages of focus group discussions as a method of data collection in qualitative research study, adopted from (Neuman, 2003).

Advantages	Disadvantages
<ul style="list-style-type: none"> • Easy to host and less expensive to organise • Allows the researcher to collect data from group (which represents a larger group/population) of few people. • Respondents express views freely in a natural setting. • Allows the researcher to observe the verbal and nonverbal behaviour of the participants (Cavana et al., 2001) • Members of marginal groups are encouraged to convey their beliefs and opinions openly • Researchers have the opportunity to experience how respondents discuss survey topics 	<ul style="list-style-type: none"> • Only a limited number of topics maybe discussed in focus group • The researcher may unintentionally limit open free discussions. • Fewer ideas are generated in a focus group as opposed to individual interviews. • Researchers cannot reconcile the differences that arise between individual only and focus group setting responses.

Another important factor when conducting FDGs is the facilitator. A facilitator serves as guide for the conversation/ discussion and is responsible for the following.

To guide the discussion by interjecting in-between with questions, with the aim of gaining the depth of the information being shared by participants and also diffuse power struggles between the participants. This is done so that all the required information may be uncovered (Schwartz et al., 2004).

- Encouraging the group dynamics to surface between participants so that the quality information regarding their experiences and perceptions may emerge (Krueger & Casey, 2000; Stoke & Bergin, 2006)
- To ask open-ended questions to participants and allow participants to share their views and experiences freely (Krueger & Casey, 2000; Garrison, et al., 1999; Stokes & Bergin, 2006)
- Facilitate the discussion, giving each participant an equal opportunity to comment, however the challenge maybe the answers or the comments from participants may come spontaneously because participants should not be pressured to comment (Zikmund, et al., 2003).

The third data collection technique was field observations that was be undertaken by the researcher at some of the facilities during the second week of service learning. The researcher accompanied the KI in her normal spot checks of the students at facilities. The researcher made detailed field notes of the actions and interactions of the KI, supervising pharmacists, students and, if available, CHF representatives at the service learning sites. This was done for the purpose of triangulating the research study results.

3.5 Data analysis

Research data was collected through an interview, focus group discussions and observations made during the SLiP week. The interview and focus group discussions were audio recorded and transcribed verbatim (Saldaña, 2015). The transcriptions were imported into Atlas.Ti8 (Saldaña, 2015). Codes were identified using a deductive coding approach. The codes that were agreed upon by the research team were categorized into four main themes (Gilgun, 2005). The purpose was to uncover the meaning behind the collected data, by creating a link and understanding to the research question (Denzin & Lincoln, 2001). The results were shared with the participants to confirm the correct interpretation of data and to validate the results found from the interpreted data.

3.6 Validity and reliability

Validity and reliability are important and they should be considered as far as qualitative research is concerned. Neuman (2003: p.183) describes validity as the “*true measure*” and reliability as the “*dependable measure*”. Validity refers to the extent to which a research instrument measures what it was intended to measure. Reliability refers to the consistency of data obtained if the same study were repeated under very similar conditions (Pendergrass et al., 2003).

The researcher’s field observations and a feedback workshop were conducted in an attempt to triangulate the findings of the interview and FDGs. For the field observations, the researcher accompanied the KI on one of her visits to the sites in order to get an objective perspective of the KI interview findings. All CHF representatives who participated in the two FGDs were invited to a feedback workshop to consolidate findings as a measure of triangulation to ensure credibility and validity. The feedback workshop included a presentation of the quotations, codes and themes that were extracted from the data. Participants had to confirm that their words were quoted in a correct manner and used in the correct context.

3.6 Ethical considerations

Ethical approval for the study was granted by the Senate Research Ethics Committee of UWC (number 15/2/90). The study included human beings, the consent of all the participants was sought and obtained before their participation commenced (McNiff, & Whitehead, 2009) The aim was explain and ask for permission from the participants to record the sessions via a video or an audio before the start of the workshop, participants agreed and gave a consent by signing the consent forms (Appendix 1) and were provided with a study information form (Appendix 2). The information sheet and consent form was translated from English into Xhosa and Afrikaans to accommodate participants who did not understand English (Boeiji, 2010). Participants received travel money and refreshments at the focus group discussions that were hosted at the School of Pharmacy at UWC.

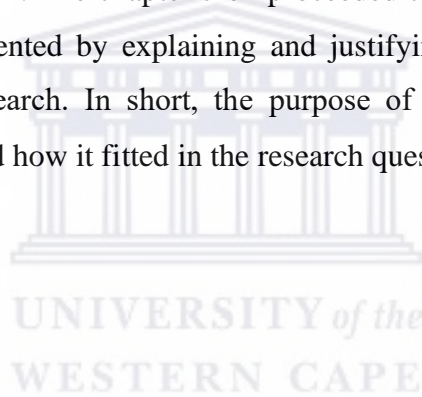
Data were kept strictly confidential. Every study participant was assigned a unique identifier that linked the informed consent form with the study information. The consent form information and the study information were stored at separate locations. Any identifying information was

removed from all documents before it was used in the data analysis. A master copy with the identifying information was kept separately.

Data files will be deleted or destroyed by the principle investigator after the research reports have been written. No direct risks or benefits of this study were anticipated for participants. A perceived benefit of the study is that it would offer community participation in the development of pharmacy education at UWC.

3.8 Chapter Summary

In this chapter, the research methodologies, including the methods of data collection were introduced. The study used the interpretive qualitative method in its approach in order to explore the key issues of the research aim. The chapter then proceeded to give a description of how the research methods were implemented by explaining and justifying the choice of methods that were used in this master's research. In short, the purpose of this particular chapter was to describe the research process and how it fitted in the research question under investigation.



CHAPTER 4

RESULTS

In this chapter, I first present an overview of the data collection timeline, participant attendance, facility representation, and a summary of the themes and codes identified. Then follows the narrative of the results obtained from the qualitative analysis presented in the chronological order of data collection.

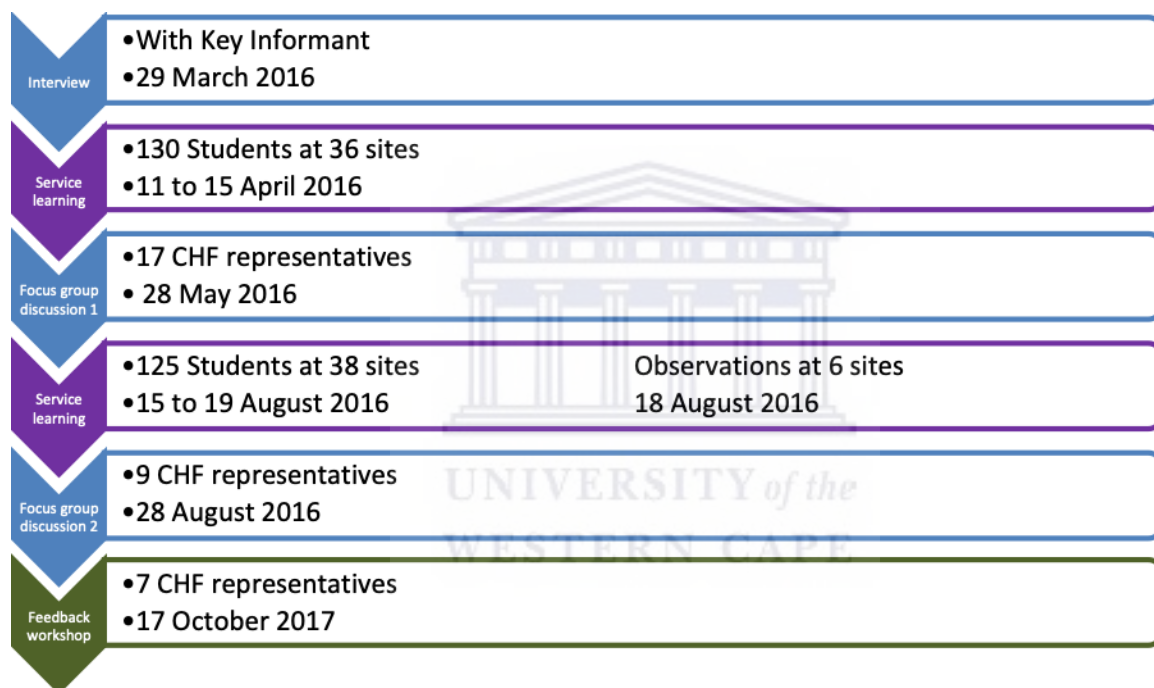


Figure 4.1. Timeline for data collection activities.

The timeline for data collection is summarised in Figure 4.1. Data collection commenced with the KI interview. The first week of service learning was mid-April 2016 thereafter the FGD1 was held in May of 2016 and was attended by 17 participants. The FGD1 was a baseline study to see how CHF representatives normally would notice students in the facility without being primed to do so. For the second week of service learning that occurred during mid-August 2016, CHF representatives were reminded that students were coming to the sites and they had specific

observation points to consider. Additional, field observations were done by the researcher on the fourth day of the second block week of service learning. The FGD2 was held a week after, the service learning block week. Only 9 of the 17 participants who attended FGD1 attended FGD2. A feedback workshop was held a year later to check back with the participants on the accuracy of the thematic analysis and interpretation of the findings.

Table 4.1 summarises the continuity of participation for each individual CHF representative in the research process and also indicates which service learning facilities they represented and subsequently observed. Some facilities were represented by more than one participant. Some participants were representing a secondary level of care above the local facility called a sub-district. Participants who were representing sub-districts were CHF representatives who served the community at a tertiary hospital level. Additionally, five of these participants were involved in previous interactions between the School and community members during 2012. Out of the 11 facilities that are reflected in Table 4.1, study participants represented 9 facilities and field observations was performed by the researcher at 6 facilities (C, G, J, K, L and M) – 3 of the observed facilities did not have a study participant linked to it.

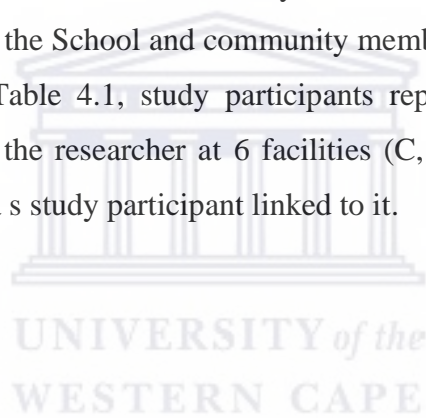


Table 4.1 Longitudinal participation of CHF representatives attached to the facility the represented.

CHF representative code	CHF representative on category: facility or sub-district	2012 workshop at UWC	FGD 1 May 2016	FDG 2 Aug 2016	Facility-Observations Aug 2016	Feedback workshop Oct 2017
Key informant (KI)	Sub-district A	X	X	X	NO	X
Participant (P16)		X	X	X		X
P1	Sub-district B	X	X	A	NO	A
P11		X	X	A		A
P2	Facility B	A	X	X	NO	X
P7		A	X	X		A
P3		A	X	X		X
P8		X	X	A		A
P4	Facility C	A	X	X	YES	A
P5		A	X	A		A
P6	Facility D	A	X	X	NO	X
P9	Facility E	X	X	X	NO	A
P14		A	X	A		A
P15		A	X	A		A
P10	Facility F	A	X	X	NO	X
P12	Facility G	A	X	A	YES	A
P17	Facility I	A	X	X	NO	X
P13	Facility M	A	X	A	YES	A
None	Facility J				YES	
None	Facility K				YES	
None	Facility L				YES	

Key: X = attended, A = Absent

Table 4.2 summarises the four main themes and codes with a quote illustrating each code. The table also indicates where in the data collection process these themes were extracted from, for an example theme A was extracted from FDG1 and observations.

The four primary themes were classified according to the following headings:

Theme A: Community

Theme B: Students' influence on the community

Theme C: Service learning programme and pharmacy curriculum

Theme D: Health system

Theme A featured most prominently in FDG1 (and observations), because a contextual understanding of the CHF representatives in the study was needed. This included the participants' roles and activities in the larger healthcare system and their roles at local health care facility level. A dual role emerged, which was located at the local health facility level, which involved working with facility managers to address individual and collective health issues of the community, and, their role in the local community. In addition, CHF representatives explained their perceived identity at local communities as health advocates and their interactions with other leadership structures that existed at community level.

Theme B described the students' influence on the community. This theme was further subdivided into; descriptions of specific student activities at service learning sites, student attitudes and behaviour while performing clinical activities, and the perceived outcomes of clinical activities on the patients. Theme B particularly related to the communication and interaction between students and patients. Both Theme B and C was noted throughout all the data collection activities as some CHF representatives have been interacting with students at the facilities (theme B) and in the service learning programme (theme C) before 2016.

Theme C related to CHF representatives' opinions of the service learning programme or broader pharmacy curriculum. Theme C comprised of general perceptions about the service learning

programme, influence of the programme on local communities, the limitations of the service learning programme and pharmacy curriculum, and recommendations for the improvement of the service learning programme and pharmacy curriculum that might provide a positive impact on the health of local communities.

Theme D related to comments that mentioned the health system in which the service learning programme was located. Theme D covered the structures and culture of the health care system and recommendations for strengthening the health system, from a community perspective. Theme D was only mentioned in FGD2 (and noted in observations), probably because the CHF representatives were primed to observe students and they might have been more sensitive in observing how the system was influencing students’ efforts to serve the community.

For clarity purposes a consistent key was used to identify each study participant in direct quotes.

- KI: key informant.
- V: the researcher
- P1 - P17: CHF representatives / participants
- Facilities: sub-districts A and B and facilities B to M (reflecting the 11 facilities that were included in the study).

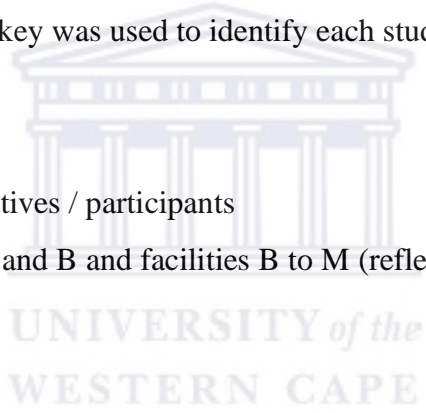


Table 4.2. Summary of themes, codes and quotes, with reference to the data collection methods which produced it

Theme	Code	Quote	Data collection activities
Theme A: Community	Roles of Community Health Forum (CHF) representatives	<i>“We [Community Health Forums] are the mouth piece of the community, we mediate between community and the day hospital staff. Without us the community doesn’t have a voice that represents them when ill-treated at the health facilities ...”</i>	FGD1 & observations

		P9:FGD1	
Theme B: Students' influence on community	Student activities	<i>"Apart from what they [pharmacy students] normally do at the pharmacy. They were assisting with the pre-packing and dispensing medicines to patients. Students also dispensed chronic medication parcels from the chronic dispensary unit to patients at the centre of distribution outside pharmacy. Students also counselled a lot of patients who are on chronic medication and educated the patients about the chronic medicines they are taking" ...P6: FGD2</i>	KI interview, FGD1, observations & FGD2
	Student attitude and behaviour	<i>"These students were steady when they were doing their job, but were very diligent as they did their work and they picked up a lot of medication errors" ...P3: FGD2</i>	KI interview, FGD1 & FGD2
	Outcomes of student's activities	<i>"The patients said ...only if we could be served by pharmacy students every day at pharmacy because they are nicer, we need more of them. Seeing that students were doing a thorough job. Their [the patients'] perception about students changed. The community wanted to be served by students more, for students took time to listen their [patient's] questions and answered with respect". P8: FGD1</i>	KI interview & FGD1
Theme C: Service learning program and	Community's current perception of service learning	<i>" I saw that, wow! You see the students are doing a remarkable work at facilities [through SLiP]. Even though they are</i>	KI interview, FGD1 & FGD2

pharmacy curriculum		<i>taking a lot of time reading each paper in the folder, they are capturing a lot of human errors and uncaptured sicknesses [by this she meant side effects]”. P8: FGD2</i>	
Service learning program influence on local community		<i>“I do notice that pharmacy students close a lot of gaps at the facility [improving the long waiting time at the pharmacy area]”. P6: FGD2</i>	FGD1 & FGD2
Limitations of pharmacy curriculum		<i>“I think for students to benefit more from this curriculum. There School of Pharmacy needs to balance the experiential learning time given practical work done at the communities with the theoretical learning time. For instance[pause], like nursing they have longer block weeks to hospital acquiring experience”: KI</i>	KI interview & FGD1
Recommendations for pharmacy curriculum		<i>“... in order to improve the learning of the students. Pharmacy students must not only visit the pharmacy at the health facility only. But pharmacy students must go more into the communities through an NGO. Where they will go with us [home-based carer] to each house where chronic patients reside at. In that way they [pharmacy students] learn, experience and know [at a grass-root level] the reality of the problems that each community is facing” ...P3: FGD2</i>	KI interview & FGD2
Theme D:	Health system	<i>“I think the department of health needs to</i>	Observations

Health system	structure	<p><i>look at changing how things are done at the pharmacy or maybe think outside the box. Because all [emphasis] pharmacies have got these walls. Where you realize that the pharmacist is on the other side and the community [patients] are on the opposite side waiting to be served. The pharmacy wall has become a barrier to effective engagement that should occur between pharmacist and community [patients].” ...P16:FGD2</i></p>	& FGD2
Health system culture		<p><i>These [pharmacy] students when they finish [university studies] and graduate. They get into a system that is very estranged to them [pharmacy graduates] and they have to stay into this estranged system and not change the system but instead they get moulded into the habits of this system.” ... P16: FGD2</i></p>	FGD2 only
Recommendations for strengthening the health system		<p><i>“Maybe the Department of Health should make chronic clubs compulsory to all health facilities attending to patients on chronic illnesses that need chronic medication. Chronic Club patients including a nurse, doctor and pharmacist should meet at least once in two months with all those patients [patients on chronic medication] so that patients can give feedback about the medication they are taking and to see if patients are improving</i></p>	FGD2 only

		<i>or getting worse ...I think” ...P6: FGD2</i>	
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Themes that emerged from the data are narrated in the following order; KI interview, FGD1, field observations and FGD2.

4.1 Key informant (KI) interview

The interview with the key informant was held at the UWC- SLiP laboratory because it provided a peaceful and noiseless environment and served as a convenient venue for the KI. The interview lasted for about 90 minutes.

The key informant had been part of SLiP at UWC for more than 15 years. She was employed as a community liaison officer at UWCs community engagement unit. As such her role was to facilitate communication and interactions between the three service learning partners i.e. UWC faculty and students, pharmaceutical services and the community. More specifically, her role in SLiP included; orientating students on how to approach the community previous to the SLiP block, visiting SLiP facilities during the service learning blocks to observe the conditions the pharmacy students work under and how students were serving patients, and, reflecting with faculty and students on the last day of SLiP about their experiences and lessons learnt.

In addition to her role at UWC, the KI was a chairperson of the Cape Town Metropole Community Health Forum. She had a history of participating in health and civic activist groups and activities. Indeed, she took number of problems that students have encountered in their visits during SLiP to be addressed at facility and district levels in the past.

During the interview, the key informant showed a lot of charisma when she spoke about matters pertaining to local the community. I must admit that as a novice researcher, I had foreseen a short interview with her. However, her charisma and her expressive abilities took over as she was answering all questions relating to the community engagement part of SLiP. The data that

was collected from the KI pertained to some of the success stories of how students meaningfully improved the health of the people living in local communities. She also shared the "not so good stories" of student's attitude towards patients, staff attitude towards students and lastly the attitude of patients when served by students.

4.1.1 Theme B: students' influence on community

The KI noted how students improved the lifestyles of the public residing in various local communities and how students served the community by educating the residents about the rational use of medicines. She also noted that this was not done to the same extent in all facilities due to differences across facilities, where in some facilities were more conducive to providing a positive learning environment for students than others.

KI: "at the facilities where there is order, you see that students are always accompanied by, either a CHF or CHC representative or they [students] are encouraged to address health issues that are within the facilities uhm but it's not always the case in all these facilities"

The KI further explained how the students interacted with patients at the local service learning site and some community members. She explained how each student meaningfully interacted with patients at chronic dispensing stations (these stations are located outside the premises of the pharmacy of the local service learning site) for the dispensing of chronic medicine parcels.

V: how was the nature of the interaction between students and patients?

KI: the students communicated well with patients, some hospitals patients waited longer before they could get their medicines because of the shortage of staff at the pharmacy...But the presence of students there made a difference. Students are good communicators when giving a patient the monthly prescription [prescribed medication for the month] they take time to explain and educate the patient on how [to] correctly take their chronic medication.... I also think that at the moment there is good promoting and educating that pharmacy students are doing at the communities using pamphlets "I think that students are needed most for community education..."

The KI also spoke about realities pharmacy students are faced with when doing the experiential training. Realities such as the language barrier between students and patients. For example, if a student who cannot speak Afrikaans that should not be placed at a local service site where the majority of the community (patients) speak Afrikaans. However, this time she was explaining, yet admiring how students chose to tackle the challenges they found at the local service learning site. Pharmacy students stood their ground and addressed the “language barrier” by choosing to work at the dispensing station with a colleague who spoke Afrikaans fluently, so that the student may translate for the patients who couldn’t speak or understand English.

***KI:** “When students saw that some community health centres had more Afrikaans and Xhosa speaking patients, as opposed to English speaking. They [referring to students] would think outside the box and create a chart of commonly used phrases in Xhosa and Afrikaans. So as to help the pharmacist dispensing medicines to better communicate with patients. I am telling you the chart helped most people who work at the pharmacy, the pharmacy staff were grateful and even said it themselves, that the phrases are very helpful, especially to those who are dispensing medicines to patients...so the students left the chart on the wall right at the dispensing area”.*

She first described the nature of the engagement students had as compared to how the employed health staff relates to patients. She described how empathetically students were when engaging with patients at the dispensing station.

***KI:** “The engagement between the community and the students was a lot different. Students showed respect to each patient they served, students took time and listened compared to service given by pharmacy staff, so I think that for me was a great advantage.*

She also described how students handled difficult matters that occurred at the local service learning site. Students took time to explain why there were delays at the dispensary and made patients aware of the realities that occur behind the “pharmacy wall”. The effort of explaining created an understanding in the minds of the waiting patients. She continued to elaborate how students identified and addressed the lack of communication that occurred between the pharmacy personnel and patients at the pharmacy’s dispensing window. Students explained the processes

[pharmaceutical care steps] that occurred prior to dispensing medicines to patients “*what happens behind the pharmacy walls after I [patient] have submitted my folder?*”

KI: “*Students created awareness about “pharmacy waiting times” ... They held a continuous discussion with the community; the pharmacy had challenges [patients were angry due to long pharmacy waiting times]. The community didn’t understand.... then students went out into the waiting area and discussed with the patients [community] reasons why it takes so long to get medicine at the pharmacy and WALAH! The community is happy and the pharmacist is happy and services were improved”.*

She reiterated that pharmacy students should realize while visiting the local service learning site that public health sector pharmacies unquestionably need pharmacists who will ensure that the health needs of each patient are relevantly addressed regardless of the lack of resources that the currently employed staff complains about. Students who aspire to serve at local government facilities must understand that the courage to address health needs of each patient should rise from within and be prepared to take responsibility towards social justice when addressing challenges of low-quality service delivered to patients.

However, the KI indicated that not all students really understood how to work with community members. She described some poor attitudes and behaviours from students.

KI: “*WELL! [Boldly emphasised] Students need to understand that, not everybody in this world is privileged enough to come from high-working class homes. So, when you [students] are going to communities, know that the community you [are] going to [serve] is nothing compared to where you come from. Make sure that you treat the community members the way you want to be treated, you know, so you are only here [referring to the university] for a moment and I am saying this because there are a few of them [referring to students] who are very snobbish when they were at the facilities”.*

In contrast to some students’ attitudes, the KI was happy overall with the professional appearance of students at the facilities.

KI: “Students dressed professionally each day. You know how you guys [students] are out in the communities you are neatly dressed [meaning wearing a white clinical coat with UWC pharmacy logo] and very professional”.

Upon sharing her observations regarding students during experiential service learning, the KI deviated and mentioned a point that was very informative. Based on her observation during the service learning week, chronic clubs seemed to be the place where the service of pharmacy students made the most impact towards the patients (community). She also agreed that students were well appreciated by the community members when they were teaching patients about the rational use of medicines. However, she felt that there was still a gap in the health system in terms of chronic clubs, because they were not yet a compulsory service at all public sector facilities in the Western Cape. She emphasized the need for such health services at local community level and identified this as an opportunity for pharmacy students to offer their services towards a priority health concern which underpins alignment towards social accountability.

KI: “Patient education that pharmacy students are doing in the communities has changed the way that the patients take medicines. Students have educated the communities about the chronic medicines that should not be taken with tea or milk. You know mos we [referring to patients] have this habit of taking medicines with milk or tea because we [referring to patients] do not know how dangerous that can be to our health, due to medicines [referring to some antibiotics] we are taking. The community really valued the information...”

4.1.2 Theme C: Service learning programme and pharmacy curriculum

The KI described how the SLIP curriculum improved communication between the pharmacy and patients at local facilities.

KI: “SLIP has benefited most communities. You know clinic C is a classic example of a significant change that was implemented by the UWC pharmacy students. Students contributed towards change at the facility’s pharmacy by informing patients about the medicines that are [were] out off-stock, even before the patients submit their folders by pharmacy windows they already know which medicines [were]out of stock. I am telling

you that, communication alone reduced the long waiting hours of patients at the pharmacy..... I mean the School of Pharmacy should at least applaud itself for the success of the SLiP program and the difference it [the program] makes at the communities”.

The primary concern that the KI had regarding service learning programme, was that the limited time [one week of experiential service learning] students spent at communities doing service learning. She questioned the reason why service learning time spent by pharmacy students at local community sites has not been increased, seeing that the SLiP program has existed for more than ten years. She believed that by increasing the experiential service hours spent by students with community (patients), such efforts could sensitize students to health needs of each community and transform student’s problem-solving skills.

***KI:** I think currently what the pharmacy curriculum needs [is] a balance. A balance between service learning practice [referring to time given to experiential learning services] and time that is given to theoretical practice[concepts].I mean what could pharmacy students meaningfully learn [about their practical professional practical work in hospitals] in one week of experimental service learning by third-year pharmacy students at the local community sites? At the end of the day, when reflecting I get to ask myself are, we [as an academic institution] doing justice in implementing SLIP learning outcomes*

In addition, the KI noted the fact that SLiP contributed a small (5 %) percentage towards the final credits of the module, was contradictory to her experience of sitting in reflection sessions with students where most students attested that service learning taught them a lot and it opened their minds into a new way of perceiving the realities that existed at local health care facilities. She shared that in her opinion service learning best prepares pharmacy students for their future work environment. She suggested that the School of Pharmacy learn from other healthcare professional schools such as nursing:

***KI:** “I mean I know the School of Nursing because I’m a nurse. Their [nursing school curriculum] experiential learning is part of the curriculum and it makes up equal points as theory, it is basically practical work. SLIP program is basically your practical work. However, it’s not currently seen as that, why can’t it be ensured experiential learning*

services done by the student at the community sites that it counts as 50 % of your annual final mark?

She additionally pointed out some of the institutional barriers that she perceived as a hindrance to aligning pharmacy training with other health professionals within UWC. She was looking at the fact that, why the School of Pharmacy was situated in the Faculty of Natural Science and not in the Faculty of Community and Health Sciences like other health professional schools:

***KI:** why is the School of Pharmacy isolated alone in the Science Faculty the School of Pharmacy needs to be the same as any other health science disciplines [nursing, dentistry, occupational health etc.].*

In her recommendations for the pharmacy education, she suggested opportunities for interdisciplinary practice during service learning.

***KI:** “We [referring to South Africa] need an inter-disciplinary team in hospitals. Health professionals need to talk to each other, to close the gap in the wellness cycle”*

***KI:** “We [referring to South Africa] need inter-professional relationships, especially around the topic of “patient care” that has become a top priority. A team that will work with one patient at a time, holding discussions about the condition and treatment of that patient”.*

The KI further reiterated that if the School of Pharmacy’s intention was making a difference at local communities, increasing time students spend doing experiential service learning of learning should be considered. She emphasised that if the pharmacy school intends to measure the impact of experiential service learning done by students in community, it will be wise to increase experiential service learning.

***KI:** Listen! Can you measure impact in one week of experiential service learning?*

***KI:** “What we [as triad partners of SLiP] want is to measure here is the impact of experiential learning services rendered by students to communities. How well, has experiential service learning changed in the lives of patients?”*

KI: “No man, it is impossible to make a sustainable contribution to a community in one week” look at nursing students do not have one week of practical at hospital”

4.1.3 Summary of KI’s key points of the interview.

Theme B: UWC-SLiP students’ influence on community

- Pharmacy students interacted and served every local community professionally.
- Pharmacy students are excellent: communicators, educators and competent dispensers and counsellors to patients.

Theme C: Service learning and pharmacy curriculum

- UWC-SLiP students have benefited and made an impact in all local communities that are SLiP partners.
- UWC Third year pharmacy curriculum must strike a balance between time invested on theoretical concept and time invested on experiential service learning.
- UWC-SLiP should engage on Inter-professional education, to challenge the culture of health schools working in silos.
- UWC-SLiP should measure the impact of experiential service learning curriculum from the recipients of the service, namely the community.

4.2 First focus group discussion (FGD1)

FDG1 was held at the service learning laboratory because participants were more comfortable and preferred coming to the university, simply because it was a central accessible venue for all participants coming from different communities. The FGD1 took 240 minutes.

Table 4.2 summarises the demographics (age and gender) of the seventeen CHF representatives who participated in FGD1. Out of seventeen participants, two participants represented two sub-districts (sub-district A and B) and 8 participants represented 8 of the local community health facilities (facility: B, C, D, E, F, G, I and M). The seventeen participants who attended fulfilled the roles of a CHF representative, home-based carer or medicine runner (collector). A medicine runner can be classified as a person who collect medicines on behalf of patients at the facility,

because the patient is unable to attend the facility for various reasons such as disability, financial or work obligations.

KI and participant 16 had a role of being a CHF member only at a sub district level. Two participants fulfilled three roles in the community which were; CHF member, home based carer and a medicine runner. Eleven participants fulfilled dual roles in the community, which were CHF member and a medicine runner or home-based carer. Lastly two participants had a role of being a medicine runner only.



Table 4.3. Demographics of the community health forum representatives who attend the first focus group discussion (n=17).

Participant	CHF representative	Home-based carer	Medicine runner	Age range (years)	Gender	Representation category: facility or sub-district
KI	X			40-60	F	Sub-district A
P16	X			40-60	M	Sub-district A
P1	X	X	X	40-60	F	Sub-district B
P11	X		X	40-60	F	Sub-district B
P2		X	X	40-60	F	Facility B
P7	X		X	40-60	F	Facility B
P3		X	X	20-39	F	Facility B
P8	X	X	X	40-60	F	Facility B
P4		X	X	40-60	F	Facility C
P5	X		X	20-39	F	Facility C
P6	X		X	40-60	F	Facility D
P9	X		X	40-60	F	Facility E
P14			X	20-39	F	Facility E
P15			X	40-60	F	Facility E
P10	X		X	40-60	M	Facility F
P12	X		X	40-60	F	Facility G
P17	X		X	40-60	M	Facility I
P13	X		X	40-60	F	Facility M

The data that was collected from FGD1 were classified into three of the four themes.

4.2.1 Theme A: community

CHF representatives described their role in their communities, which aimed to improve the health status of community members.

P9: “We [Community health forums] are the mouthpiece of the community, and we [Community health forums] mediate between the community and the day hospitals [also known as health facilities]. Without us [Community health forum representatives] the community doesn’t have a voice to represent them at the facilities” ...FGDI.

In addition to CHF representatives advocating for the health needs of patients at the facility level, some also played a dual role as a home-based carer and a CHF member. In this way participants had to address challenges at, a patient as well as facility level. Participant 8 (who fulfilled three roles in the community: CHF representatives, home based carer, and medicine runner) explained that they had to assist patients who were too ill to travel to the local health centre. The following quote illustrates the multiple role played by participant 8 resulting in a blurring of roles and functions of CHF representatives.

P8: “As a community health forum, when we see that a client [referring to a patient] is sick and they [patients] cannot bath themselves and go to a hospital. As Community health forum member, you roll up your sleeves, wear on some gloves and wash the patient get them ready for hospital and get the patient to a hospital. So sometimes we [community health forum] play two roles by being a home-based carer and also a community health forum member ...FGDI

On the other hand, participants also reported challenges at the facility level where some felt that their authority as leaders in the community and their legitimacy as equal partners in the health care system were undermined by some facility managers.

P8: “We [community health forum representatives] are part of the Department of Health structure. Even facility managers have to recognize, respect and listen to us [community health forum] when we voice out challenges patients face at the facility level” ...FGDI.

Though participants had explained their role in the community it was not clear how being a community health forum member or home-based carer helped them (as CHF representatives) engage with the larger community beyond patients at the facility.

P8: "Being a community health forum member gives us an opportunity to interact with more people of the community and it helps you as a community member to get to know people better as you serve them, by solving each problem they bring on the table."

...FGD1

Participants further explained how other resources (ward councillors, street committees, clinic committees, sub district committees, NGOs, YMCA (Young Men's Christian Association), community halls etc.) in the communities are linked and offer assistance to CHF representatives.

The following quote was a response to a question which the researcher had inquired about how home-based carers assist to improve proficiency the community health forum members in the community. The quote also shows the blurred roles between home-based carers and medicine runners, for it seems like home-based carers are allocated to bed ridden patients by NGO's and the home-based carer that attends to a patient also becomes a medicine runner for that patient only to ensure that a patient does not default on prescribed treatment.

V: In what ways are home based carers' role linked to health forum members?

P7: The home-based carers lessen the burden on us [community health forum/ health workers]. At times when the patient is sick and bedridden and the patient cannot go to the facility to pick up their [patients] medication anymore. So, they [patients] can go to the nearest NGO and explain the entire situation. The NGO assigns a home-based carer that will be responsible to pick up the medicines from the facility and see to it that the patient takes all the medicines prescribed" ...FGD1

4.2.2 Theme B: students' influence on community

Five out of the 17 participants reported that they had seen pharmacy students at their facilities, which were representing facility B, D and sub-district A (access to three facilities in the sub-district). The rest replied with a negative response.

P16: “I have seen pharmacy students at our facility” ...FGD1

P6: “yes, we saw students at our facility” ...FGD1

P3: “yes, we saw the students shame [giggles]” ...FGD1

This led to a description by participants of their observations on the conduct of students when they were at facilities. Participant 8 from Facility B expressed her view on how the community (patients) complained about how slow students were when they were dispensing medicines to patients at the dispensing station.

P8: “These students were steady when they were doing their job, but were very diligent as they worked” ...FGD1

Participant 3 from Facility B had seen and taken time to observe pharmacy students at the pharmacy. She described the busy atmosphere at the pharmacy and had noticed that the atmosphere made students tense, because they were working with their heads facing down.

P3: “Students were always busy and focus on what they are doing, they did not even look around, or even communicate with anyone in the pharmacy. They looked so tense as if they were scared of being shouted at” ...FGD1

Participant 16 from sub-district A shared his experience as he observed pharmacy students. He described his experience as:

P16: “Some students were not dressed up appropriately. They did not have their name tags on as they should, some had put them at the back, some were wearing lanyards, and some do not even have any identification card at all. So, they [pharmacy students] had no official visible identification. You [as a patient] could not see the difference between who is a pharmacist, who is a student or staff” FGD1

Despite the students’ slow pace of dispensing and some concern about their dress code, participants reported that the community was still impressed by their respectful interaction with the patients. Participant 8 explained how the community responded when pharmacy students had served them during the service learning week.

P8: “The community said, “if we [community] can be served by pharmacy students every day, it would be nicer. We need more of them”. Seeing that students were doing a thorough job, their [community] perception about students now changed. The community wanted to be served by students more, for students took time to listen on their [community’s] questions and answered nicely” ...FGD1

4.2.2 Theme C: service learning programme and pharmacy curriculum

Participants described how well the service learning program and pharmacy curriculum in general had prepared students for the experiential learning activities that were performed by students while serving the community (patients).

P7: “I do see that the student really closes the gaps at the facilities I don’t want to speak for other facilities I want to speak for [facility D] that I go to. When I saw how they served each patient, I said wow, do you see the remarkable work students are doing by taking a long time when reading folders thoroughly, they are capturing other sicknesses” ...FGD1

4.3 On-site observations at health facilities during service learning block 2

The site visits took place during the scheduled experiential learning week on Thursday the 18th of August 2016 between 08:00 and 15:30 at six facilities (Facility J 10:00, Facility K 11:00, Facility G 12:00, Facility L 13:00, Facility M 14:00 and Facility C 15:00) that hosted nineteen pharmacy students. Three of these sites (G, M and C) had CHF representatives who participated in FGD1. It is worth mentioning that Facility K was a hospital and the rest of the facilities were Community Health Centers (CHC). The selection of sites was done based on the decision made by the KI as it was her routine role to visit facilities during the service learning week to do spot checks on both students and the facility. As a researcher I merely accompanied the KI on her usual duty as community liaison person for the SLiP program.

The observations that were captured in researcher’s field notes fed into themes of the community (theme A), student activities (theme B), the service learning programme (theme C), and health system structure (theme D). The observations of the routine activities and interactions of the KI in her role as university community liaison person at sites made it possible to document; (1) the

interactions between CHF representatives and pharmacy staff and/or students at the selected sites, (2) the activities that students had engaged in at the facilities and their interactions with the pharmacy staff (3) pharmacists as facilitators of experiential service learning programme and the influence they have towards communities, and (4) how students were located and incorporated into the health care facility operations.

4.3.1 Theme A: community

At facilities J, K and L CHF members were not available to observe pharmacy students during experiential service learning block week. Students who were placed at facilities J, K and L reported that they had not interacted with any CHF member at the health facility. Conversely, students that were placed at facility C reported to the KI that Participant 4 invited them and the pharmacy staff to an educational health talk organized and planned by her (P4) and the management of the facility. Pharmacy students at facility C students had a constructive interaction with P4. At facility M, there was no interaction between participant 13 and the students. The pharmacist reported to the KI that the lack of interaction between participant 13 and pharmacy students was a result of a disagreement between participant 13 which occurred a week preceding the experiential service learning.

4.3.2 Theme B: students' influence on the community

For this theme, it was possible to extract student activities as observed from the students themselves and from the conversation between the KI and pharmacists who facilitated the students at the pharmacy. Student attitude and behaviour could be gauged from their conduct and dress code at the site. Pharmacy students' influence towards community were inferred from the actual location of the students in the pharmacy – i.e. were they visible to the patients (students can only have influence if they are visible and from their actual interactions with the patients).

Upon every facility visit, the KI found the students inside the pharmacy either in the dispensing area (partially visible to patients through the pharmacy window) intensely reading patient folders or as part of the dispensing team preparing medicines for patients, or, at the back of the pharmacy (not visible to patients) occupied by service learning projects such as designing posters, reading and preparing for presentations.

At facility C and L students were involved in dispensing CDU parcels and counselled patients at CDU dispensing stations. Students also offered educational talks to patients and people from the community who were present. Whereas at facility J, K and M students were observed preparing educational presentations and were not functioning as part of the pharmacy team. The pharmacists reported that students were well behaved and arrived and left the facility on time. At facility G the KI did not observe students doing any activity but she only spoke to the pharmacist about the activities students had done.

4.3.3 Theme C: service learning programme and pharmacy curriculum

These observations speaks to limitations of the service learning program, i.e. the time pharmacists could offer to facilitate pharmacy students, which ultimately influenced the learning opportunities pharmacy students received to engage with patients at the pharmacy and beyond. Pharmacists at facility C, J, L and M expressed how busy they were and shared about the realities of working at public health pharmacies. The realities of working at public sector included the following: running a pharmacy with lack of human resource, resulting to pharmacy personnel being overworked. As a result, pharmacists felt that it becomes difficult and frustrating to facilitate pharmacy students during the service learning block. The frustrations arose when a pharmacist had to facilitate students and oversee daily operations at the pharmacy, the latter being their prime responsibility at the health facility. This therefore limited the learning opportunities of students, who were usually assigned mundane tasks such as pre-packing of medicines.

4.3.4 Theme D: Health system

This theme captured observations that pointed to students inside the pharmacy, how isolated the pharmacy was from the rest of the facility, and the extent to which pharmacy staff were overloaded with work.

The majority of pharmacies inside facilities were situated right at the back of the facility and were isolated from other departments within the facility. All pharmacy's accesses points were restricted and locked, and no other health care workers were present in the pharmacies. Hence

CHF representatives had to be informed beforehand about where to look for pharmacy students during the service learning week.

At facility G, J, L and M the pharmacy waiting areas were packed with patients. The pharmacy staff were overworked due to very high number of patients they served daily. Most of the staff members were unfriendly to patients as a result of being overworked. At facility J, the pharmacist shared that most of patients who were taking chronic medicines were not collecting the monthly CDU parcels. There were 22000 uncollected CDU-parcels but she never specified the amount of time the pharmacy had to keep the CDU packets for at the pharmacy. However, at facilities K (the hospital) and C (at 15:00) the pharmacy waiting areas were quiet and staff members showed no sign of being over worked and the pharmacy staff at these facilities were actually friendlier.

4.4 Second focus group discussion (FGD2)

FDG2 workshop was also held at the service learning laboratory on the 28th August 2017 for the same reasons as mentioned previously in section 4.2. FGD2 lasted for 180 minutes and all the CHF representatives who attended the FGD1 workshop were invited to attend workshop. However, only nine out of seventeen CHF representatives who attended FGD1 were able to attend FGD2. The decrease in the number of participants who attended FGD2 was because, it took place towards month-end, when their personal needs were attended to.

For FDG2 the local CHF representatives were informed at FGD1 of the process of observing pharmacy students at the local community service site. The CHF representatives made their observations of the third year students in an unstructured and passive way so that patients would not be intimidated or disturbed by the process.

Table 4.3 summarises the demographics of the nine CHF representatives and KI who participated in FGD2. Out of nine participants: participant 16 was representing sub-district A, the remaining 8 participants represented the following facilities: B, C, D, E, F and I. Participants 2,3 and 4 had dual roles which were being a home-based carer and a medicine runner. Participants 6,7,9,10 and 17 had a role of being a CHF representative only.

Table 4.4 Demographics of the community health forum representatives who attend the second focus group discussion workshop of the study (n=9).

Participant s	CHF representat ive	Home based carer	Medicine runner	Age range (years)	Gender	Representati on category: facility or sub-district
KI	X			40-60	F	Sub-district
P16	X			40-60	M	A
P2		X	X	40-60	F	Facility B
P7	X		X	40-60	F	
P3		X	X	20-39	F	
P4		X	X	40-60	F	Facility C
P6	X		X	40-60	F	Facility D
P9	X		X	40-60	F	Facility E
P10	X		X	40-60	M	Facility F
P17	X		X	40-60	M	Facility I

Only three (theme B, C and D) of the four themes were mentioned in FGD2, with theme D surfacing for the first time in the CHF representatives' conversation.

4.4.1 Theme B: students' influence on community

In this discussion, all participants reported seeing pharmacy students at their facilities.

P6: "I've noticed that there were 3 students at facility D. I went to meet the students and we communicated well" ... FDG2

Participant 6 described and explained her observations and the tasks she had witnessed that students were engaged in at the health facility.

P6: "Apart from what they [students] normally [do] at the pharmacy... assisting with the pre-packing and dispensing medicines. Students also dispensed chronic medication

packets at our [community health facility] collection points. Students also counselled and educated the community about the chronic medicines they are taking” ... FDG2

She also mentioned that the responsible pharmacist pioneered and implemented the use of a feedback form system in an effort to teach the patients who were on chronic medication about the medicines patients were taking. The ultimate goal of engaging patients to offer their feedback was to improve the health status of each patient who attended facility D and to teach patients about potential side effects that they may experience after taking their medicines. The feedback forms were distributed to patients while issuing medicines to a patient at the dispensing station and explained how the patient should record the side effects or adverse effects. The patients were encouraged to report the side effects or adverse effects on the next collection date.

P6: “Pharmacy students also gave out the feedback forms that our pharmacist gives to the patients and those forms are actually for patients to write notes on, if or when they [patients] experience any side-effects from the medicines they are taking” ...FDG2

Participant 9 at facility E reported how pharmacy students were addressing the needs of the community during the experiential service learning week.

P9: “Yes I agree because at facility E, the pharmacy staff members were only two that morning, and they [pharmacy staff] were complaining saying that “they are short staffed and the work is too hard for them”. So, you will notice that when a patient comes to the window and say that “I missed my club date, what I can do. The old pharmacy staff members will say “No! No! No! Mama, you are wasting my time and say next”. But students made time to listen to their [patients] problems and come up with solutions” ...FDG2

Participants further described the behaviour of students at the service learning site. They were especially impressed with how well students communicated with patients.

P6: At our facility D students did well and I’m happy about that. Pharmacy students were polite and answered all the questions patients had” FDG2

P17: “The communication was very good. Students interacted very well with the patients (community) and were very helpful” ... FDG2

The quote below explained the nature of engagement that pharmacy students had with patients at the chronic dispensing stations.

P6: “The meaningful interaction between pharmacy students and patients occurred mostly at the chronic medication dispensary points [which are located outside the community health facility yard], not so much at the dispensary window [which is inside the community health facility building]. But the pharmacy atmosphere was very nice, very professional” ...FGD2

Participant 4 from Facility C also shared the nature of meaningful engagement that pharmacy students had with patients at the chronic clubs set up.

P4: “The interaction between pharmacy students and patients was effective because, on Thursdays, we [the pharmacist, professional nurse, community health workers and patients that are on chronic medication] have clubs where patients bring all the medicines they are taking at the chronic-club. Then we start open discussions about the correct use of medications. The chronic club session continued up until four o’clock in the afternoon, so it took the whole day. So, pharmacy students and patients had enough time to interact and discuss everything that has to do with chronic medication that patients are taking, like the side effects, medicines that interact with each other and how to take medication following the written instructions...So I think there’s a benefit in there” ... FGD2

Participant 2 from facility B described the nature of engagement between pharmacy students with the patients at the dispensing station. It seemed like at most local service learning sites where pharmacy students were placed for experiential learning service, most of the community (patients) members seemed impressed and were willing to be served by students at dispensing stations.

P2: “The student started explaining what the medication is for, how should the patient take it, and the patient said “yhooo! That girl was too nice towards me, it’s the first

time I have someone like that who listens and has patience and who does not shout at me or judge me. She listened to me and gave me what I wanted and I wish there could be more people like her here”, that mama said that about the student that served her that afternoon” ...FGD2

4.4.2 Theme C: service learning programme and pharmacy curriculum

Participant 6 shared her appreciation that the School of Pharmacy always takes an initiative to engage with the community, seeking community’s views about the experiential services offered by pharmacy students in various communities.

P6: “I think, from us, as health committees, we really appreciate the fact that you [School of Pharmacy] called us, to consult with us and hear from us [community] about what can be done? Or what can we [community, together with the school of pharmacy] do to better the health of our local communities? We appreciate it so much because we do not get the same treatment from the Department of Health. It is as, if they do not want our input at all, so we [Community Health Forum members] appreciate that. So, let’s continue with this” ...FDG2

Participants shared their ideas about how the School of Pharmacy could strengthen its service learning programme. These ideas focused on expanding the role of the students at the facility’s chronic clubs and exposing students to the local communities to engage further. Participant 6 shared how effective chronic clubs were at improving the health status of patients who were diagnosed with chronic illness and taking chronic medication.

P6: “I think the chronic clubs should be compulsory, for all facilities and pharmacy students must be involved in educating patients there” FGD2

Participant 17 has been a community health forum member for years such that he now serves not just at a local community level but at sub-district level and has lived to see the realities of the fluid environment at the tertiary hospital pharmacy and dispensing stations. He suggested that collaborations between the School of Pharmacy, CHF representatives and the Department of Health could be a great initiative to improve the health of many patients in various communities. He suggested that these collaborations

could focus on doing health promotion through different mediums where students could play a meaningful role of educating different communities about the rational use of medicines and educate the community about the importance of lifestyle modifications to patients who are taking chronic medicines and willing to improve their health status.

P17: “As a community health forum [representative] at sub-district level and as local health committees, we want to interact with pharmacy students. We can even collaborate with our services and have some road shows to create health awareness in communities, that too is something we can look [at]” ...FGD2

Participant 3 who was also a home-based carer suggested that pharmacy students should visit local communities more frequently like nursing students, so that pharmacy students may engage with patients beyond the walls of the pharmacy and be at the heart of the local community by partnering with NGOs. In that way she thought students will get to see the realities of being a health care worker and the living conditions of patients who are on chronic medications.

P3: “Like I mentioned the last time I was here, that pharmacy students must go more to communities through an NGO. Where they will go with us [home-based carer] to each house that our patients reside in. In that way, they [Pharmacy students] will know the problems [at grass-roots] that each community is facing” ...FGD2

4.4.3 Theme D: health system

This theme was given when participants shared their perspective concerning the infrastructural barriers, the attitude of health care personnel and the nature of engagement the health staff seem to have towards patients at health facilities.

In the quote below, participant 16 shared his views about how the pharmacy wall is a communication barrier and contrary to meaningful engagement between the pharmacy personnel and the patients. He alluded to this, because he felt that the pharmacy profession was governed by strict laws. For instance, the restriction to the pharmacy, only pharmacy staff members are allowed to enter at the pharmacy and that makes it more difficult for the community leaders to assist in resolving the existing and evident realities of unsatisfactory service patients are receiving from the pharmacy.

***P16:** “I am in favour of the chronic-club ideas because our [Community Health Forum member at Sub-District level and community] problem is that, “We hate the wall” for it creates a barrier that blocks the engagement between the community and pharmacist. We [Community Health Forum member at Sub-District level] need to see what is behind the wall. So that if there is something behind the pharmacy wall that is the primary cause of the lack of engagement problems. Then we [as leaders in the community] want to know it and see what is going on behind those pharmacy walls. I would really like to see an engagement like that at all the community health facilities. As a health committee member at Sub-district level, we want to deal with such problems, without putting anybody on the spot. So that’s what I would want to see happening before we can move on so that we can move on fully”. FGD2*

Secondly, he addressed the realities of lack of engagement between the pharmacist and patient because of the setup of a dispensing station at the hospital “the pharmacy window” is not conducive (no privacy, noise in the background) for proper counselling. He suggested that if the patient cannot be counselled well at the pharmacy window (dispensing stations) why not change the way things are done and counsel patients at counselling rooms (like doctors do). His view was that the pharmacy window (dispensing station) seems to be a systemic barrier to meaningful engagement and privacy of a patient should be having with the pharmacist.

***P16:** “The second thing is, I think the Department of Health needs to look at changing how things are done at the pharmacy or maybe think outside the box. Because all [Emphasis] pharmacies have got these walls, where you realize that the pharmacist is behind the wall and on the other side of the wall it’s the community sitting waiting to be served. The pharmacy wall that is a barrier to effective engagement that should occur between the pharmacist and the community. Hence, I liked the question that she [the researcher] asked about the chronic-clubs because it is only at the Chronic-Clubs that the wall “barrier” is absent and if you are listening well, the interaction at the chronic clubs is effective, simply because the wall is removed, I think we [community] need that sort of engagement at our facilities, not the dispensing window, but the chronic clubs... I really do not understand why the Department of Health cannot stand and close that gap*

*or have another area where you [pharmacists] can dispense and interact with patients”
...FGD2*

He then suggested that chronic clubs may be a solution to long waiting times that chronic patients spend at the pharmacy and has the potential to improve the compromised counselling time that pharmacists might not have at the pharmacy dispensing window. Participant 6 agreed and narrated her view of chronic clubs and how she thought chronic clubs could be a solution of pharmacist engaging more with patients and for the multidisciplinary team to improve the health status of each patient who are on chronic medicine. She expanded on how well chronic clubs were working at facility D for chronic patients together with the “feedback form” that was used to teach patients more about their medication.

P6: “I saw physically what the pharmacist was doing with the students and explaining to them [students]. The pharmacist told them [students] what to do and how they [students] must-read prescriptions, and dispense medicines to patients” FGD2

Participants shared their input on what could be done to improve the existing pharmaceutical services offered by the public health system and the attitude displayed by pharmacy personnel who were working as dispensers and distributors of medicines to patients. However, they reiterated that the current pharmaceutical service was severely flawed. So much so, that even though the education system produces graduates that are well trained to be change agents, they are not able to make the changes needed in the current context. Instead the old veterans who have served in the public health pharmaceutical services for years, do not give the fresh minds (graduates) an opportunity to change the archaic traditions of the public health system which seems to be non-beneficial to patients’ health needs.

P16: “These [Pharmacy] students when they finish [graduate] they go into a system [health] that is estranged to them [as pharmacy students] and they [pharmacy students] stay in that system until an old senior pharmacist retires or whatever. The problem with that is you [Community member] will notice that students become moulded into that flawed system. We [School of pharmacy together with the community] need to look at this and its implications. Because now the pharmacy school is emphasizing “patient-centred care”, notice the shift of emphasis. The old and experienced pharmacist fails to accept

the progressive change instead they [old and in all these years we [old and experienced pharmacists] have been doing things this way” and it’s the senior that is refusing progressive change. FGD2

Participant 6 from Facility D also noted that their chronic clubs were run effectively and were changing the lifestyles of patients for the better. She then recommended that the Department of Health should consider making chronic clubs a standardized feature of every community health facility. She suggested that any community health facility that has a doctor, a professional nurse, and a pharmacist should have chronic clubs.

P6: “Maybe if the Department of Health can say “chronic clubs must be compulsory to all facilities” and each chronic-club should meet once a month and that’s how you get feedback from patients who are on chronic medication” ...FGD2

4.5 Feedback workshop

The feedback workshop was also held at the service learning laboratory on the 17th October 2017, about a year after FGD2. CHF representatives who had attended the FGD1 and FGD2 workshops were invited to feedback workshop. All participants were sent preliminary results two weeks prior to the feedback workshop via an email. The purpose of the workshop was to review with the participants the accuracy of the thematic analysis and interpretation of the findings to validate the results of the study with the participants. The feedback workshop took 120 minutes. Only six participants who had attended both the FGD1 and FGD2 in 2016 participated in the feedback workshop.

Table 4.5 Demographics of the community health forum representatives who attended the feedback workshop (n=7).

Participant s	CHF representa tive	Home based carer	Medicine runner	Age range (years)	Gender	Health Facility represen ted
KI	X			40-60	F	Sub-district A
P16	X			40-60	M	
P2		X	X	40-60	F	Facility B
P3		X	X	20-39	F	
P6	X		X	40-60	F	Facility D
P10	X		X	40-60	M	Facility F
P17	X	YES	X	40-60	M	Facility I

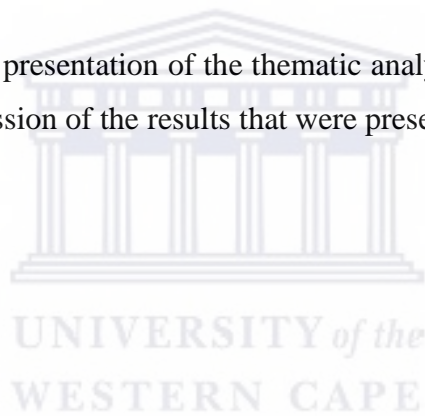
The research results were presented to participants during feedback workshop in terms of the four main themes: student’s influences towards community, local community’s role played by CHF representatives, community’s perceptions of the service learning programme and service within the health system. The first theme participants had alluded to was that most patients were first very uncomfortable when first served by third year pharmacy students. However, due to the students’ competent professional skills and empathy displayed towards patients, such patients then were at ease when served by pharmacy students. The second theme participants alluded to was about the role they played in the community, where CHF representatives described themselves as community advocates and the “mouth piece” for patients at their facility. CHF representatives thus mediated between the patients and health care personnel when complaints arose, and were “*watch dogs*” of service delivery at the health facility. They offered these services without receiving a stipend for their efforts. The third theme participants alluded to was about the service hours spent by pharmacy students for their service learning. The amount of

time in their opinion was not enough to be able to measure the impact of service delivery at health facilities and they recommended that service learning hours be increased. The last theme, the participants allude to was about how pharmacy students yielded towards being moulded by health system governed by old traditions instead of being the change agents that they are being trained towards. Participants were shown these study results and asked if the quoted evidence was really what they contributed.

A new point that emerged from the feedback workshop was that participants recommended that action be taken regarding the high numbers of uncollected CDU parcels at facilities. It was decided to host a meeting to collaboratively address this issue.

4.6 Chapter summary

This chapter provided a detailed presentation of the thematic analysis of the research study. The next chapter will present a discussion of the results that were presented here.



CHAPTER 5

Discussion

This study aimed to explore the perceptions, experiences, challenges, and input from local community health forum representatives regarding the third-year service-learning program of the School of Pharmacy at UWC. The objectives of the study were to identify community representatives through the Community Health Forums via the community liaison person of UWC who was also the Chairperson of the Cape Town Health Forum (key informant) and obtain their experiences, perceptions and recommendations of the service-learning programme in order to re-design and align student activities towards addressing community health concerns. This chapter presents the discussion of research results in the following sequence of themes, starting with community, health system, students' influence on community, and, service-learning program and pharmacy curriculum. Finally, the findings are contextualized in terms of the social accountability conceptual framework.

The service-learning in pharmacy (SLiP) program has been adopted by the School of Pharmacy at UWC since 2002, with the foundation of the program resting on a reciprocal triad partnership between the university, the services, and community. The initial partnership that was established in 2002 was primarily focussed with the pharmaceutical services where students were being placed for service learning, i.e. between the university and the Metro District Health Services (MDHS) (Bheekie et al., 2007). More recently, formal agreements between UWC as an institution of learning and the Department of Health have been negotiated in the form of multilateral and bilateral agreements, which provide for university students using the service platform for work-based learning activities. Also, the School of Pharmacy has a Memorandum of Agreement with the Metro District Health Services that enables a partnership with pharmacists to supervise pharmacy students during their service-learning experience.

This primary initial focus of building the service learning partnership with service providers and not the community has been noted in other literature from South Africa, which highlight the absence of active community participation in service learning (Van Schalkwyk & Erasmus,

2011). The writers explored in their article how “*service-learning could be utilized to become a robust, transformative intervention that contributes substantially to constructive participation and empowerment*”. The article purposefully draws attention to that fact that service-learning be used to evaluate student development and learning outcomes of the current curriculums. Furthermore, the authors attest that evidence on the outcomes of service-learning programmes on local community participants is yet to be documented and re-iterate that service learning is normally a point of entry to local communities around the university (Van Schalkwyk & Erasmus, 2011).

Furthermore, the CHESP triad partnership model aspires towards a reciprocal relationship with both the services and local communities (Lazarus, 2007). Accordingly, Fourie (2003) whose research critically analysed some service learning projects at the University of the Free State in South Africa advocated that the role of service learning with a community development approach deserved attention (Fourie, 2003). The researcher explored the necessary conditions needed for service learning to make a worthwhile and effective contribution towards sustainable community development. Indeed, it has been suggested that developing campus-community partnerships (based on the dyad partnership seen in developed countries) is a core element of well-designed and effective civic engagement, including service-learning and participatory action research (Bringle et al., 2012).

Fourie (2003) employed participatory action research as a method to prove that the involvement of the university’s service-learning projects in community development was a benefitting investment for current students and future graduates. Fourie (2003) reiterated that universities pay attention to teaching and student learning outcomes, and towards research outcomes that are streamlined towards partnerships between local communities and university students. Research on service-learning services, that contributes towards meaningful social change in local communities and research evidence that contributed by local community members regarding services rendered by students is equally important and deserves equal attention (Fourie, 2003).

In alignment with Fourie’s (2003) recommendations, the current research project was inspired following a functional partnership with the pharmaceutical services to subsequently strengthen

the partnership with the community by adding a research component to SLiP. This was in part due to the uncoordinated and individualized nature of establishing partnerships with the local community as compared to the university's collaborated efforts to establish partnerships with the service platforms. In the case of the community, the university has the Community Engagement Unit (CEU). Initially, SLiP utilized the community engagement liaison officer located at UWCs CEU for engaging with the local community. Her background as a nurse, community health activist involved with the Community Health Forum established a network of key people in the local communities. She recruited Community Health Forum (CHF) representatives from facilities involved with SLiP (van Huyssteen & Bheekie, 2015).

Since 2012 an informal partnership with the recruited CHF representatives was established through the hosting of workshops to introduce the SLiP principles and objectives to community participants. From these interactions, it became clear that community health forums have not been uniform in their implementation across the health system and that their functioning depends largely on the facility managers' willingness and ability to engage with local community representatives. Lack of formal communication structure between the health service and community makes it tricky for UWC to truly collaborate with the community and to measure direct student impact at the patient or community level (Van Huyssteen & Bheekie, 2015). This informal structure and variability of CHF representatives to engage at most SLiP facilities have been the primary reason why the Schools attempts to engage with the community have been gradual and remained primarily campus-bound (van Huyssteen & Bheekie, 2015). Literature agrees that professional experts and academics prefer to partner in research or in community development projects with community representatives that are affiliated with a formal structure like a non-profit organization (Botes and van Rensburg, 2000). The writers in that study are zooming into community participation in development by analysing the dynamics of community participation, particularly in the South African urban upgrading context, addressing obstacles and plagues. This might be one of the reasons that universities prefer to invest in the university service partnership and not the university community partnership. This preliminary study serves as a source of evidence from a service-learning partnership perspective whereby the significant role of the community becomes visible in pharmacy education.

5.1 Community

This section attempts to describe the study participants in terms of their influences and roles in the community, what they currently contribute to the community and policy considerations in terms of the health services.

5.1.1 Background of CHF representatives participating in this study

In our research, we had a KI who served the Department of Health as a chairperson at the Cape Metro District Health Forum. The KI was considered to have extensive knowledge and experience with sub-district health forums and was well connected to recruit CHF representatives as participants in this study. Participants' backgrounds with the CHF were important because they were individuals who lived in the SLiP facilities catchment areas and who were chosen to engage as a member of the CHF or health/clinic committees as a community representative or “*watch dogs*” as they referred to themselves. This agrees with literature that found that, most academic institutions prefer to partner with community representatives that are within an organization, system or an existing structure of stakeholders, rather than a group of community members who are at grassroots level without being affiliated in any organization (Lantz et al., 2001)

At the FGD1 the participants explained their background experience and their roles as CHF representatives in their communities. More than half of the participants had dual and triple roles in the community, including that of being a CHF representative. In this study, participants reported that they were also home-based carers, retired health worker, served as a member of a street committee and/or acted as medicine runners. These multiple role experiences were echoed in another study conducted in the Cape Town Metropole that investigated community participation in health committees (Haricharan et al., 2014). In that study, participants also identified as being home-based carers, retired nurses, TB DOT (directly observed treatment) supporters, community workers, support group facilitators, health promoters, working with children or elderly care, and working with HIV (Haricharan et al., 2014). Similarly, Padarath and Friedman, (2008) study that investigated clinic committees at primary health care level in South Africa showed that their 175 participants reported having valuable previous experience that they use in their work as health committee members.

In this study, the CHF members previous experience influenced that way they operated as CHF representatives as these roles informed, overlapped and blurred with the role of being a CHF representative. Similarly, Haricharan et al., (2014). reported the overlapping of roles that resulted from the participants work history, which could have strengthened their functionality as community health forum representatives. The CHF's health-related work history made it easy for most CHF members to operate as all-rounders in the community (Haricharan, 2014). Besides, these community members were sometimes approached by facility managers and entrusted with being CHF members at the local health facility due to their advocacy skills (Haricharan, 2014).

5.1.2 Current roles of CHF representatives in the community

The participants agreed that their current duties as CHF representatives primarily required them being the voice of the community as well as making sure people were being treated fairly at the local health facility. However, upon probing about their roles and functions, CHF representatives remained vague and the CHF leadership mentioned that no policies were in place that explained in detail the vision, ethos, roles and function of the CHF. The reason for this could be that this research was conducted at a time when the Western Cape Government just amended the Western Cape Health Facility Boards and Committees Act (no 4 of 2016). Many community members, including study participants, were unhappy with this Act, which elicited a public march to show the community's discontent in the top-down approach the Act has taken in the appointment of committee members, which takes the ownership away from the community (Stinton, 2015). It is important to highlight the above mentioned details about CHF and health committees simply because the references used in this current study speaks about health committees in most publications, but not about CHF, even though in colloquial terms CHF and health committees is the same structure of local accountability existing at different times.

Due to problems with the regulations, participants of this study were unsure if the Western Cape Government understood the importance and value of community participation through health committees. Padarath & Friedman (2008) research aimed at assessing the function and effectiveness of health governance structures in the form of clinic committees to identify opportunities for strengthening their role in governance. Their study was conducted by seeking to

ascertain the number of clinic committees/health committees associated with public health facilities in all nine provinces in South Africa (Padarath & Friedman, 2008). The research on clinic committees in South Africa showed that the Western Cape had a below-average coverage of 48% of clinics reporting to have health committees in 2008, which was an increase from 28% in 2003 when health committees became a legal requirement stipulated in the National Health Act (Padarath & Friedman, 2008).

In the current research, the study participants were disappointed by the level of disrespect they received from some facility managers. Participants felt that facility managers were not aware of the importance of consulting and engaging with the community members or leaders before changes were made at facilities. Despite the poor relationships between CHF representatives and facility managers, participants displayed a resilient attitude to continue being health advocates and escalating unresolved complaints of patients to facility managers. This is similar to what the following writers discovered in their research results which depicted clinic committee members as leaders who advocated for the rights of the people in their local communities (Glattstein-Young, 2010; Potts & Hunt, 2008).

The current research results showed that at the sub-district level the CHF members seemed clear of their role and function. CHF at the sub-district had noticed and pointed out the barriers to meaningful interaction between the pharmacist and patient. CHF from the sub-district was interactive and was inspired to challenge the health system and made recommendations on the current health system on improving pharmacy services rendered to patients. Similarly, Haricharan's, (2012) findings of the health committee, CHF metro and sub-district show that there is an accountability structure at sub-district and at a sub-district level, thereby clarifying the CHF members' roles and responsibilities.

CHF representatives shared their frustration encountered during their monthly meetings as part of a community health forum of a health facility about not receiving support from the ward councillor. Study participants also described their role as challenging in trying to keep the local ward councillor accountable for service delivery concerns at the local health facility. CHF representatives kept the local councillor accountable to improve health services for community

residents. CHF representatives ensured that they were “*watchdogs*” for equitable health service delivery for all patients. Similar findings were reported by Padarath & Friedman (2008) and Haricharan et al., (2014) where participants reported that the ward councillors were not supportive and caused frustration to the clinic/health committees (Padarath & Friedman, 2008). The poor participation of ward councillors in health committees has been documented extensively (Loewenson et al 2004; Glattstein-Young 2010; Padarath & Friedman, 2008; Haricharan, 2015). The major reason why ward councillors seemed not to adhere to CHF/health committee/ Clinic committee is simply because health governing structures (CHF/health committee/ Clinic committee) operate without a policy that would show guidelines, role and function and explain the role of the ward councillors in their meetings (Loewenson, et al., 2004; Glattstein-Young, 2010; Padarath & Friedman, 2008; Haricharan, 2015). The lack of policy that guides CHF/ clinic/health committee impact negatively on the health governing structures in this way: lack of clarity on roles, lack of political will, powerlessness, confusion, lack of commitment, lack of recognition of CHF at local health facilities and disengagement of CHF members (Haricharan, 2014).

Despite gaps in health policy, study participants could still relate stories of advocating for and assisting patients at health facilities and communities. CHF representatives felt that they could make a positive impact to improve the health status of many in the local community. As an example, CHF members on busy days at the health facility, they would frequently ask patients on “*how long have patients been waiting*”. CHF members do this to ensure that patients do not wait long and unusual times without corresponding communication from the health staff explaining the reasons for long waiting times. Similarly, what Padarath & Friedman found in their study where a member of the clinic committee from the Eastern Cape shared that their role as clinic committee is to ensure that nurses work full hours and ensure that there are no conflicts between health staff and patients (Padarath & Friedman, 2008).

In the current study, the CHF shared that, when a patient lodge a complaint the CHF member will further investigate the concern and subsequently inform the facility manager. CHF shared that they have limited power when dealing with patient complaints on their own, hence some unresolved issues were taken to the facility manager. Similarly, Haricharan’s research found

clinic/health committees to have limited power to resolve patient complaints on their own, as facility manager must be involved. Haricharan found that the reason why clinic/health committees may not govern or rule on matters at facility level is a result of policy vacuum which led to unclear and blurred roles regarding the functioning of local health committees. Even though community leaders have the potential to positively influence health matters at a health care facility, the lack of governing policies robs them of effective leadership and implementation (Haricharan, 2014).

Potts's, (2009) research study aimed at drawing up recommendations on how to strengthen health committees and community engagement. Recommendations were included advocating that communities should be given equitable access to active and informed engagement with government in health-related decisions that affect their communities. This means that the role of local leadership is imperative to function as the voice of the local people in the health system at the sub-district level. Furthermore, Potts stated that the process of engagement should be fair, transparent and accountable. Similarly, Potts and Maluka & Bakagile's research findings show that active engagement with community leaders improved the health services: daily services at the hospital improved, nurses who had a record of disrespecting patients were disciplined and health committees improved the health status of the community through health education (Potts 2009; Maluka & Bakagile, 2015). Potts agreed that the intention behind community engagement is to heed the voice of the community in the decision-making process affecting their health (Potts, 2009).

Glattstein-Young (2010) whose research explored the relationship between participation and the right to health and drew lessons on best practice for community participation from health committees in South Africa's Western Cape Province. Her dissertation findings provided evidence supporting an important inter-relationship between participation and the right to health that is heavily influenced by elements of power. Glattstein-Young's findings also pointed out that the community participation put into practice by engaging the community through health committees in the greater Cape Town area improved service delivery at health facilities (Glattstein-Young, 2010). Similarly, Maluka & Bakagile (2015) whose research aimed at describing why some health committees performed better than others in Tanzania found that

health committees who were communicating efficiently with community members were better. However, the local communities that did not have health committees had no improvement of health services when compared to local communities who had health committees.

In this current research CHF representatives acknowledged how fulfilling that they were serving the community and making a meaningful difference in patient's lives and the community. Loewenson et al. (2004) whose research aimed at assessing the impact of health committees on its performance and resource allocation in three sub-districts in Zimbabwe (Loewenson et al., 2004) found that health committees in Zimbabwe improved both health outcomes and health service delivery. It was also discovered that health committees were influential and meaningfully contributed towards finding successful solutions to health problems that existed in communities (Loewenson et al., 2004).

Baez and Barron (2006) whose literature review investigated the community's voice and role in the district health system in East and Southern Africa showed how community involvement in Malawi, Kenya, and South Africa, had resulted in improved health services, improved service delivery, increased access to health facilities at primary health care level and imparting health education to the community (Baez and Barron, 2006).

5.1.3 Role of CHF representatives in the service-learning program

For the current research, the participating CHF representatives were requested to observe pharmacy student activities at their health facility. The majority of CHF representatives managed to locate and observe students at their local health facilities. Students were mostly observed in a passive manner without interference or guidance by the CHF representative so that patients would not be disturbed at the health facility. The passive technique used in the current study contradict Mitchell's (2008) argument for critical service learning, which advocated for community members to exchange roles with lecturers i.e. community members serving as guides and teachers for students during service-learning experiences. She suggested that community members take an active role in teaching and assessing both the lecturers and students about the lived experiences in that community (Mitchell, 2008). Mitchell stated that all participants must be informed and willing to engage in service relationships if authenticity is to be developed with

community members. She also advocated for the community to be valued as an equal partner, where community members could move between roles of student and teacher (supervisor) in the university-community research project (Mitchell, 2008).

However, Mitchell's research was written in the context of the developed country's dyad partnership perspective and may oversimplify the university community relationship when compared to the current study conducted in a developing country's triad partnership. In terms of the current SLiP program and the nature of the triad partnership, the pharmacist in the health facility's pharmacy is the primary supervisor and teacher for the pharmacy students. In most instances that pharmacy is isolated from the rest of the facility and it thus makes sense that those CHF members who were able to observe students at the health facility reported that students were observed to be mostly in the pharmacy doing dispensing related tasks. The quality of the relationship between the supervising pharmacist and the CHF representative in the study thus influenced the type of engagement and ultimately learning experiences of the students. At facility C, where the relationship between the CHF representative and the pharmacist was good, she could interact with students constructively, leaning more towards the type of interaction Mitchell (2008) was advocating for. Contrarily, at facility M, where there was a disagreement between the pharmacist and the CHF representative, the pharmacist denied the CHF representative access to the students, thereby prohibiting accessible community engagement learning opportunities for the students.

Meaningful interaction between the CHF representative and students occurred in facility C, where students interacted with CHF members and the pharmacist. The CHF representative together with facility manager planned and hosted a health educational talk at the community hall and the CHF at facility C invited pharmacy students to share their pharmaceutical knowledge on specific topics. This is similar to Mitchell's (2008) views about critical service learning and how the community needs to play an active role by instructing students of how to do specific tasks. Additionally, community members may also be asked at times to lead and supervise an orientation of students, verify service hours, and meet with students to give evaluations of student's service (Mitchell, 2008).

Further to the primarily on-site role of CHF representatives, the KI had both on campus and on-site roles. The KI's on campus roles for SLiP included the orientation of students prior to going to facilities as well as reflecting with students when they came back. The KI would orientate students by informing them about the kind of communities' students will be placed at to serve. In most instances, the KI informed students with an indigenous knowledge perspective of how pharmacy students should approach the local communities and she also covered safety issues. Proper orientation of students to the context of local service-learning communities have been highlighted as an important aspect to prepare students both psychologically and emotionally for community conditions (Cipolle, 2004). Prior orientation for service learning is also important to prepare all role players including community members or supervisors, students, facilitators, and lectures to understand their function and duty. This is an ideal example of what must happen in critical service-learning pedagogy (Mitchell, 2008).

The on-site role of the KI included supervision to check on students and to make sure students and patient were treated well at the sites. She would address any problems identified during her supervision visits either on site or at a health form meeting depending on where the matter could be solved.

5.2 Health System

Participants' comments of the health system mainly pertained to the pharmacy in the facility, because that was where students were mostly located. The discussion of this theme centred around the current health system structure, culture, and limitations as viewed by CHF representatives. The health system has been observed to have a culture that may impact negatively on students once they graduate. Participant 16 who had served for many years on the Metro Health Forum observed how students get impacted by the culture in the health system, once pharmacy students graduate and enter the health system. Pharmacy graduates get moulded into the practice of the current stagnant culture that is pervasive in the health system instead of becoming change agents needed to strengthen the health system. Similarly, Burch & Reid have questioned if health professional education is really robust and relevant enough in South Africa to produce graduates who are 'fit for purpose' i.e. able to improve the current system (Burch & Reid, 2011).

Frenk et al. (2010) advocated for reforming health professional education by transforming the education system to strengthen the health system in an interdependent world. They recommend that health education institutions focus on transformative learning and interdependence in education. Health education institutions should not only focus on teaching technical skills and ethics to develop content experts and health professionals, instead they must focus training future graduates on the health needs of the population to produce change agents that can eliminate inequities and strengthen the health system. Interdependence in education refers to the reciprocal partnerships between the health system and health education systems as well as dismantling professional silos to embrace collaborative health practice (Frenk et al., 2010).

More recently, the Academy of Science of South Africa (ASSAF) released a consensus report compiled by a panel of health education experts who were tasked to evaluate the health professional education in South Africa and to provide evidence for decision-makers on how health professional education might be transformed to improve the health of the nation. The report aimed at addressing the broader value of health sciences education from bottlenecks in the system and looking at how the future health sciences education system could be financed and regulated (Academy of Science of South Africa, 2018).

The report outlined the conceptual framework used to guide the envisioned process where population health and wellness needs determined the required health services which should define the health care professional skills and drive the educational content (Academy of Science of South Africa, 2018). The conceptual framework outlined the need for interconnectedness between health and higher education, whereby population health needs and burden of disease should prescribe the required health system and services which, in turn, should inform the desired health professional skills mix. Health professional education should facilitate the acquisition of relevant knowledge, skills competencies, and attributes needed to affect the scope of practice required for different health professionals. The health system may advance training of community members and service providers in rural and urban underserved settings as the key teachers of students in such areas (Academy of Science of South Africa, 2018).

Community orientated primary health care was recommended as a strategy for service and learning. This approach meets all stakeholders needs in underserved rural and urban settings. As evidence of social accountability, health science faculties must demonstrate the impact they have on service delivery through the distribution of their graduates to primary health care, rural and urban underserved communities (Academy of Science of South Africa, 2018). Similarly, Mayosi and colleagues reiterated the need for health professional education at higher education to produce graduates well trained and skilful to serve the underserved communities (Mayosi et al., 2012). Local community members in most cases are underserved yet they rely only on public health services (Mayosi et al., 2012).

In the current research, study participants felt that the pharmacy undergraduate curriculum did not prepare future pharmacy graduates to adapt to the challenging realities of working in a health system that has a poor service delivery culture. Indeed, the poor service delivery was already noted in a study that investigated pharmacy students' responses to incidents of social injustice during their service learning experiences in public sector primary healthcare facilities in Cape Town, South Africa (Bheekie et al., 2016). Findings displayed the inability of many pharmacy students to speak out against incidents of discrimination between service providers and patients. In addition, students also noted structural barriers with in facilities (the pharmacy window) that seemed to perpetuate these inequalities (Bheekie et al., 2016). Similarly, Rowe, (2015) whose research explored the characteristics of capable healthcare professionals in South Africa advocated that graduates as healthcare professionals must be more than competent. Health professional graduates must demonstrate an ability to adapt to dynamic situations and continually improve the performance of service delivery to patients served by the health system (Rowe, 2015).

5.2.1 Pharmaceutical services

The study participants mentioned an overwhelming health system culture of poor service delivery that could be attributed at least in part to structural limitations of the pharmacy and regulatory stipulations regarding pharmaceutical services. As such, participants noted that the pharmacy was a restricted place that was impossible to access due to strict laws governing medicines. This made it difficult for them to address or solve problems relating to the pharmacy.

These problems included poor communication and relationships between the patient and the pharmacist at the dispensing station. Participants added that patients did not receive appropriate counselling from the pharmacist simply because of long queues at the pharmacy. Participants mentioned the local community needed appropriate counselling during dispensing. Similarly, Bradley et al. (2008) who investigated professional collaboration between general practitioners and pharmacists delivering pharmaceutical services in Manchester (United Kingdom) showed that the interaction between a pharmacist and patient was minimal during the time of dispensing medicines (Bradley et al., 2008). The lack of meaningful interaction between a patient and pharmacist may put the patient at risk for adverse drug reactions due to lack of appropriate drug information (Bradley et al., 2008).

Participants of this study further elaborated that, one of the reasons that made it difficult for pharmacists to communicate effectively with patients was due to being overburdened with work at the overcrowded facilities. Similarly, Mburu & George (2017) who reviewed challenges faced by health care personnel against government strategies aimed at attracting and retaining health personnel in these underserved areas in KwaZulu Natal in South Africa also found that pharmacists at facilities were overburdened with work such, which led to decreased time given to patients. They reiterated the facts that there was a lack of human resources in underserved areas, which was caused by poor working conditions, poor incentives and overburdened staff (Mburu & George, 2017).

Participants mentioned the pharmacy wall/window was a barrier to effective communication between the pharmacist and patients. Similarly, Bradley et al. (2008) also reported that the window at the dispensing station was an obstruction to effective interaction that should occur between the pharmacist and patient. Participants also felt that the setup of the dispensing station itself compromised the privacy of patients receiving medicines. Participants further claimed that the lack of privacy caused at the dispensing window might be a reason why patients just want to take the medication and go without listening to the pharmacist who relays information about how the medication should be taken. Furthermore, Wado et al. (2015) who explored pharmacist-patient communication barriers in dispensing practice, in a hospital setting in Ethiopia, agreed that poor communication led to clinical consequences, especially in geriatric patients because the

dispensing window becomes an obstruction between geriatric and pharmacist when communicating at the dispensing station (Wado et al., 2015). The authors recommended that pharmacists provide appropriate, clear, understandable and relevant information to patients about rational medicinal use as patients often attributed their failure to adhere to medication to communication barriers (Wado et al., 2015).

The art of dispensing includes clear communication and counselling. Participants shared that pharmacists do not spend time counselling them on the rational use of medication. Participants shared that the dispensing window may not be an appropriate space or environment for appropriate counselling. Participants shared that most geriatrics struggle to hear on the other side of the window. Participants then suggested that the Department of Health may set quiet and private rooms where appropriate counselling may be done by the pharmacist to patients. Similarly, Wado et al. advocated that counselling is a critical step in pharmaceutical services that enhances the rational use of medicines by patients (Wado et al., 2015).

In the current study, all participants appreciated educational talks that were done by third-year pharmacy students at health facilities and they requested more talks about the rational use of medication. The community might be appreciating mostly the educational presentation done by students at health facilities and have the opportunity to share their medicine-related concerns simply because pharmacists seem to be overburdened by the number of patients, they need to serve each day at the health facility.

5.2.2 Chronic clubs

Study participants thought that the problem with lack of medical information could be bridged by the pharmacist engaging in the chronic clubs, this would also remove the barrier of the window between the pharmacist and patient. Study participants felt that if all patients could be allocated to a chronic club by each facility it might improve the health status of each patient who is taking chronic medication. Participants also thought and felt that if the Department of Health Western Cape could make chronic clubs a standardized service in all health facilities in the Western Cape. The participants reasoning behind this recommendation was due to the positive feedback they had received from the community and testimonies from patients of how attending chronic clubs

improved their health status, especially on adhering to chronic medicines. Chronic clubs by definition extracted from Western Cape Government are “*The Chronic Diseases of Lifestyle Chronic Clubs are those service areas of the CHC where the chronic (long-term) and clinically stable patients are managed. The clubs see patients every 6 months on average, to make the visits as convenient as possible, with minimal disruption to the patient’s life. This way, patients are more likely to remain in care, which is the aim of treatment “to keep patients in a stable condition at the primary care level and to prevent complications and unnecessary hospital admissions”* (Draper et al., 2013: Pg.5)

Participants envisioned a chronic club as space where a pharmacist and patients would sit and discuss the treatment that patients are on, where the pharmacist will discuss potential side effects, drug to drug interaction or drug to food interaction and explore potential adverse clinical consequences of non-adherence to medication. Similarly, Grimsrud et al. (2015) whose search is about an *implementation of community-based adherence clubs for stable antiretroviral therapy patients in Cape Town, South Africa*. Grimsrud et al. found that chronic clubs did improve the health status of chronic patients who were stable and adhered to their medication. Similarly, other studies (Puoane et al., 2012; Grimsrud et al., 2015) shared that chronic clubs improved many patients’ health status. Both research studies were conducted in Cape Town communities where the current study was conducted, with participants from health facilities around Cape Town. Therefore, the findings of the above-mentioned studies are relevant and insightful for the current study (Puoane et al., 2012; Grimsrud et al., 2015).

Participants in the current study voiced their concerns about the lack of pharmacy personnel at some chronic dispensary unit (CDU) stations which are off-site distribution centres located outside the health facility, either in a church hall or community hall. In the past, CDU stations were always at the health facility but because of geriatrics and immobile patients, the Western Cape Department of Health decentralized the CDU services to meet the needs of all those patients. The participants purported that the CDU “*off-site*” distribution centres were not staffed by pharmacists or pharmacy personnel but by NGOs. The participant felt that the absence of pharmacy personnel at the CDU distribution site was a gap and patients did not receive the appropriate pharmaceutical counselling each patient needed upon dispensing. Participants also

shared that as means of decentralizing services, NGOs were now responsible for recruiting and employing some of the community residents and induct them to be “*medicine-runners*” (Boswell et al., 2018). Medicine runners were tasked to collect CDU medicine parcels for the bedridden patients or immobile patients for which patients were required to pay a R30 service fee.

5.3 Students’ influence on the community

This section of the discussion focuses on students, the activities that they were involved in at the facility and the effect these activities had on the patients and community from the participant’s perspective. For this section, there was much consensus among the observations noted from the study participants. Students’ activities included dispensing of medication to patients at the pharmacy, patient education at chronic club sessions and patient counselling at the dispensing window and Chronic Dispensing Unit (CDU). Participants also described the professional and empathetic manner in which students performed the aforementioned activities despite the high-pressure environment of the pharmacy, and, language barriers, which students solved by working in multilingual groups where they translated medicine-related information for one another when serving patients.

5.3.1 Student activities

Student activities were noted by study participants following their on-site at the facilities. Observational accounts differed between participants depending on whether participants were allowed inside the pharmacy or if they remained on the outside. The KI and a few other CHF representatives observed pharmacy students inside the pharmacy, compared to the rest who had to observe them from the outside of the pharmacy.

Participants noticed the effort of students who counselled patients properly during the dispensing of medication either at the pharmacy or at the CDU. Indeed, both the KI and CHF representatives consistently praised pharmacy students for being excellent communicators when dispensing and counselling patients. They also mostly admired the respect that these students showed towards the patients. This phenomenon was also noted in a study by Bheekie et al. (2016) which analysed student reflection reports describing equity in this service learning programme as pharmacy students were observed to be respectful and empathetic toward patients (Bheekie et al., 2016).

Participants reported that third-year pharmacy students excelled at service activities for chronic clubs through patient education on the rational use of medicines, by creating awareness on how the medication should be taken and why. Participants thought and felt that pharmacy students may maximize their services at chronic clubs by improving the health and the rational use of medicines. Participant 6 mentioned that the pharmacist at facility D implemented as an intervention that taught patients the names of medicines. The pharmacist at facility D designed a feedback form, on which patients were encouraged to write the names of their medicines they are taking and note potential side effects that they might have experienced. These feedback forms were reviewed monthly by the pharmacy personnel when patients came back to the health facility to pick up their CDU parcels for the next month. The intervention pioneered by the pharmacist at facility D is a practical example of what a socially accountable pharmacy graduate or “*change agent*” could initiate in local communities (Boelen, et al., 2013). The ability to think outside the box and pioneer a project that is designed to improve the health status of each patient and meaningfully address service gaps due to a shortage of human resources at the public health clinics. Being a socially accountable pharmacist does not merely mean a medicine expert or custodian of medicines, it means a pharmacist who can identify gaps and relevantly address social health needs existing in that specific community.

5.3.2 Outcomes of student activities

Participants noted the respect and the competency displayed by third-year pharmacy students when serving patients at health the facilities. Patients seemed pleased by the services offered by pharmacy students, so much so that some patients preferred being served by students as opposed to the other staff members at the pharmacy. Similarly, a previous study that analysed pharmacy student service-learning experiences found that pharmacy students also found that facility staff disrespected patients as opposed to them trying to be more respectful towards the patients, especially the elderly (Bheekie et al., 2016; Van Huyssteen & Bheekie, 2017).

The KI further commented on the professional conduct third-year pharmacy students displayed during experiential learning at local health facilities. The KI reiterated that pharmacy students should realize while visiting the local service-learning site that public health pharmacies unquestionably need pharmacists who will ensure that the health needs of each patient are

relevantly addressed regardless of the lack of resources that currently employed staff complains about. Pollack (2015) agreed that service-learning should be seen as an investment towards the future realities of a student and it also serves to translate theoretical knowledge into practice.

One of the future realities that students were exposed to was to dispense medicines while coping in a high pressure work environment. Participant 8 observed how pharmacy students were slow compared to the other staff while dispensing. She noticed that pharmacy students took time to read the patient folders, checked every medicinal item and dosages before dispensing. The Pharmacy Act 53 of 1974 defines dispensing as an interpretation *and evaluation of a prescription, the selection, manipulation and compounding of medicine, the labelling and supply of medicine in an appropriate container according to Medicine Act and the provision of information and instruction by a pharmacist to ensure safety and effective use of medicine by the patient and dispense has the corresponding meaning* (South African Pharmacy Council, 2012, pg. 59). Indeed, literature has shown that the dispensing process requires many technical and high-level cognitive thinking abilities (Croft et al., 2018). Pharmacy students were thus slow because such practical exposure occurs only at the third year of study and they were still learning to perform this technical and cognitively challenging process.

Furthermore, as opposed to simulated practice on campus, where students are encouraged to ask questions and are given adequate time to practice all aspects of the dispensing process, this practice environment was time limited as described by participant 3 who was also a home-based carer with clients for whom she fetched CDU parcels at facility B. She was granted intermittent access inside the pharmacy so that she may locate her clients' CDU parcels. She had observed third-year pharmacy students on a particularly busy day at the pharmacy when the pharmacist at facility B had tasked third-year pharmacy students to help out with dispensing. The participant noticed that the busy atmosphere in the pharmacy and crowded pharmacy waiting room made students tense because students were working with their heads facing down. This could have been as a result of pharmacy students had to focus and pay attention to dispensing tasks. Similarly, van Huyssteen and Bheekie (2017) found lack of time due to high workload as a major theme student reported on, while on their service-learning experience. Some students tended to

become totally overwhelmed by the pressure and reported to forget everything they learnt on campus (van Huyssteen & Bheekie, 2017).

Participants reported that it was easy for patients to notice and complain about how slow students were while dispensing and counselling patients at the dispensing stations. Indeed, students have reported previously that patients did not always appreciate their counselling and just wanted to take their medicines and leave, partly due to them not being used to being counselled by pharmacy staff and partly because they had been waiting for such a long time (Bheekie et al., 2016; Van Huyssteen & Bheekie, 2017). There is a scarcity of literature regarding the patient's understanding of the complex and higher order thinking skills needed in the dispensing process (Croft et al., 2018), because thinking (and the complexity thereof) is not a visible activity that can be viewed through the dispensing window. Patients are product (get my medicine and go) centred and are sometimes ignorant of potential health risks caused by administering a wrong dose. Similarly, to what Croft et al. (2019) were portraying in their study (Croft et al., 2018).

Despite some ignorance, some participants did mention that they observed students identifying errors in the medication and took action to correct it. Accurate dispensing potentially helps towards correcting mistakes made on prescribed medicines, correcting the number of doses given to patients per day that the patient could potentially be exposed to. It is, therefore, a recommendation or a posed challenge to the Department of Health and pharmaceutical services to consider educating or raising awareness to patients (community) regarding the appropriate steps (Croft et al., 2018) of dispensing done by pharmacy personnel.

5.4 Service-learning program and pharmacy curriculum.

Participants thought that overall the pharmacy students were providing a valuable service at the health facilities and, while pharmacy students were at the health facility, they tended to improve the services rendered by the pharmacy, at least by the end of the week when students were familiar with operational procedures. However, participants also noted that the time spent at the facilities was too little to make a sustainable difference and that students could also benefit from spending time engaging with the community located in the vicinity of the facility.

5.4.1 Community representative's perception of the service-learning program

The KI believed that the SLiP program benefitted most communities that pharmacy students have served, especially on educating the public about the rational use of medication. Similarly, the rest of the participants were also pleased with the services provided by third-year pharmacy students at their local health facilities, especially the students' talks and presentations about the rational use of medicines. The definition of rational use of medicines as defined by WHO, (1985) *"patients receive medications appropriate to their clinical needs, in doses that meet their requirements, for an adequate time, and at the lowest cost to them and their community,* (WHO, 1985). Worldwide, (50%) of medicines are prescribed, dispensed, or sold inappropriately. While the average number of patients fail to take them correctly and one-third of the world's population lacks access to essential medicines (WHO, 2002). The WHO definition of rational use of medicines clarifies the need for pharmacists at local health facilities and the definition consolidates the need for appropriate dispensing and counselling of patients upon receiving medication. Participants of this study thought the educational presentations by pharmacy students at health facilities covered the absence of appropriate counselling for chronic patients at health facilities.

A limitation for student learning that the KI noticed during her observations of students at health facilities was attributed to the fact that students were most times separated from the pharmacy staff. In most cases, students were inside the pharmacy working on their service-learning projects. The KI attributed this to the fact that public health pharmacy queues of patients are always long and pharmacists might be too busy to mentor or facilitate the learning of a student. She thought that by leaving students to focus on experiential projects they were denied the opportunity to get immersed in realities of working at a public health pharmacy. Pharmacists neglecting their teaching responsibilities at very busy facilities have also been reported by students previously (van Huyssteen & Bheekie, 2017).

The key informant shared that student exposure to different learning opportunities within and outside the pharmacy walls depended on the availability of the SLiP facilitator or pharmacist on duty. Similarly, a study was conducted through a survey about volunteering pharmacy preceptors to pharmacy students during experiential learning in the United States (Maryann et al., 2010).

The findings of this study presented insightful information for pharmacy educators and experiential curriculum designers to understand the dynamic factors of placing pharmacy students at a certain location, practice type, and the populations densities affect experiential learning, preceptor time-quality issues between a pharmacy student and how site compensation inspired necessary action to improve quality of student experiences (Skrabal et al., 2010). Preceptors at private community clinics spent more quality time with pharmacy students as opposed to public practices that had requested more pharmacy students (Skrabal et al., 2010). This is relatable to the current study in that the above authors' findings are similar to these research findings in that the time a preceptor spent with the pharmacy students depended on the preceptor's receptiveness and willingness to avail themselves. Our results showed that some pharmacists who were SLiP facilitators spent and invested appropriate time teaching and engaging with pharmacy students in pharmaceutical duties. On the contrary, there were also facilitators that did not invest much or planned to engage pharmacy students in pharmaceutical duties at the pharmacy. At those health facilities, students simply sat at the back of the pharmacy and worked on their SLiP project presentations, or fulfilled mundane tasks such as pre-packing medicines.

5.4.2 Recommendations for the current pharmacy curriculum

The two primary recommendations for the service-learning program were to expand the program from the facilities into the community and to increase the time spent in communities. The participants of the study indicated that the experiential learning time spent by third-year pharmacy students was not enough. They felt that it was not adequate to fully train and give students time to partner with community residents to address the health needs or issues that existed within the local communities that students might find themselves working in during internship or community service.

In particular, participant 3 who was an experienced home-based carer at facility B recommended that for pharmacy students to relate to real grassroots health issues in local communities, they should do home visits with home-based carers so that they may learn about the underlying issues that caused patients to default on medication. Participant 3, who was an experienced home-based carer employed at an NGO, saw an opportunity for the School of Pharmacy to partner with

NGOs to promote better learning outcomes of students by increasing community participation that could lead to positive community outcomes. Participants made recommendations on how pharmacy students may address health needs in local communities in partnership with other community stakeholders and showed an interest in partnering with pharmacy students to further address health concerns through community empowerment initiatives regarding rational use of medicines. Participant 17 specifically challenged UWC to partner with the sub-district CHF looking towards the future to raise more awareness about the correct use of medicine. In terms of pharmacy educational research, it has also been noticed that students are more prone to work in an environment that they are familiar with. Indeed, a pharmacy school from South Africa found that students who came from rural areas were more likely than students from urban areas to show a willingness to work in rural areas after they graduate (Modipa & Dambisya, 2008).

The suggestion from participants to get students involved in the community is in line with the focus on primary health care that is currently being driven by the National Health Insurance. Similarly, Bradley et al. (2008) advocated that pharmacist's expert knowledge of medicines is a scarce skill that can add valuable benefits if better employed at primary health care level (Bradley et al., 2008). At primary health care level, where diagnosis and decision making of which medicinal regimen is suitable for a patient is made, a pharmacist must be part of those decision-making steps (Bradley et al., 2008). Despite the importance that the CHF representatives attributed to students getting involved in community, it seems pharmacy education in general are not on par with primary health care yet as both African and South African studies show the career preference of pharmacy students towards the hospital pharmacy sector (i.e. secondary level of care) (Modipa & Dambisya, 2008; Breedemariam et al., 2014; Ubaka et al., 2013).

The second recommendation related to the increase in the duration of the service-learning program. Participants highlighted the fact that due to the lack of time; students could not address the health concerns of that local community they were placed at. One week, per semester spent by students in the local community, mimics traditional service learning, which neglects activities aimed at addressing the structural roots of health problems in the local communities (Robsin, 2000; Mitchell, 2008). The aspect of additional experiential learning time in the undergraduate

curriculum has been a debate in academia in terms of when to start i.e. early experience, and, how long to stay there to make an impact (Celio et al., 2011).

The key informant who has been part of SLiP for fifteen years alluded to transforming the current pharmacy curriculum towards an equal balance between experiential and theoretical learning. The pharmacy curriculum needs to be transformed into being more community based, and well balanced as opposed to being skewed towards traditional science. Similarly, Mitchell (2008) advocated for critical service learning that balances experiential learning and theoretical learning. A balanced time for both experiential and theory may produce socially accountable pharmacy graduates who have meaningfully interacted with fluid professional worlds as opposed to the ideal theoretical world, which might not be the best option for a developing country with limited resources.

Literature supports KI's quote that if pharmacy students are placed at the local communities for service-learning sites for a period longer than a few months will sensitize pharmacy students towards a social change orientation. Students will learn to critique the acts of social injustice and address the existing unequal distribution of power caused by the status quo. Students will be more conscious about cases of that nature and gain an ability to critique the existing social systems and learn to develop authentic relationships with relevant stakeholders in the community they serve. Most importantly the longer the time that students spend in communities will inherently challenge their thinking abilities and improve the students' problem-solving skills. The longer the time that is spent by pharmacy students in local communities doing experiential service-learning will sensitize students towards a social justice orientation and learn ways of addressing social injustice (Mitchell, 2008; Reeve et al., 2017)

Mitchell (2008) clarifies the importance of students spending more time visiting communities as social change programs take time to establish, let alone building trust-based relationships with the members of the community. Such authentic engagement cannot be done in a week. Forbes et al. (1999) adds on to say when an institution aspires to empower students into being change agents through experiential service learning, those students must be practically trained for community engagement and on how to build rapport with the local communities, students must

consistently be exposed to opportunities of raising public awareness regarding health issues affecting communities. Similarly, to SAPC SAQA standards stipulates that pharmacy students are expected to complete 400 hours of experiential learning during their four years of undergraduate study. (SAQA, 2012). Indeed, McCartney & Boschmans, (2018) showed that introducing pharmacy undergraduate students at Nelson Mandela University in Port Elizabeth (South Africa) to a hospital-based experiential learning program improved students' ability to integrate pharmacology expertise during clinical practice exercises (McCartney & Boschmans, 2018). McCartney & Boschmans's study is relevant as it underpins the current study's aim which contextualises the South African service learning pharmacy undergraduate curriculum.

5.5 Social accountability

The primary purpose of the SLiP program is to prepare students to become socially accountable future graduates. In terms of social accountability, there should be two primary shifts in how an educational institution conducts itself. Firstly, there should be involvement of a wide range of internal and external role-players in the development and assessment of the school's activities, to ensure relevance, equity, quality, and effectiveness. Secondly, a monitoring and evaluation framework is required to track educational outcomes in the health system in defined local populations, which the school services, thereby demonstrating health education quality and effectiveness to society (Larkins et al., 2013; Bheekie et al., 2019).

In terms of role-players, the initial service-learning partnerships were based on a core triad between the university, services, and community. Social accountability expands towards multi-stakeholder partnerships, which include other community stakeholders, policymakers, professional councils, and other educational institutions to ensure the values of efficiency and relevance in pharmacy education, research-based evidence around the pharmacy profession and service delivery programs as means of making a sustainable impact (Boelen et al, 2012). Indeed, this was one of the recommendations of the study participants which included the School partnering with more community organizations.

The importance of the development of our current partnership with CHF representatives aids us in moving closer to the values of relevance and equity. Relevance is the extent to which the

school trains students to prioritize and address community health issues affecting the vulnerable people and the social determinants of health. Equity refers to students being taught to address social injustice in the health system at the primary health care level where the pharmacist is needed the most.

The problem that the results of this study identified in the service-learning triad partnership showed that the relationship between the services and community is inconsistent between facilities and mostly of poor quality. This begs the question: could/should health education institutions intervene to improve the services community relationship? Advocacy for better community participation in the Department of Health could be one way that the School could promote social cohesion. A health school that seeks to align its values towards social accountability must demonstrate an understanding of national, provincial and local challenges or opportunities for the health system. The other question that sprouts from the poor relationships between partners in this study are how interactions are limited by the culture and structure of the systems in which they operate. Understanding systems is imperative when two such systems are aligning and aiming to strengthen one another.

Indeed, UWC as part of the higher education system still largely reflects a socially responsive (Bheekie & van Huyssteen, 2015) approach and its strategic document still largely speak to social responsiveness, not social accountability. This institutional orientation limits the ability of the School to align its curriculum to produce socially accountable graduates. Another institutional barrier mentioned by the KI in this study speaks to the silo approach still embedded in the university system which leads to the impression that the School of Pharmacy is misplaced at the Faculty of Natural Science, instead of the Faculty of Community and Health Sciences. Consequently, this silo orientation lead to pharmacy's exclusion from interprofessional learning opportunities with other health professional schools also doing intensive community work through service learning.

The second fundamental change that distinguishes a socially accountable institution from a socially responsive one is its empirical monitoring and evaluation to produce evidence on the outcomes of the institution's activities (Boelen et al, 2012). Quality and effectiveness can only be

determined if a monitoring and evaluation framework for the institution's service, research, and teaching activities are measured to determine a return on investment. An evaluation framework in the form of a logic model, based on the CPU model (Boelen et al., 2012) has been developed by (Larkins et al., 2013) with medical schools using it to benchmark their aspirations towards social accountability.

Effectiveness would mean that UWC-SLiP aims at making the greatest impact on the local community's health issues while partnering with other existing stakeholders in the community for the best results. Equity in health is evidenced by showing the community's evaluation of the service module and how it has prioritized the health needs of the people (Boelen et al, 2012). The value and significance of partnerships will be assessed by how frequently partners interact in planning, implementation and assessing the UWC-SLiP experiential program locally and provincially (Boelen et al, 2012). The partnership with the CHF thus needs to be nurtured and sustained to measure the impact of SLiP. The partnership also needs to become a more equitable interaction to evaluate the impact of the SLiP program by observing the services rendered by students through experiential learning in various local communities. Only then will SLiP have research outcomes focused on the local community participation towards SLiP thereby offering the research evidence towards improving the SLiP program.

5.6 Limitations of the study

This generalizability of the study findings is limited due to the local focus of the SLiP programme to certain areas of the Cape Town Metropole. The seventeen participants only represented eight of the 38 facilities participating in the SLiP program. Representatives from the rest of the facilities could not be recruited. CHF representatives were not always reflective of the entire spectrum of local communities' voices.

Not all seventeen participants that attended the FGD1 managed to participate throughout the entire research project, some participant dropped out. Not all of the 17 participants that attended FGD1 were able to observe pharmacy students at the local health facility during the experiential week. Some CHF representatives that did observe pharmacy students during the service-learning week were limited by the pharmacy walls, some CHF couldn't differentiate between pharmacy

students and staff, but this was compensated for by KI observations who had access inside the pharmacy where the students were working.

5.7 Chapter summary

The highlights of this chapter include recommendations for the improvement of the service-learning programme including an increase in experiential learning time and more exposure to the community. In the next chapter, I will be concluding the research findings and recommendations for future research studies.



CHAPTER 6

Conclusion

This study explored the views, experiences, and recommendations of community representatives regarding the third year service-learning programme in the context of whether students were being prepared adequately to become future socially accountable pharmacy graduates. The SLiP programme's community liaison officer was employed as KI to identify and recruit community representatives through her network created by her involvement in the Cape Town Community Health Forum. Community health forum representatives participated in the research through two focus group discussions, one undertaken before and the other after observing the third year students at their facilities. This participation made it possible for them to share their perceived outcomes of the programme and recommendations towards improving the programme. This method was adequate to elicit preliminary data on local community views as per the research questions by contributing informative experiences that may serve as evidence towards improving the experiential learning programme and pharmacy curriculum. Secondly, the local community views and experiences further highlighted the stagnant culture of the health system that challenged the current effectiveness of pharmacy training to transform poor practices in pharmaceutical service delivery.

The study participants that were recruited served as knowledgeable community representatives and demonstrated excellent insight into community needs as well as facility needs and problems. In addition to being able to provide information on the experiential learning programme, participants also provided valuable information on the community services interactions/relationships (or lack thereof in some instances). In this regard, participants leaned towards a policy that clarified the role and function of health committees in communities and explicitly explained their significance to health facility managers and patients in general. Such a policy would be paramount if the School was to develop the triad partnership between the university, community and services. Interestingly, the concept of medicine runners was quite a novel community led intervention that was revealed during this research.

Participants also shared their understanding of the health system and identified a need for chronic club sessions to be a standardized service at all clinics and community health centres. As they believed this might address and improve medicine adherence of patients, even better give third year pharmacy students a chance to relevantly address health issues through educating patient health-related topics that affect communities mostly. However, participants also identified the pharmacy dispensing windows to be privacy stripping to patients and the window limited the meaningful engagement that should occur between pharmacists and patients. Participants recommended a dispensing and counselling room where a nurse, physician, and pharmacist could attend to the patient at the same time and enable the pharmacist to counsel patients and to ask questions regarding the medication they are taking, thereby engaging meaningfully in their medicine-related concerns.

Participants believed that third year pharmacy students were doing well in serving patients during their time at the facilities, especially during education sessions at chronic clubs and at CDU distribution centres, but also recommended that the outcomes could be improved by extending the hours spent by students at facilities. Participants also recommended students spending time in communities outside facilities to better understand health problems. Extended hours will benefit the curriculum giving equal time to theoretical and community experiential concepts that will better prepare pharmacy students to be socially accountable graduates.

Study results highlighted the local community's crucial role in health concerns within the health system, health professional education system and the pharmacy curriculum. More-over the community residents know what works and what doesn't, community residents are experts of indigenous knowledge on how to thrive in those circumstances, hence as researchers and health professionals, collaborative consultation with the community before making decisions that may affect their lives is paramount. The community then becomes a resource for indigenous knowledge and experiences about the existing health needs and what might be the ideal solution that is tailor made for the community. The local community needs to be involved and engaged in decision making regarding UWC-SLiP experiential service-learning curriculum redesign.

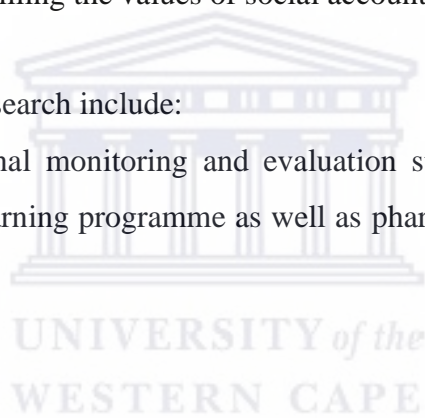
6.1 Recommendations

Recommendations for the experiential learning programme included:

- Extending the experiential learning hours spent by third year pharmacy students in the local community.
- Building more meaningful relationships with different community partners to increase the exposure of students directly to the community health determinants outside the facility.
- Advance the exposure of UWC to the community through a website, brochures and communication mediums that explicitly declares to serve the social accountability values.
- A continuous engagement between university and local community in the form of regular meetings and discussions will open a platform for academic institutions to assess relevance and sustainability of their curricula and indirectly measure the quality of future graduates in terms of fulfilling the values of social accountability.

Recommendations for further research include:

- Establishing a longitudinal monitoring and evaluation study to show evidence of the impact of the service-learning programme as well as pharmacy graduates working in the health system.



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Appendix 1: Informed consent form



School of Pharmacy, University of the Western Cape,
Robert Sobukwe Road, Bellville, Cape Town, 7535

Moving towards social accountability in pharmacy education: what is the role of the community?

Consent form

Date: _____

Name of participant: _____

Name of person taking consent: _____

1. I agree to provide the information of (please tick):
 - a. Semi- structured interview
 - b. Focus group discussion
2. The purpose of the study has been explained to me and I understand the objectives.
3. I have been provided with an information sheet on this study.
4. I understand that I can withdraw my participation at any time.
5. I understand that my interactions with UWC, School of Pharmacy will not be affected by my decision to participate in this study or not.
6. I understand that I will not be identified in any reports or presentations emanating from this study.
7. I understand that any information I provide for the study will be kept secure by the researchers and destroyed after five years of research reports being written.
8. The researchers have my permission to use information given by me, as long as I cannot be identified by name or through background information.

Signature (participant): _____

Date: _____

Signature (person taking consent): _____

Date: _____



Appendix 2: Study information sheet



School of Pharmacy, University of the Western Cape,
Robert Sobukwe Road, Bellville, Cape Town, 7535

Moving towards social accountability in pharmacy education: what is the role of the community?

Study information sheet

Introduction

We would like to invite you to participate in a research study conducted by Prof Angeni Bheekie and Dr Mea van Huyssteen from the School of Pharmacy at the University of the Western Cape. The study is called: **Moving towards social accountability in pharmacy education: what is the role of the community?** The study forms part of a larger evaluation which incorporates determining and improving the social accountability status of the service-learning in pharmacy programme.

Before you decide whether to participate or not in this study, we would like to tell you about the study and answer any questions that you have. If you agree to participate, you will be asked to sign a consent form. You will also be given a copy of this information sheet to keep for your own records.

Please note that your participation is voluntary and you may choose to withdraw from the study at any time. There will be no negative consequences if you choose not to participate.

Purpose of the study

We are interested to understand how community can help us evaluate and inform the service-learning programme in an effort to improve both pharmacy education and practice. This study particularly targets communities who are recipients of care at facilities where pharmacy students undertake service-learning. The primary aim of the service-learning programme is to develop socially accountable pharmacists. Through this study we will evaluate if this

programme has had any impact on the community, why this is so and what suggestions participants have for its improvement.

Procedures

Data collection for this study will be done through semi-structured questionnaires and focus group discussions with community representatives from the Western Cape sub-structures. The questionnaires will be administered annually to account for newly appointed representatives. Focus group discussions with community representatives will be routinely performed annually to ensure regular feedback and implementation of changes for towards service-learning programme.

Risks

We do not think there will be any risks for you in participating in this study.

Benefits

There will be no direct benefit for you from participating in this study. Participation is voluntary and you will not be paid for your time.

Confidentiality

All the information you provide us with will be kept confidential. We will not mention your name in any reports from this study. Study materials will be kept in a secure location where only the senior investigators will have access to it. The rest of the study materials will be destroyed after five years.

Voluntary participation

You do not have to take part in this study, your decision to take part in the study or not will not affect your interactions with UWC and the School of Pharmacy in any way. You can choose to withdraw from the study at any time. If you wish to take part in the study you will have to sign the consent form and indicate which data collection options you would provide the researchers access to.

Contact information

If you have any questions you can ask them now, or,

If you agree to participate in the study and you have more questions at a later time, you can contact:

Prof Angeni Bheekie

Pharmacy building, First floor Room K6

School of Pharmacy, University of the Western Cape, Robert Sobukwe Road, Belville

Tel: 021 9592977

Email: abheekie@uwc.ac.za

The committees giving ethical approval for this study is the UWC Faculty board Research and Ethics Committee and the UWC Senate Research Committee. If you have any problems or questions about this study you can also contact the Ethics committee directly at telephone number 021 9593170.

