UNDERGRADUATE MEDICAL STUDENTS' EXPERIENCES OF THEIR CLINICAL ROTATIONS IN A PRIVATE HOSPITAL SETTING IN SOUTH AFRICA.

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A MPhil research project submitted to the Faculty of Medicine and Health Sciences of Stellenbosch University, in partial fulfilment of the requirements for the degree of

Master of Philosophy (MPhil) in Health Professions Education

Supervisor

Dr A Louw

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December 2018

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Author

Dr F. C. Rust Theron

Date signed: 26/9/2018

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Abstract

Study title: Undergraduate medical students` experience of their clinical rotations in a Private Hospital setting in South Africa

The problem

There is currently a critical shortage of medical doctors in South Africa. The limiting factor in training more doctors is that the clinical teaching platform is filled to capacity. Community-based training has been implemented successfully to expand the clinical teaching platform, moving students from the bigger academic teaching hospital to more rural and community-based hospitals. Not only did the students at the community-based centre benefited from more individual workplace education, but also the student who stayed at the bigger academic centrum benefited from smaller student numbers and less competition for access to training and patients.

With the current clinical teaching platform being filled to capacity, the Private Hospital and infrastructure seems to be an untapped resource that could be used in collaboration with the public platform to train students and expand the teaching platform

The context

Since 2014, undergraduate medical students as part of their official mid-clinical rotation in Internal Medicine has been rotating for a four-week period on the Private Hospital Platform. This project is a first of its kind in South Africa and lends itself to be studied.

Research question.

How do the undergraduate medical students experience their rotation at a private hospital setting in South Africa, with regards to their teaching and learning environment, the private physician as an educator and the private patient?

Aims and Objectives

This is a qualitative study to evaluate the students` experience of their rotation on the private platform. Specific objectives are:

-To use the experience of students rotated at the private platform to make informed decisions if the platform is adequate and accessible to undergraduate teaching.

-To determine if the students experienced private specialist physicians as capable and to have sufficient time to be an effective educator.

-To determine if the students experienced the private patient accessible to student training

Data collection

Survey questionnaire and focus group interviews were used to gather data. Framework analysis, triangulation of results and member checking were used as instruments to validate the data and ensure reliability and objectivity.

Results &Discussion

The students` comments on their rotation were overwhelmingly positive. The openness and willingness of the private patient to be seen by the students were for them one of the big surprises. The advantage of the smaller groups, one-on-one interaction with the specialist, bed-side teaching, more personal relationship with the educators, and role- modelling all led to better and more stimulating education and learning experience. Some of the theoretical principles that underpin the experience of the students at the private clinical platform are the following: social cognitive theory, community of practice, reflective practice, principles of feedback, role modelling and the positive working environment.

Conclusion

Evaluation of the students` experience of their rotation on the private hospital platform confirms that the Private Hospital Platform can successfully be utilised for undergraduate medical student training. The teaching platform can thus be enlarged to include infrastructure and human resources available in the private sector, more cost-effectively than other initiatives. The enlarged teaching and learning platform will allow access to more students being trained in South Africa for our local need. Ultimately providing more doctors and improving medical care for the whole population.

Opsomming

Titel: Voorgraadse mediese studente se ervaring van hul kliniese rotasie in ‘n Privaat-hospitaal omgewing in Suid-Afrika

Probleemstelling

Daar is tans ‘n kritiese tekort aan mediese dokters in Suid-Afrika. Die beperkende faktor in die opleiding van meer dokters is dat die kliniese onderrigplatform tot kapasiteit gevul is. Gemeenskapgebaseerde opleiding is al suksesvol geplïmenteer om die kliniese onderrigplatform uit te brei deur studente van groter akademiese hospitale te skuif na landelike en gemeenskapgebaseerde hospitale. In die gemeenskapgebaseerde omgewing het studente nie net voordeel getrek uit individuele onderrig nie, maar ook uit die kleiner dosent-student verhouding; dus is daar minder mededinging vir toegang tot opleiding en pasiënte.

Met die huidige kliniese platform wat kapasiteit bereik het, is die infrastruktuur van die privaathospitaal ‘n onbenutte hulpbron wat gebruik kan word in samewerking met die publieke platform om studente op te lei en sodoende die onderrig-platform uit te brei.

Die konteks

Sedert 2014 roteer sommige voorgraadse mediese studenter vier weke lank by privaat-hospitale as deel van hul amptelike kliniese rotasie in Interne Geneeskunde. Hierdie is die eerste projek van sy soort in Suid-Afrika en het dus baie navorsingspotensiaal.

Navorsingsvraag

Hoe ervaar voorgraadse mediese studente hul rotasie in ‘n private hospitaal omgewing in Suid-Afrika met betrekking tot hul onderrig en leerruimte, die dokter in die private sektor as opvoeder en die privatepasiënt.

Doelstelling en doelwitte

Hierdie is ‘n kwalitatiewe studie om die studente se ervaring van hul rotasie op die private platform te evalueer. Spesifieke doelwitte:

- Om die ervaring van studente wat op die private platform geroteer het te gebruik om ingeligte besluite te neem oor die platform as ‘n voldoende en toeganklike omgewing vir voorgraadse onderrig.

- Om te bepaal of studente die privaat spesialiste ervaar het as effektiewe opvoeders wat toegerus is met die nodige vaardighede en beskik oor tyd.

- Om te bepaal of studente privatepasiënte as toeganklik vir studente opleiding ervaar het.

Data-insameling

Vraelyste en fokusgroep onderhoude is gebruik om data in te samel. Raamwerkanalise, triangulering van resultate en respondent-terugvoering is gebruik om die geldigheid, betroubaarheid en objektiwiteit van die data te verseker.

Resultate en Bespreking

Studente se kommentaar oor die rotasie was oorweldigend positief. Die openheid en gewilligheid van privatepasiënte om gesien te word deur studente was vir hulle een van die grootste verrassings. Die voordeel van die kleiner groepe, een-tot-een interaksie met die spesialis, praktiese onderrig, persoonlike verhoudings met die opvoeders en rolmodellering het gesamentlik gelei to ‘n beter en meer stimulerende onderrig- en leerervaring. Teoretiese beginsels wat studente se ervaring by die privaat kliniese platform onderskryf, is: die sosiale kognitiewe teorie, gemeenskapsinteraksie, reflektiewe praktyk, beginsels by die gee van terugvoer, rolmodellering en ‘n positiewe werksomgewing.

Gevolgtrekking

Evaluering van studente se ervaring van hul rotasie by die privatehospitaal platform bevestig dat die platform suksesvol gebruik kan word vir voorgraadse opleiding. Die onderrig platform kan dus uitgebrei word om infrastruktuur en menslike hulpbronne wat beskikbaar is in die privaat sektor te gebruik op ‘n koste-effektiewe manier. Die uitgebreide onderrig en leer platform sal toegang gee vir meer studente wat opgelei word in Suid-Afrika vir plaaslike behoeftes. Uiteindelik kan die inisiatief meer dokters voorsien en mediese sorg vir die hele bevolking verbeter.

Preamble

The format of this MPhil research project is in accordance with the recommendations for an MPhil in HPE research assignment by publication format, as required by the Faculty of Health Science of Stellenbosch University. This research is submitted as a collection of a research article, PowerPoint presentation, combined with introductory and synthesis chapters. Some of the content might be repetitive, as it forms part of the background of the study and will thus be part of the study, research article and power point presentation.

The introductory chapter, Chapter One, provides a background to the current crisis worldwide of a shortage of Healthcare workers, enlightening the fact that the shortage of Healthcare workers is directly related to the current teaching platform for healthcare workers being flooded. To address the shortage, new and innovative ideas are needed to expand the teaching and learning platform. It links the rationale for this study and the problem statement, describing the overall aim of this study and its objectives.

Chapter Two provides a literature review on current innovations expanding the teaching and learning platform. Ample studies are done to confirm the expansion of the teaching and learning platform for undergraduate medical education via community-based education. The Private Hospital platform, however still seems to be an untapped resource that can be utilised for undergraduate medical education. Chapter Two also includes a literature review on the theories and principles of teaching and learning that applies to bedside teaching in the private hospital setting.

Chapter Three describes the methodology of the study and the methods used to collect data, to analyse the data and to validate the data. This chapter includes a description of the positionality of the researcher, ethical considerations and addresses the assumptions and limitations of the study.

In Chapter Four, we present the results of the study and discuss the meaning thereof. Using the results from this study to prove that from the student's experience of their rotation on the private hospital platform, undergraduate teaching can take place in the private hospital setting.

Chapter Five presents a manuscript submitted to the African Journal of Health Professions Education which explores the undergraduate medical student`s experience on the Private Hospital Platform. It also contains a PowerPoint Presentation that was presented on this data at a meeting at the Occupational Psychologist Forum at the Business School of Stellenbosch University.

Finally, Chapter Six provides a synthesis of the study and concludes possible implications for Health Professions Education, applicable to South Africa.

The references section for the study appears at the end of Chapter Six. The Vancouver referencing style has been used for this research assignment.

Chapter One

1.1 Introduction

There is currently a major shortage of healthcare professionals worldwide, but more so in South Africa and specifically a shortage of medical doctors.[1] The Medical Schools in South Africa are filled to capacity, and there is a need to expand the clinical teaching platform.[2] Clinical teaching needs to take place at the bedside.[3] With the overload of the clinical teaching platform, too many students for too few patients and doctors, the reality is that proper bedside teaching cannot be effectively achieved.

Community-based teaching has not only been identified as part of the solution for the transformative scale-up of medical education but also enlarges the clinical teaching platform, giving access to more medical students.[4] Taking students away from the traditional academic teaching hospital not only serves the purpose of apprenticeship teaching in the community but also lessens the burden of the traditional teaching platform, while concomitant improving the teaching and learning environment even there.[5]

The success of the rural clinical school of medicine of Stellenbosch University has led to a trial project where medical students in their fourth and fifth year of study rotate at a private hospital. The infrastructure and expertise in the private setting is currently an untapped resource that may be utilised for the teaching, learning and training of healthcare professionals. Bateman (2015) quoted the Dean of the Faculty of Medicine and Health Sciences, Stellenbosch University stating that the public and private sectors need to collaborate to help solve some of the fundamental problems confronting South Africa.[2] This is the first official project of formal teaching collaboration in clinical teaching of undergraduate medical students between the private and the public sectors. How the students, doctors as educators and the private patient would respond and experience this intervention in a Private Hospital setting has never been previously documented.

1.2 Rationale for the study

At Stellenbosch University, the 6-year MB ChB programme is comprised of three clinical phases – the early, middle and late clinical rotations. The third academic year is covered by the early clinical rotation, the fourth year and the first semester of the fifth academic year constitutes the mid-clinical rotation, and the late clinical rotation stretches over the final 18 months of the programme. Some students in their mid-clinical rotation in the Internal Medicine Module get the opportunity to do their official rotation on the private platform at Mediclinic Durbanville, Panorama and Cape Gate (the Private Hospital Platform). This is not an elective or voluntary rotation for the students. Those students currently selected to rotate at the private platform, are those who have the necessary access to transport, because of the distance between the respective hospitals and the Faculty. The rotation spans a four-week period, and eight rotations take place in a yearly cycle. Eight students per rotation are allocated to Mediclinic Durbanville with four students rotating at Panorama and Cape Gate Mediclinic respectively.

The physicians who participate as clinical educators in this programme are all specialist physicians in private practice. They are all accredited by Stellenbosch University as clinical

lecturers and attend a yearly orientation seminar arranged by the Department of Internal Medicine. These physicians do this educational work without any form of additional remuneration. This collaboration programme between the private and public sector commenced in January 2014 and successfully implemented ever since.

Community-based education and teaching on the rural platform, has been at the centre of many recent publications or literature reviews.[6,7,8] However not much research is available on undergraduate medical student training at a private hospital setting. The Queensland University has successfully implemented a programme of collaboration between the public and private hospital platform for the training of undergraduate medical students.[9]

In South Africa programmes to address this shortage of health professionals seems to be failing and new initiatives are needed.[1] Expanding the clinical teaching platform to the private sector might be part of the solution.[2] Collaboration, not only in healthcare delivery but also in health education and research, sharing of expertise and infrastructure is needed in order to survive this potential health crisis.[10]

The delivery of undergraduate medical education has significantly evolved. Today education occurs in a variety of environments – teaching sites are not limited to traditional teaching hospitals but also extend to community settings such as community hospitals, interdisciplinary clinics, and physicians' private practices.[11] The educational environment in the Private Hospital setting differs from the environment in the Public sector. Not only does the environment differ, but also the disease profile and type of patient.[2]

There is not only a need for collaboration between the public and private sector but also a social responsibility. Virchow as quoted by Woollard[12] stated that "physicians are the natural attorneys of the poor, and the social problems should largely be solved by them". We as physicians thus have a social responsibility to help to solve the shortage of doctors by helping to train more colleagues.[12]

The formal definition of social accountability of a Medical school is: "the obligation of the medical school to direct their education, research and service activities towards addressing the health concerns of the community, region and nation they have the mandate to serve". [12] The Medical school thus has a social responsibility to direct their education, research and service activities to address the shortage of healthcare professionals in South Africa.

However, this programme of formal training of undergraduate medical students at a private hospital in South Africa is a first of its kind. This experience of training undergraduate students at the private clinical platform is thus new. It is therefore important to faculty as well as to the private hospital sector to understand the contribution this initiative brings to the training of medical students. It is important to understand how the students, doctors and private patients experienced this rotation.

The setting of undergraduate medical training in the private hospital sector lends itself to be studied. It is an innovating medical education practice, which if proven to be successful can be easily expanded and be implemented by more clinical disciplines and faculties.

1.3 Problem Statement.

Due to the shortage of healthcare professionals in South Africa, new and innovative ways of expanding the teaching platform are needed.

South Africa has a shortage of Medical doctors. In 2013 South Africa had 60 doctors per 100 000 citizens. The world average was 152 doctors per 100 000 citizens in the same year.[1] The Minister of Health, Dr Aaron Motsoaledi, has stated that he plans to triple the number of medical graduates to at least 3600 per year in preparation of implementing the National Health Insurance Programme (NHI).

The most significant factor that limits the supply of doctors from meeting demand, however, is the constraint on the number of doctors trained. Eight faculties of medicine at South Africa's public universities ('medical schools') carry the full responsibility for training doctors. These medical schools do not deliver enough doctors to respond to South Africa's doctor demand and large disease burden; training capacity has not kept up with population growth.[1]

A collaboration project between Stellenbosch University and Mediclinic Durbanville was launched in 2014. Undergraduate medical students rotated at Mediclinic Durbanville as part of their official undergraduate training.[2] This is a first of its kind project in the South African context where the private sector officially contributes to clinical training. No scientific research has been done to determine the educational value of this project.

1.4 Research Question

How do the undergraduate medical students experience their rotation at a private hospital setting in South Africa, with regards to their teaching and learning environment, the private physician as educator and the private patient?

1.5 Aims and Objectives

The study aims to evaluate the students` experience of their rotation on the private platform. Specific objectives are:

-To use the experience of students rotated at the private platform to make informed decisions if the platform is adequate and accessible to undergraduate teaching.

-To determine if the students experienced private specialist physicians as capable and to have sufficient time to be effective educators.

-To determine if the students experienced private patients as accessible to student training.

1.6 Conclusion

Due to the current and urgent need to train more doctors, this study will, from a student`s perspective, provide information to determine if the private hospital setting can be used to

train undergraduate medical students. It will also give insight into the collaboration needed between the public and private hospital sector to successfully expand the teaching and learning platform and will address some of the misconceptions of the private patient`s attitude towards students.

This experience of training undergraduate students at the private clinical platform is novel. It is an innovating medical education practice, which if proven to be successful can be easily expanded and be implemented by more clinical disciplines and faculties

Chapter Two: Literature Review

2.1 The Shortage of health professionals and current ways implemented to expand the teaching platform.

There is currently a worldwide shortage of health professionals and more specifically a shortage of doctors in South Africa.[4] An Econex report, commissioned by the Hospital Association of South Africa (HASA) confirmed not only the severity of the shortage of doctors in South Africa but also the high disease burden of the country, worsened by the Aids pandemic and the high trauma burden.[1] The current clinical teaching platforms are already overloaded, and there is a need for the transformative scale-up of medical education.[13]

Expanding the clinical teaching platform to include community-based teaching has become essential and has been successfully implemented across the world.[14] Barrett *et al.* found that students on a rural platform appeared to do as well or even better than their fellows at the more traditional academic hospitals.[15] In South Africa, the Walter Sisulu Medical school recruits students from the community. This same community's health and social needs also guide its education, service and research. Much of the learning takes place within the community and is integrated into the local health care delivery system.[4]

The Parallel Rural Community Curriculum was developed and implemented in Australia due to the shortage of doctors, expanding the clinical teaching program to the rural setting. The general practitioner's initial response was that of anxiety and uncertainty, questioning their teaching abilities, time commitment to students and the possible infrastructure demands on their practices. Partnership development with the teaching faculty took time, but once established their fears and anxiety dissolved. Student`s ranking also improved by an average of 17 places in a class of 90 students, addressing the fear of inferior teaching.[16] Specialist`s engagement in the rural teaching programme was found to be a challenge due to limited contact and exposure to the students as specialists are more hospital bound.[16]

The community-based education has primarily evolved to rural-based medical education, where students are placed in longitudinal clinical clerkship programmes in the rural setting.[8] The success of rural-based medical education did not only implied better outcomes for the students but also led to the development of their professional identity.[5] The general practitioners taking part in the education programme tend to spend more time with their patients and to follow treatment guidelines and protocols more precisely, leading to better healthcare for the patient and the community.[17,18]

The University of Witwatersrand started a rural elective program for undergraduate medical students in 2005. During the period from 2005 to 2011, 402 students choose to do their electives in the rural clinical setting. Role modelling the doctors, working in difficult conditions with multiple roles led to personal growth and improvement of and confidence in their clinical skills.[19]

Turkeshi *et al*. reviewed sixty-four articles on family health clerkship teaching and learning of undergraduate medical students.[20] Forty-eight of these articles focused on the impact that the clerkship had on the students, twelve on the effect on the family health practitioner and eight on the patient experience. Students reported satisfaction with the content and process of

teaching. The exposure enhanced previous learning and provided a unique learning opportunity in dealing with common acute and chronic conditions, disease prevention, health maintenance, communication and problem-solving skills.[20]

Teaching family health practitioners reported increase job satisfaction and stimulation of professional development. They, however, had concerns about increased workload and less productivity. Students presence and participation had overall no negative impact on patient experiences.[20]

Not all programmes have been equally successful. Matchaya *et al.* report that although private medical practitioners were not opposed to students in their consulting rooms, students and faculty members were concerned about compromising academic teaching standards.[21]

The Faculty of Medicine and Health Science at Stellenbosch University implemented a rural clinical school at the Eben Donges Hospital in Worcester in 2011. Twenty senior students per final year group can elect to spend their late clinical rotation on the rural platform. An evaluation of the academic successes these students achieved, support the success of rural-based education locally.[22]

Benefits of community-based education, for both student and educator in the rural setting, seems to be established. Urban community based medical education, specifically in the private setting seems to be a relatively new model of community-based education.[23] The Onkaparinga Clinical Education Programme is such a programme implemented in the urban private general practitioner setting. The general practitioner`s experience was very similar to that of their peers in the rural public setting. Having students for longer periods than electives, led to continuity that benefitted both the student and the practice.[24] Exposure or contact with the private specialist remained limited in this study. Specialists were more involved in the hospital setting and did not have the same exposure to the students to develop a student-teacher relationship.[24]

Crawford reflects on the experience of expanding medical training to the private hospital setting at Greenslopes Private Hospital in Brisbane Australia. He found teaching rating by discipline to be very similar in the private and academic centre, with the outcomes in paediatrics and internal medicine to even favour the private sector. Most private patients (93%) also experienced teaching in private as being positive. Eighty-four percent of students also felt that there was an advantage in being taught in the private sector.[9]

In South Africa programmes to address this shortage of health professionals seems to be failing and new initiatives are needed.[1] Expanding the clinical teaching platform to the private sector might be part of the solution.[2] Collaboration, not only in healthcare delivery but also in health education and research, sharing of expertise and infrastructure is needed to survive this potential health crisis.[10]

The delivery of undergraduate medical education has significantly evolved. Today education occurs in a variety of environments – teaching sites are not limited to traditional teaching hospitals but also extend to community settings such as community hospitals, interdisciplinary clinics, and physicians' private practices.[11] The educational environment in the Private Hospital setting differs from the environment in the Public sector. Not only does the environment differ, but also the disease profile and type of patient.[2]

At the start of this programme, both the Faculty of Health Sciences and the management of Mediclinic were concerned about how the private patient would react and respond to the students. Their fears were unfounded as it appears that the private patient enjoys the academic approach and the extra attention. The smaller student numbers at the bedside, not only improves teaching and learning but also adds to the positive patient`s experience.[2]

There is not only a need for collaboration between the public and private sector but also a social responsibility. We as physicians have a social responsibility to help to solve the shortage of doctors by helping to train more colleagues. Clinicians have a dual role in medicine, to provide care and to teach.[25] The word 'doctor' comes from the Latin *docere*, meaning to teach. The British Medical Council includes the following attributes to doctors in their publication of Tomorrow's Doctor (2001);" Recognition of the obligation to teach others, particularly doctors in training and that the example of the teacher is the most powerful influence upon the standard of conduct and practice of trainees".[26]

Teaching in the clinical environment is focused on and directly involving the patients and their problems. Skills such as history taking, physical examination, patient communication and professionalism are best learned at the bed-side. Medical knowledge is directly applied to patient care, stimulating self-directed learning by relevance.[27]

This programme of the mid-clinical rotation of undergraduate medical students on the Private Hospital Platform is unique, not only in expanding the teaching platform to the private sector, but also providing us with the opportunity to evaluate the effect of community-based education in the urban private hospital setting.

2.2 Teaching and Learning theories implemented at bed-side teaching:

Teaching and learning of clinical skills happen best at the bed-side.[3] Karani et al. explained how medical students learn from residents in the workplace and what teaching and learning theories are implemented at the bed-side.[28] The setting at the private hospital platform, where students are allocated in small groups, one on one, or two per consultant for a four-week rotation, are thus ideal for the teaching and learning of clinical skills. Some of the theoretical principles that underpin the experience of the students at the private platform are the following: social cognitive theory, service learning, community of practice, problem-based learning, reflective practice, principles of feedback, role modelling and the positive working environment. Learning theories that could inform learning in this context:

2.2.1 Social cognitive theory:

Students learn by watching specialist work in real-world situations. Individual knowledge acquisition is directly related to observing others within the context of social interactions and experiences.[29] A part of this learning can properly overlap with situational learning or experience learning, learning through certain experiences or situations.[30]

2.2.2 Service learning:

Optimal learning will happen most probably where the students share the responsibility for patient care. Students are part of the decision-making process and take responsibility for getting results back of diagnostic procedures and monitoring patient's response to therapeutic interventions. Service learning appears to enhance academic learning more than what classroom teaching can.[30]

2.2.3 Community of practice: Communities of practice are formed by people who engage in the process of collective learning in a shared domain of human endeavour; groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.[31] Clinical activity usually takes place in teams. Such teams are important not only for the delivery of care but the continuing professional development of the team members. It is a feature of such groups that knowledge and skills are rapidly disseminated throughout the group. The informal day-to-day contact between members allowing the students to take part in the activities of the group and in that way, they also acquire the knowledge that is inherent in the group.[26,32]

In this rotation, the student belongs to two communities of practice. They are a member of the treatment group, with their consultant looking after the well-being of their patients and as a small group of students, that work and studies together to prepare for tutorials, exams or OSCE`s. Their interaction with the consultant, the patient and each other stimulates and motivates them to study, learn and become professional healthcare workers.[33]

By making students part of the treating team one has the opportunity to utilise the above learning theories. The smaller clinical groups also make bed-side teaching more practical. As a tutor in a small group setting like this, one also gets to know the students personally and can one easier identify where they struggle and help correct problems with technique, and build on what they know- constructivism.[30]

Using service learning reflective journals (case study`s and portfolio`s) require the use of integrative learning, expressive writing and critical thinking, which encourages higher order of learning.[27] Students learn to apply knowledge to help patients and not just to pass exams.

2.3 Teaching and Learning Principles with clinical teaching.

The following Teaching and Learning principles are not only important but also most of the times present at clinical teaching encounters, and are therefore discussed:

2.3.1 Problem-based Learning: Good clinical teaching can only take place at the bed-side, where the patients and their problems are central, not only for solving but also for teaching and learning-Problem Based Learning.[3] Problem Based learning is founded on; encountering the problem, solving the problem with good clinical reasoning skills, identifying learning made in an interactive process, leading to self-studying and applying the newly gained knowledge. The optimal size for problem-based learning is between five and seven students. If more than seven, reluctant members can hide.[28]

2.3.2 Reflective practice: When conducted by a mentor reflection becomes much more effective. There are two forms of refection; reflection in action and reflection on action.[35] At the bedside one has the ideal opportunity to guide and correct the student while he or she is performing a clinical procedure, correcting an examining technique or helping with the interpretation of a clinical sign or diagnostic result. Reflecting on action might include formal feedback on what was done. Both are important adjuncts to learning.[36]

2.3.3 Principles of giving feedback: The first requirement of feedback is that the student must have a clear concept of the objective they are trying to attain. Learning is assisted when

both the strengths and the weaknesses of the student's performance are identified and discussed. The emphasis should be on reporting the observed behaviours and thinking and should be detailed and specific rather than general. Above all feedback should be constructive. This does not mean that the student's performance cannot be criticised, but when there are deficiencies, the feedback should include suggestions for making improvements.[26, 36]

Self-assessment is an important part of feedback. Students are often harsher on themselves than the teacher, but they can sometimes identify their errors and shortcomings better, which can give the teacher the change to correct those errors and reinforce their strengths.[36]

Because clinical learning takes part in a group environment other members of the group can play a role in informal feedback. They often have valuable insights into their clinical partner's behaviour and in the process will also learn of constructive feedback.[27]

2.3.4 Role Modelling:

The observation of role models is one of the most important factors in the development of the professional role in students.[37] Both the learning theories of communities of practice and situated learning are based on role modelling.[26] By reflecting on their behaviours and attitudes, the teacher will transmit positive messages. By admitting that you as a physician does not know everything, that you are willing to learn (even from students or peers) you will stimulate your students to become lifelong learners.[38] Formal teaching will also be reinforced by evidence-based clinical practice and good doctor-patient relationships.[27]

2.3.5 Assessment:

Assessment is a very important part of reflective practice.[26] Not only must it reflect on how well the students have met the outcomes of the curriculum, but also how successful we as teachers were in stimulating and supporting the right learning activities.[39] It is thus very important to apply good and sound assessment principles. Assessment needs to be regarded as part of the learning process and not only a tool to be used to make decisions.

2.4 Conclusion*:*

Expanding the teaching and learning platform to the private hospital setting gives us the opportunity to improve bed-side teaching on both platforms, reducing the congestion at the public platform and giving more students the opportunity to work in close relationship with a consultant. Applying the theories of teaching and learning at the bedside, we can stimulate the students to become lifelong learners, to move from knowing, to competence, to performing and becoming successful practising physicians (Miller`s pyramid).[40]

Chapter Three: Research Methodology

3.1 Study design

This was a qualitative study which followed an interpretivist paradigm. The design was a cross-sectional descriptive study with convenient sampling.[41,42,43] The students on the mid-clinical rotation were the best positioned to reflect and gave an account of their experience of the rotation. The data analysis of their experiences was used to infer their experience.

3.2 Theoretical framework

The design of this intervention was positioned on the philosophies of social accountability, patient-centered problem-based learning and literature of similar interventions.[28] Teaching and learning theories in this rotation were based on situated learning, communities of practice, role modelling and formative feedback.[44] All of them playing a role in developing the professional identity of the future doctor. The students who worked on the private platform as part of a more intimate clinical team became part of the community of practice.

3.3 Participant selection

The students, who rotated at the Private Hospital Platform were the participants. Thus, students who rotated at Mediclinic Durbanville, Panorama and Gape Gate were included in the study. Only students from two rotations were used (one fourth-year group and one fifth-year group). Student sample size was thus sixteen students per rotation times two-thus thirty-two students. Non-probability sampling (convenience sampling) took place, selecting only students who rotated at the Private Hospital Platform. The students that rotated were randomly allocated by the Department of Internal Medicine of Stellenbosch University, who decided whom will do their rotation on the private or public platform. The only criteria for selection were the student's access to transportation.

3.4 The setting

Only students who rotated at the Private Hospital Platform took part in this study. The Private Hospital Platform includes Mediclinic Durbanville, Mediclinic Panorama and Mediclinic Cape Gate. The setting of this study was thus the Private Hospital Platform. This is a well-equipped, well-staffed private hospital group in the northern sub-burbs of Cape Town. Between the three hospitals, it has more than a thousand beds and some of the latest technologies available for diagnostic purposes (MRI and CT scanners, Nuclear Medicine and Pathology services**)** and treatment (De Vinci Robotics). All the major disciplines in medicine are represented as well as most of the sub or super specialities. It admits, however, patients from all social standing and race, being a referral centre from as far as Namibia. Providing thus more Hospital-based education, but being smaller hospitals and situated in the community also overlapping with some factors of community-based education, providing a different learning experience, making use of previously untapped resources, introducing the students to a different part of the health care system.

3.5 The Position of the Researcher

I, working as a specialist physician for the last 22 years in private practice, accredited by the University of Stellenbosch and is actively involved with the teaching and learning of students doing their mid-clinical rotation at Mediclinic Durbanville, conducted this research project as Principal Investigator.

Because I as the researcher, also worked with the students as an educator it might be perceived to have influenced the data. Only two students per rotation worked directly in my service group. Thus a very small part of the study population had direct contact with me, protecting the study from researcher`s bias and lending to more objectivity.

3.6 Data collection

Two methods were used for data collection namely, survey questionnaires and focus group interviews. Data were collected at the end of both rotations, with the students taking part in a focus group interviews and completing a questionnaire after written consent was given.

3.6.1 Survey questionnaires:

Survey questionnaires (see Appendix 8.4) were completed at the end of each rotation. The post-course design, making use of surveys with open-ended questions, creating text-based data, had the main advantages of being inexpensive, straightforward, quick to do and to analyse.[45] Because there was mainly one point of data collection, participants` time investment was relatively limited and getting all the participants to complete their surveys on time more possible.[46]

The purpose of the survey questionnaire was to assess the student's experience of their rotation at the Private Hospital Platform. Questions regarding teaching and learning, the private doctor as an educator and the accessibility and response of the private patient to undergraduate medical students were included in the questionnaire. An important component of academic strengthening is the evaluation of the quality and structure of health science programmes.[47] With the design of the questionnaire, it was important to choose and word the questions in such a way that all respondents would interpret the questions in the same way, respond accurately and be willing and motivated to complete the questionnaires.[46]

The Dundee Ready Education Environment Measure(DREEM) was identified in the literature review as a valid and reliable method for evaluating the teaching and learning environment.[47] Although the initial DREEM questionnaire was developed to evaluate Masters and Doctoral registrars, it has been used successfully to evaluate undergraduate medical students worldwide.[48] The DREEM is a 50-item self-report questionnaire using a 5-point Likert scale, with scores reflecting a student's overall perception of the environment as well as their perceptions of 5 main aspects of this environment, namely: their learning, the teachers, academic self-perception, atmosphere, and social self-perception.[49]

The DREEM questionnaire was used as a basis to design, the questionnaire to ensure validity and reliability. Some of the DREEM questions were adapted to be open-ended (with smaller numbers) to better understand the response of the students` experiences. The aim of the study did evaluate not only the student's experiences of the teaching and learning environment of the private platform but also their experiences of the private patient. Therefore an additional set of questions had to be added.

This questionnaire consisted of three parts, a demographic section, a section on the teaching and learning environment and a student–patient experience section. To generate and explore more meaning and depth, open-ended questions and place for comments and recommendations were available. A return of a completed questionnaire was seen as implied consent.[48] We however also have gotten signed consent from the students before asking them to complete the questionnaires. (Appendix 8.6)

3.6.2 Focus group interviews (FG):

Focus group interviews were conducted in the last week of the student`s rotation. Being only 16 students in the rotation at the Private Hospital Platform, presented the ideal opportunity to conduct focus group interviews, questioning the group on their experience of the patients, disease profile, the specialist physicians and the hospital environment.[42] This gave us the change not only to get the students responses but also their opinions on their fellow student's responses. A set of questions were used as a baseline for these interviews, but being a focus group discussion certain new ideas were raised and new themes identified. (Appendix 8.5)

An independent facilitator conducted the focus group discussions. Audiotaping was done of the sessions, which were then transcribed by a typist. (Appendix 8.7) The students were invited to voluntary take part in the focus group interviews, and informed consent was signed at the interview. Their identity is protected and will not be revealed in the transcribed data. The interview schedule and the open-ended questions that formed the base of the discussion is included as part of Appendix 8.5.

3.7 Data Analysis Framework

Data generated by the questionnaires and focus group interviews were analysed. The development of codes at each level of the analysis was documented to enhance confirmability; coding was done manually. (Appendix 8.8) Triangulation of data was established by using more than one source (questionnaires and focus group interviews) to gather data, enhancing and confirming the credibility of the data.

One thousand one hundred and forty-six comments were made by the students, 805 originating from the open-ended questionnaires and 341 from the two focus group interviews about their experience rotating at the private hospital platform.(Appendix 8.9) These comments were coded, grouped and categorized into themes: interaction with patients, the private physician as an educator, the private hospital as teaching and learning environment, the teaching and learning experience, relationships, stress, language and student recommendations. (Appendix 8.10)

3.7.1 Focus group interviews and open-ended question data analysis

Both the focus group interviews and the open-ended questions of the questionnaires did generate qualitative data. This data or responses were assimilated into themes an analysed using the Framework Method of data analysis.[50] (Appendix 8.10) The Framework Method of qualitative data analysis is an adaptable and acceptable tool for deductive and inductive data analysis.[50, 51] The following process was used to analyse the data captured:

Familiarisation: The first phase of data analysis was to familiarise oneself with the raw data, reading through the questionnaires, the closed and open-ended questions and the transcriptions of the two discussion forum audiotapes.

Identifying a Thematic Framework: Identifying the concepts, themes and key issues, not only derived from the aims and objectives of the study, but also from the issues raised by the participants.

Indexing: Labelling the data in the textual form, giving numerical codes from the index of the thematic framework. Coding and researcher triangulation was used to indicate a broader and more complex understanding of the open-ended questions and focus group interviews. The results of the survey questionnaire and the focus group discussions were compared to determine if they have the same or corresponding results. By making use of more than one method of data gathering, the data collection process adheres to the principle of triangulation.[52]

Charting: Rearranging the data according to the thematic framework.

Mapping and interpretation: The process of mapping and interpretation- finding associations between themes and explaining findings, was influenced by the research objectives and emerging themes from the data generated.

Member checking: Feedback of the participants on the research findings were obtained, validating that the research findings truly reflects the view of the participants and not being influenced by the researcher`s ideas or agenda.[53]

3.7.2 Reliability, validity and objectivity:

Using the same questionnaire for every student, made the data more reliable. The Framework Method of qualitative data analysis is an adaptable and acceptable tool for deductive and inductive data analysis.[51] Trustworthiness of the data was enhanced in a variety of ways. Two students of each rotation, as well as the facilitator of the focus group interviews, evaluated the transcribed data and gave written consent that it was a true reflection of the focus group interviews. Triangulating the data generated by the questionnaire with the data from the focus group interviews also contributed to the reliability of the data.[53] Member checking, giving the students also a chance to give feedback on the transcribed data of this research project improved objectivity and gave protection against researcher`s bias. [54]

3.8. Ethical consideration

Ethical considerations include respect for the study participants. The surveys were completed voluntarily and anonymously. The students were allowed to withdraw from the study without explanation or any consequence. Ethical approval for the study was obtained, but due to the non-maleficence of the study, the possible benefit of improving medical education and patient care, the study was ethically justified. (Appendix 8.1) Being a qualitative study in an interpretist paradigm, no clinical procedure or clinical intervention took place, only data collected of the students` experience of their mid-clinical rotation at Private Hospital Platform. Data collection took place through anonymous survey questionnaires and focus group discussions where none of the participants was identified in person.

No remuneration of the students took place. Snacks and refreshments were served with the focus group interviews.

Due to the participants being students of Stellenbosch University, institutional clearance and permission were obtained from the MB, ChB programme committee, protecting the students from exploitation. (Appendix 8.3) Although all questionnaires were filled in anonymously, written consent was signed and completed before any data collection took place. Consent forms were available in the choice of the two languages of instruction – English or Afrikaans.

Although all the participants in this study are students of Stellenbosch University, this study was conducted at Mediclinic Durbanville, Panorama and Cape Gate and the students' interaction with the doctors, nursing staff and the private patient were evaluated. The approval and permission of Mediclinic were therefore also obtained.(Appendix2)

All data generated, completed questionnaires and transcriptions will be stored in a secure facility for at least five years. Electronic data are password protected, and the identities of all participants will be kept confidential.

3.9 Assumptions of the study

It was assumed that the students invited to take part in the study would do so and that they would complete the questionnaires responsibly and truthfully. In the focus group interviews, we hoped that they would engage openly and respond not only on the questions asked, but would also respond on their fellow students` opinions and responses, to delve deeper into the meaning of their experiences of this rotation. It was further assumed that the data collected will help to understand the students` educational environment better and that these results will apply to improve and expand undergraduate medical education.

3.10 Limitations of the study

This research project has been adapted to fit the purpose of an MPhil project. It is a small-scale study with only thirty-two students as participants, sixteen students in their fourth academic year and sixteen in their fifth. The study was also limited to include only the students' responses of their experience at Private Hospital Platform and does not include the responses from either the private physicians as educators or private patients. We hope that this study will generate enough interest and enthusiasm to motivate a more inclusive and extensive research project in the future that will include the private physician and patients experience of being involved with undergraduate medical education.

Chapter 4: Results

4.1 Introduction

This chapter will provide the results from the study as determined using the qualitative research approach. The data were collected using survey questionnaires and focus group interviews as described in the previous chapter.

Thirty students completed the questionnaires and took part in the focus group interviews – sixteen fourth-year students and fourteen in the fifth-year group. Two students were either absent or busy with their exams and could not take part in the discussions. There were seven male students in the study group. Twenty-five students were in the age group of 20 – 25 with the rest being older. The different race groups in the South African population were well represented in the study group. All students quoted will be referred to with an "*S*" followed by the student's number. Numbers were allocated in year groups but in no particular order.

4.2 Students responses

All the students, irrespective of race, language or culture, found the mid-clinical rotation at the Private Hospital Platform to have been a positive learning experience, some more so than others did. Their comments were coded and categorised into eight themes as stated below.

4.2.1 Interaction with patients

The students found the patients surprisingly willing and acceptable to be examined by them as illustrated by the following comments made in the focus group discussions:

I was pleasantly surprised. The patients we saw were friendly and eager to help us along or academic endeavour becoming doctors' (S25), and *It was nice to see that even patients paying for health-care did not mind being examined by students (S21).*

The students commented that private patients are more informed and knowledgeable about their disease, diagnostic tests and treatment regimens as opposed to the patients in public hospitals:

The patients were very open to being examined, and most of them understood their conditions and could point out relevant signs and symptoms, helping to integrate my exam findings. The patients also wanted to know more about their conditions from us (S4).

Not only were the patients more informed but they were also more eager to ask the students questions, not only about their disease but also about diagnostic tests, results and treatment regimens:

Here is a difference in engagement and the extent of the discussion. They also tend to be more aware of their rights and assertive and would regularly ask for explanations and justification of certain situations or investigations (S11).

Patients who were informed and selected by their physicians to take part in the programme were all very accommodating: '*the doctor handpicked the patients, and all were very accommodating*' *(S13).*

The smaller numbers also influenced the patient's willingness: *'patients were obviously much friendlier than the public hospital patient because they do not get harassed by students every 5 minutes' (S30).*

Disease profiles are different at the private hospital versus the public hospital platform. Patients are on average older at the private platform, and the focus is on lifestyle diseases, endocrinology, rheumatology and degenerative diseases versus HIV/AIDS, tuberculosis and infectious diseases at the public platform: *'disease spectrum is different- more lifestyle associated' (S29); 'no or less HIV and Tb' (S18).* The students' overall response is that rotation on both platforms are needed to complete their education.

4.2.2 The Private Physician as Educator

All the students commented on the consultant's willingness to teach, share their knowledge and their experience. They argued that because private physicians are taking part voluntarily, they are more willing to teach. In comparison, their peers at the public platform were mostly being taught by the registrars, who they perceived as overloaded by their patient burden, clinical work and own studies– and were 'forced' to teach:

> *The main thing is that doctors on the private platform are teaching on a voluntary basis, not because they have to. It always felt like they wanted to help, and I felt comfortable to ask them questions (S15).*

The daily one-on-one contact with the consultant was the most important distinguishing factor between the rotations on the private versus the public platform. Whereas at public hospitals the students' contact with consultants are limited to one or two ward rounds per week where they are part of a bigger group. They also experienced the consultants to be supportive of them whereas the public consultants were more focused on the registrars.

Because of the maximum of two students per consultant, they found the consultants were welcoming, less threatening and eager to get to know them better, not only as students but as persons: *'he took personal interest in our development' (S2).*

The consultants made them feel part of the team and valued their opinions, taking time to teach and help them. According to the students the experienced consultant was also better equipped to teach them than the registrars, interns or senior students:

> *The major difference between the private and public doctor is the level of education. We work with registrars and interns, and that can`t compare with working with a specialist, their background, education and level of experience (FG1).*

The rotation was much more academically orientated than they expected. There was more focus on acquiring knowledge and skills and less on doing procedures like drawing blood or putting up drips. The one-on-one contact led to better identification of gaps in their knowledge and skills and helped to correct it. All the students reported that this rotation improved their skills of history taking, proper clinical examinations and presenting patients:

> *The private platforms offer a unique opportunity to learn from a consultant in a very personal environment. I feel much more confident in my approach to patients and clinical examination technique at the end of this rotation (S29).*

Relationships between the physicians and the students were different from their previous experiences, mostly due to the smaller groups and personal interaction, leading to more respect between physician and student:

> '*…the way our doctor interacts with us made me realise how I would like to interact with others' (S4), and 'the consultant actually knows our names' (S18).*

4.2.3 The Private Hospital Platform as a teaching and learning environment

The students experienced the environment as good for teaching and learning since it was academically focused: *'it is done in an environment conducive to learning' (S22).*

The hospital and the patient`s wards were quieter, cleaner and more spacious with fewer people around the bed. The equipment worked, and the turn-around time of diagnostic tests was shorter:

'... the private hospital environment is a lot more organised, hygienic and friendly than the public' (S4), and *'everything is always available' (S10).*

The interaction between the staff was better, and the nursing staff were helpful and accommodated to the students. Free Wi-Fi was also an added bonus:

'the nursing staff and doctors are happy to see and interact with you' (S7), and *'free Wi-Fi is a plus' (S12).*

However, they felt that they lacked a proper allocated place where they could work, study or relax between ward rounds, consultations or while waiting for tutorials *(FG2).*

4.2.4 The Teaching and Learning Experience

The main difference was the small groups at the private hospital, being allocated either one or two students per consultant. This led to more personal contact and relationships developing between the students and the consultants.

Ward rounds were experienced as learning opportunities and not just to do ward work. The students missed doing clinical procedures but said that the time saved not doing ward work was well spent on teaching and learning: *'no procedures, lots of learning' (S10).*

Bedside teaching took place on every ward round with mini-tutorials with the patient as the focus: *'it was great to be acknowledged and involved in ward rounds. Tuts on the patients along the way instead of aimless following' (S6).*

Due to the smaller groups, the students felt more comfortable to raise opinions and ask more questions, without the fear of being ridiculed. The smaller group makes it also easier to give and receive feedback. Feedback on how the students examined and presented clinical cases, during action and after action, led to an improvement of their clinical skills. Because of the more personal relationship with the consultants, they experienced the feedback positively:

'*… we were given feedback after every case. One of the best teaching experiences. I will always cherish my experience' (S19).*

By observing the consultants working with the patients, their families, their interaction with the staff and other colleagues, had a direct effect on how the students claim they want to practice one day*: 'the type of doctor that I would like to be' (S28).*

The smaller groups and personal contact led to a more positive impact than any other action. Nearly all the students mentioned that this stimulated and motivated them with some mentioning that it reignited their passion for medicine: *'it inspired me again' (S9).*

The tutorials were found to be practical and interactive. The students requested more tutorials to be arranged and identified certain practical topics that they wanted to be addressed. They also recommended that the tutorials must not interfere with their ward rounds:

'... tutorials in the morning interfered with ward rounds. We were unable to complete ward rounds and missed exposure to more clinical cases' (S4).

The tutorials must also follow on each other to save time for students that have to travel from other hospitals (*FG1*).

4.2.5 Relationships

The individual contact with the consultant differs from their previous exposures to specialists: *'I liked the one-on-one approach' (S10).*

They did not experience the hierarchy that exists at the public hospital: '*usually we`re seen at the bottom of a power/seniority hierarchy' (S7).*

The consultants knew them personally, asked about their personal life's and shared personal experiences with them; work and family related:

… '*the doctor shared his own personal experiences e. g. family life and how important it is to have a balance' (FG1).*

Patient-doctor relationships are also different from the public sector since the patient is usually referred to a specialist of their choice. They are also paying to be seen by the doctor, and some of them are chronic patients of the doctor, knowing them and their families for years. Therefore, the private physician communicates more effectively, not only giving information about their disease, tests and results but also to their families and referring doctors:

> *the family members are also much more included in the explanations and are definitely an aspect of the job that we don't get to deal with at Tygerberg Hospital (TBH) (S14).*

The interdisciplinary relationship, where patients are referred between disciplines, is also much more of a team experience, where specialists work together to address a patient`s problem: '*More or better relationships between all healthcare workers' (S2).*

4.2.6 Stress

The students experienced the private rotation as less stressful. They felt their days were more structured and organised and not rushed and more time was spent with the patients and the physicians:

> *The interactions were friendly and stress-free in comparison to the hierarchy platform in public. It made me significantly more comfortable to interact with senior doctors (S23).*

The ward rounds are less stressful when it is only you and your consultant. The smaller group also did not make them feel intimidated: '*being the only student with a consultant helped my learning, and it did not feel as intimidating as it can in a bigger group'* (*S8)*

They described the environment as less toxic as the consultants at the public platform are less approachable, and as a student you try to avoid them, whereas at the private platform they appear to be interested in you as a person: '*In TBH the consultants are like gods and registrars and students stay out of their way. Here I feel that everyone actually appreciates me being here' (FG1).*

They found the public hospital to be an intimidating environment to answer questions, but at the Private Platform they felt that the consultant wanted to help, correct or guide them: *'the doctors here at private told us to say whatever we think out loud because they want to know how we think.'* (*FG1*).

4.2.7 Language

Although there were no communication or language barriers experienced talking to patients*: 'Yes it was easier to communicate with the patients' (S2)*. Some students were upset about their fellow students initiating discussions between them, the doctors and the patients or even communication within the group via Whatsapp or SMS in Afrikaans. (FG1) All the doctors were willing to speak, translate or explain in English when asked to, but some students felt that the consultants should anticipate that there are students who do not understand Afrikaans or use Afrikaans as an academic language. They felt uncomfortable having to ask a question or explanation to be repeated in English: *'learning environment must be kept mono-lingual – just English. Extremely frustrating to have to keep reminding people to speak English' (S25)*

4.2.8 Student Recommendations

All the students gave positive feedback on their experience of this rotation, some even mentioning that this was the best clinical rotation of their career and that it had ignited their passion for medicine again. However, there were certain elements identified by the students that can be improved or must be addressed when planning to expand the private hospital platform.

Students in the questionnaires and the focus group discussions made the following recommendations:

1. They would like their own designated space where they could work in their free time, waiting between tutorials or ward rounds.

2. They would like to have more tutorials, finding them very practical, but they would like them to take place later in the day, not to interfere with their ward-rounds.

3. Tutorials must also be arranged to follow on each other, not to waste time if they had to travel from other institutions to attend.

5. All the consultants, private and public, must be on the same page, knowing what is expected of a student in their mid-clinical rotation (knowledge and skills).

6. The evaluation of OSCE`s and Portfolios must be more uniform and the same on both platforms to ensure fairness, validity and reliability.

8. The two platforms, public and private, do complement each other and all the students must get an opportunity to experience both platforms:*" I recommend that all students be allowed to apply to the private rotation" (S3)*

4.3 Discussion

The students` comments on their rotation were overwhelmingly positive. The openness and willingness of the private patient to be seen by the students were for them one of the big surprises. The advantage of the smaller groups, one-on-one interaction with the specialist, bed-side teaching, more personal relationship with the educators, and role- modelling all led to better and more stimulating teaching and learning experience. Some of the theoretical principles that underpin the experience of the students at the private clinical platform are the following: social cognitive theory, community of practice, reflective practice, principles of feedback, role modelling and the positive working environment.

Students, in this rotation at the private hospital platform, worked in small groups and often one on one with the private consultant. They had ample opportunity to see how the consultant operates and interact, not only with their patients but also other healthcare workers. People learn by observing others in the context of social interactions and experiences (Social Cognitive theory).[29] It also relates to Situational learning or Experiential learning[30] which stated that learning happens through certain experiences or situations.

In this rotation, the student belongs to two communities of practice. They are a member of the treatment group in the first place, with their consultant looking after the well-being of their patients, and in the second place as part of a small group of students that work and study together to prepare for tutorials, exams or OSCE`s. Their interaction with the consultant, the patient and with peers stimulates and motivates them to study, learn and become professional healthcare workers.[33]

The smaller groups and bedside teaching is ideal for reflective practice.[35] At the bedside is the ideal opportunity to guide and correct the student while he or she is performing a procedure, correcting an examining technique or helping with the interpretation of a clinical sign or diagnostic result.[36] Using reflective journals (case studies and portfolio`s) requires the use of integrative learning, expressive writing and critical thinking, which encourages higher order of learning.[27] It is easier to give feedback working in a small group. A student's performance can be criticised, but feedback must include suggestions to correct deficiencies.[26] The students rotating at the private platform experienced the feedback as constructive.

Self-assessment is an important part of feedback. Students are often harsher on themselves than the teacher, and they can identify their errors and shortcomings sometimes better. If an open and safe environment is created (as stated by the students in this study), then it provides the opportunity for the teacher to correct those errors and reinforce their strengths.[36] Clinical learning often happens in a group, and the role peers play in the learning process must not be

underestimated. Peers often have valuable insights into their clinical partner's behaviour and in the process will also learn of constructive feedback.[27]

The students very clearly highlight the effect that working in a close relationship with a consultant has on their development of a professional identity, the kind of doctors they want to become, or how they want to interact with their patients. Kenny et al. state "the observation of role models is one of the most important factors in the development of the professional role in students.[37] Both the learning theories of communities of practice and situated learning are based on role modelling.[26] By admitting that you as a physician does not know everything, that you are willing to learn (even from students or peers) you as a clinical teacher, stimulate your students to become lifelong learners.[38]

Some obstacles need to be addressed, and the recommendations of the students must be considered in the planning and execution in future. At present not all the students get the opportunity to rotate on the private hospital platform. The students who remain on the public platform also benefit from this initiative, because they are now fewer students on the public platform, their access to patients and consultants also improves. The optimal size for bed-side teaching is a group smaller than seven students.[34] The current teaching platform in the public sector is so crowded that it is common to have more than twenty students on a ward round.

One of the biggest challenges remains to get the private physician (with their already busy schedules) interested and committed to the programme. Doctors (Public and Private) have a social responsibility as the natural attorneys of the poor, to help and solve the social problems[12] and one of the biggest social problems is the shortage of healthcare workers. Clinicians have a dual role in this context—which is to provide medical care and to teach.[25] Being a role model, doctors have the most powerful influence upon the standard of conduct and practice of their trainees.[26]

However, there are also rewards that are not necessarily financial. For the doctors involved, there are academic accreditations, academic prestige and closer bonds again with the academic community. Working with the students, they must also ensure that they practise a good standard of medicine, following the latest guidelines and protocols. The patients get the benefit of not only getting more attention but also getting better quality or standard of care.[2]

Looking at the aims and objectives of this study of - evaluating the students` experience of their rotation at the Private Hospital Platform, one can clearly state that the Private platform can effectively be used for undergraduate medical education. The private physician taking part in this study made ample time for the students and played a role in the development of their professional identity. Private patients seem to be more knowledgeable about their condition and more than willing to assist the students in their development.

This study does not only have scientific value in providing evidence, based on the students' experience that the private platform can be utilised for undergraduate medical teaching but also addresses the social responsibility that the Doctor, the University and the Private Hospital sector have, with the infrastructure and human resources that are available.

The question that needs to be answered; did this rotation`s success depend only on the smaller group size, one-on-one interactions? And yes, it definitely played a role in the

outcome, but the contribution of the private patient, the private hospital environment and especially the private physician`s commitment to assist, help and guide the students, made a major difference to the undergraduate student`s experience of their rotation at the private hospital platform.

The student`s comment that this experience has reignited their passion for medicine stimulated them to study and to become better doctors has made all the hard work and effort to put this programme together, worthwhile. DC Tosteson, the previous dean of Harvard Medical School once said "We must acknowledge… that the most important, indeed the only thing we have to offer our students is ourselves. Everything else they can read in a book."

4.4 Recommendations for future research

This study confirms from a student's experience that the Private Platform can be utilised for undergraduate medical education. The evaluation of how the private physician and how the private patient experienced this formal interaction with the undergraduate medical student could possibly help to understand and implement the possible expansion of the teaching and learning platform to the Private Hospital Platform, and should, therefore, be researched.

4.5 Conclusion

Evaluation of the students` experience of their rotation on the private hospital platform confirms that the Private Hospital Platform can successfully be utilised for undergraduate medical student training. The private patient is accessible to undergraduate training, and that the private physician can contribute to undergraduate education. The teaching platform can thus be enlarged to include infrastructure and human resources available in the private sector, more cost-effectively than other initiatives, e.g. the Nelson Mandela/Fidel Castro programme, or building another training facility/hospital. The enlarged teaching and learning platform will allow access to more students being trained in South Africa for our local need. Ultimately providing more doctors and improving medical care for the whole population.

This study is important in proving that the private sector can contribute, that Private-Public-Partnership can guide the way for future medical education, where the current platform has become insufficient to supply or fulfil the medical or healthcare need of the people of South Africa. Collaboration, not only in healthcare delivery but also in education and research, sharing expertise and infrastructure is needed to survive this potential health crisis, addressing the need for more healthcare professionals. It is time for the private hospital sector to contribute to undergraduate medical education.

Chapter 5

5.1 Manuscript submitted to the African Journal of Health Professions Education

Manuscript no AJHPE1140

Can the Private Hospital platform be used to train undergraduate medical students?

An evaluation of the undergraduate medical students` experience of their clinical rotation at a Private Hospital setting in South Africa.

Abstract

Background: A central issue in South African healthcare is the shortage of capacity to train medical doctors. Recent research on community-based teaching points to its effectivity in the expansion of clinical teaching opportunities. The Private Hospital setting, as part of the teaching platform, has not been utilised yet.

Objectives: To evaluate the experience of medical students doing their clinical rotation at a private hospital setting.

Methods: This cross-sectional descriptive study used a qualitative research design. Thirty students who completed their clinical rotation at a private hospital participated. Two methods of data collection were used namely open-ended surveys and focus group interviews. The results were coded and categorised into interpretive themes.

Results: The fourth- and fifth-year medical students experienced this initiative as an overall positive learning experience with several benefits attributed to the smaller group environment, better work environment, the one-on-one approach with the consultants, less stress and better interactions with the patients.

Conclusion: This study confirms that the private health platform can be used effectively for medical student training. Allowing access to more students will ultimately increase the number of doctors, potentially improving medical care in South Africa. It is time for the private hospital sector to contribute to medical education.

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Introduction

There is currently a major shortage of healthcare professionals worldwide and a specific shortage of medical doctors in South Africa.[1] The Medical Schools in South Africa are training at full capacity, and therefore the expansion of the clinical teaching platform is necessary.[2,3] With the overload of students on the clinical teaching platform, it is a challenge to offer proper bedside teaching. Community-based teaching has been identified as part of the solution for the transformative scale-up of medical education as it enlarges the clinical teaching platform by giving access to more medical students.[4] Moving away from the traditional academic teaching hospital not only serves the purpose of apprenticeship teaching in the community but also lessens the burden of the traditional platform, while improving the teaching and learning environment.[5]

Community-based education on the rural platform has been at the centre of many recent publications.[5,6,7,8] However, less research is available on undergraduate medical student training at a private hospital setting. The Queensland University in Australia has successfully implemented a programme of collaboration between the public and private hospitals for the training of undergraduate medical students.[9] New initiatives are needed to address this shortage of health professionals in South Africa.[1] Expanding the clinical teaching platform to the private sector might be part of the solution.[2] Collaboration, not only in healthcare delivery but also in health education and research, in the sharing of expertise and with infrastructure, is needed to survive a potential health crisis.[10]

The success of the rural clinical school of medicine of Stellenbosch University has led to a trial project where medical students in their fourth and fifth year of study rotate at a private hospital. The infrastructure and expertise in the private setting is an untapped resource that may be utilised for the teaching, learning and training of healthcare professionals. Bateman[2]

quoted the Dean of the Medicine and Health Sciences at Stellenbosch University stating that the public and private sectors need to collaborate to help solve fundamental problems in South Africa.[2] This trial project is the first official project of formal clinical teaching collaboration of undergraduate medical students between private and public sectors. How the students, doctors-as-educators and private patients respond and experience such an intervention in a Private Hospital setting, has never been previously documented in the South African context.

The trial project started in 2014. Students get the opportunity to do their official mid-clinical rotation in Internal Medicine on the private platform at Mediclinic Durbanville, Panorama and Cape Gate. The physicians-educators in this programme are all specialist physicians in private practice. They are accredited by Stellenbosch University as clinical lecturers and attend a yearly orientation seminar arranged by the Department of Internal Medicine. These physicians do this educational work voluntarily without remuneration.

Research Method

This was a qualitative study which followed an interpretivist paradigm. The design is a cross-sectional descriptive study with convenient sampling, selecting students who rotated at the Private Hospital Platform.[13,14,15] Students allocation to the Private Platform Rotation were randomly made by the Department of Internal Medicine.

After ethical research approval was received (S18/02/035), data were collected by open-ended survey questionnaires (*S1-30*) and focus group interviews (*FG-1 and 2*). All students were invited to participate. The two focus group interviews were conducted in the last week of the students` rotation. The students were questioned about their experience of the patients, disease profile, the specialist physicians and the hospital environment. The students were invited to take part in the focus group discussions voluntarily, and informed consent was signed at the forum interview. Students' comments were coded manually, grouped and categorised into seven themes. Results were triangulated, comparing the responses from the questionnaires with that of the forum interviews.

Results

Thirty students took part in the study– 16 fourth-year students and 14 in the fifth-year group; all completed the questionnaires and attended the focus group interviews. All the students, irrespective of race, language or culture, found the mid-clinical rotation at the Private

Hospital Platform to have been a positive learning experience, some more so than others did. Data from the questionnaires and the focus group interviews were found to complement each other, and the following themes were identified as common points of interest:

Interaction with patients

The students found the patients surprisingly willing and acceptable to being examined by them as illustrated by the following comments made in the focus group discussions:

> *I was pleasantly surprised. The patients we saw were friendly and eager to help us along or academic endeavour becoming doctors' (S25)*, and *It was nice to see that even patients paying for health-care did not mind being examined by students (S21).*

The students commented that private patients were more informed and knowledgeable about their disease, diagnostic tests and treatment regimens as opposed to the patients in public hospitals:

> *The patients were very open to being examined, and most of them understood their conditions and could point out relevant signs and symptoms, helping to integrate my exam findings. The patients also wanted to know more about their conditions from us (S4).*

Not only were the patients more informed but they were also more eager to ask the students questions, not only about their disease but also about diagnostic tests, results and treatment regimens:

> *Here is a difference in engagement and the extent of the discussion. They also tend to be more aware of their rights and assertive and would regularly ask for explanations and justification of certain situations or investigations (S11).*

Patients who were informed and selected by their physicians to take part in the programme were all very accommodating: '*the doctor handpicked the patients, and all were very accommodating*' *(S13).*

The smaller numbers also influenced the patient's willingness: *'patients were obviously much friendlier than the public hospital patient because they do not get harassed by students every 5 minutes' (S30).*

Disease profiles are different at the private hospital versus the public hospital platform. Patients are on average older at the private platform, and the focus is on lifestyle diseases,

endocrinology, rheumatology and degenerative diseases versus HIV/AIDS, tuberculosis and infectious diseases at the public platform. The students' overall response is that rotation on both platforms are needed to complete their education.

The Private Physician as Educator

All the students commented on the consultants' willingness to teach, share their knowledge and their experience. They argued that because private physicians are taking part voluntarily, they are more willing to teach. In comparison, their peers at the public platform were mostly being taught by the registrars, who they perceived as overloaded by their patient burden, clinical work and own studies– and were 'forced' to teach:

> *The main thing is that doctors on the private platform are teaching on a voluntary basis, not because they have to. It always felt like they wanted to help, and I felt comfortable to ask them questions (S15).*

The daily one-on-one contact with the consultant was the most important distinguishing factor between the rotations on the private versus the public platform. In contrast, at public hospitals the students' contact with consultants are limited to one or two ward rounds per week where they are part of a bigger group:

> *In the past, I would see the consultant once a week on a massive ward round where absolutely no one-on-one interaction occurred (S9).*

They also experienced the consultants to be supportive of them whereas the public consultants were more focused on the registrars (FG-1). Because of the maximum of two students per consultant, they found the consultants were welcoming, less threatening and eager to get to know them better, not only as students but as persons: *'he took personal interest in our development' (S2).*

The consultants made them feel part of the team and valued their opinions, taking time to teach and help them. According to the students, the experienced consultant was also better equipped to teach them than the registrars, interns or senior students:

> *The major difference between the private and public doctor is the level of education. We work with registrars and interns, and that can`t compare with working with a specialist, their background, education and level of experience (FG-1).*

The rotation was much more academically orientated than they expected. There was more focus on acquiring knowledge and skills and less on doing procedures like drawing blood or putting up drips. The one-on-one contact led to better identification of gaps in their knowledge and skills and helped to correct it. All the students reported that this rotation improved their skills of history taking, proper clinical examinations and presenting patients:

> *The private platforms offer a unique opportunity to learn from a consultant in a very personal environment. I feel much more confident in my approach to patients and clinical examination technique at the end of this rotation (S29).*

Relationships between the physicians and the students were different from their previous experiences, mostly due to the personal interaction, leading to more respect between physician and student:

> *'…the way our doctor interacts with us made me realise how I would like to interact with others' (S4),* and '*the consultant actually knows our names' (S18).*

The Private Hospital Platform as a teaching and learning environment

The students experienced the environment as good for teaching and learning since it was academically focused: *'it is done in an environment conducive to learning' (S22).*

The hospital and the patients` wards were quieter, cleaner and more spacious with fewer people around the bed. The equipment worked, and the turn-around time of diagnostic tests was shorter:

> '*… the private hospital environment is a lot more organised, hygienic and friendly than the public' (S4),* and *'everything is always available' (S10).*

The interaction between the staff was better, and the nursing staff were helpful and accommodated to the students. Free Wi-Fi was also an added bonus:

> *'the nursing staff and doctors are happy to see and interact with you' (S7),* and *'free Wi-Fi is a plus' (S12).*

However, they felt that they lacked a proper allocated place where they could work, study or relax between ward rounds, consultations or while waiting for tutorials (*FG-2*).

The Teaching and Learning Experience

The main difference was the small groups at the private hospital, being allocated either one or two students per consultant. This led to more personal contact and relationships developing between the students and the consultants.

Ward rounds were experienced as learning opportunities and not just to do ward work. The students missed doing clinical procedures but said that the time saved not doing ward work was well spent on teaching and learning.: *'no procedures, lots of learning' (S10).*

Bedside teaching took place on every ward round with mini-tutorials with the patient as the focus: *'it was great to be acknowledged and involved in ward rounds. Tuts on the patients along the way instead of aimless following' (S6).*

Due to the smaller groups, the students felt more comfortable to raise opinions and ask more questions, without the fear of being ridiculed. The smaller group makes it also easier to give and receive feedback. Feedback on how the students examined and presented clinical cases, during action and after action, led to an improvement of their clinical skills. Because of the more personal relationship with the consultants, they experienced the feedback positively:

> *'... we were given feedback after every case. One of the best teaching experiences. I will always cherish my experience*' *(S19).*

By observing the consultants working with the patients, their families, their interaction with the staff and other colleagues, had a direct effect on how the students claim they want to practice one day: *'the type of doctor that I would like to be' (S28).*

The smaller groups and personal contact led to a more positive impact than any other action. Nearly all the students mentioned that this stimulated and motivated them with some mentioning that it reignited their passion for medicine: *'it inspired me again' (S9).*

The tutorials were found to be practical and interactive. The students requested more tutorials to be arranged and identified certain practical topics that they wanted to be addressed. They also recommended that the tutorials must not interfere with their ward rounds:

> *'... tutorials in the morning interfered with ward rounds. We were unable to complete ward rounds and missed exposure to more clinical cases' (S4).*

The tutorials must also follow on each other to save time for students that have to travel from other hospitals (*FG-1*).

Relationships

The individual contact with the consultant differs from their previous exposures to specialists: *'I liked the one-on-one approach' (S10).*

They did not experience the hierarchy that exists at the public hospital: '*usually we`re seen at the bottom of a power/seniority hierarchy' (S7).*

The consultants knew them personally, asked about their personal lives and shared personal experiences with them; work and family related:

> *... 'the doctor shared his own personal experiences e. g. family life and how important it is to have a balance'* (*FG-1*).

Patient-doctor relationships are also different from the public sector since the patient is usually referred to a specialist of their choice. They are also paying to be seen by the doctor, and some of them are chronic patients of the doctor, who knows them and their families for years. Therefore, the private physician communicates more effectively, not only giving information about their disease, tests and results but also to their families and referring doctors:

> *the family members are also much more included in the explanations and are definitely an aspect of the job that we don't get to deal with at Tygerberg Hospital (TBH) (S14).*

The interdisciplinary relationship, where patients are referred between disciplines, is also much more of a team experience, where specialists work together to address a patient`s problem: *'More or better relationships between all healthcare workers' (S2).*

Stress

The students experienced the private rotation as less stressful. They felt their days were more structured, organised and not rushed, and more time was spent with the patients and the physicians:

> *The interactions were friendly and stress-free in comparison to the hierarchy platform in public. It made me significantly more comfortable to interact with senior doctors (S23).*

The smaller group also did not make them feel intimidated: *'being the only student with a consultant helped my learning, and it did not feel as intimidating as it can in a bigger group' (S8).*

They described the environment as less toxic as the consultants are not approachable at the public platform and as a student you try to avoid them, whereas at the private platform they appear to be interested in you as a person: *'In TBH the consultants are like gods and registrars, and students stay out of their way. Here I feel that everyone actually appreciates me being here'* (*FG-1*).

They found the public hospital to be an intimidating environment to answer questions, but at the Private Platform, they felt that the consultant wanted to help, correct or guide them: *'the doctors here at private told us to say whatever we think out loud because they want to know how we think.'* (*FG-1*).

Student Recommendations

All the students gave positive feedback on their experience of this rotation. However, certain elements identified by the students can be improved when planning to expand the private hospital platform (Table 1).

Table 1. Student recommendations

Student recommendations	
1	They would like their own designated space where they could work in their free time, waiting between tutorials or ward rounds.
2	They would like to have more tutorials, finding them very practical, but they would like them to take place later in the day, not to interfere with their ward-rounds.
3	Tutorials must also be arranged to follow on each other, not to waste time if they had to travel from other institutions to attend.
4	All the consultants, private and public, must be on the same page, knowing what is expected of a student in their mid-clinical rotation (knowledge and skills).
5	The evaluation of objective structured clinical examinations (OSCE) and Portfolios must be more uniform and the same on both platforms to ensure fairness, validity and reliability.

6	The two platforms, public and private, do complement each other and all the students must get an opportunity to experience both platforms.
7	The preferred language to be used for academic purposes must be English. Even the Afrikaans speaking students felt uncomfortable or did not understand Academic or Medical Terminology in Afrikaans.

Discussion

This study has outlined a number of issues in clinical teaching which are usually associated with positive experiences as students. The openness and willingness of private patients to be seen by the students were one of the big surprises. The advantage of the smaller groups, one-on-one interaction with the specialist, bed-side teaching, more personal relationships with the educators, and role- modelling all led to their perception of a good educational experience. Some of the theoretical principles that underpin the experience of the students at the private platform are *inter alia*: social cognitive theory, community of practice, reflective practice, principles of feedback, role modelling and a positive working environment.

Students at the private hospital rotation worked in small groups and individually with the private consultant. They had ample opportunity to see how the consultant operates and interacts with their patients and also other healthcare workers. People learn by observing others in the context of social interactions and experiences.[19,20]

In this rotation, the student belongs to two communities of practice. They are part of the treatment group with their consultant treating their patients, and part of a small group of students who work and study together to prepare for tutorials, exams or OSCE`s. Their interaction with the consultants, the patients and peers, stimulate and motivates them to study, learn and become professional healthcare workers.[21]

The smaller groups and bedside teaching are ideal for reflective practice.[22] Bedside teaching is the ideal opportunity to guide the student while they are performing a procedure by correcting an examining technique or helping with the interpretation of a clinical sign or diagnostic results.[23] A student's performance can be criticised, but feedback must include suggestions to correct deficiencies.[25] The students rotating at the private platform experienced the feedback as constructive.

Self-assessment is an integral part of feedback. Students can often be critical and successfully identify their errors and shortcomings. If an open and safe environment is created as reported

by the students who rotated on the private hospital platform, then it provides the opportunity for the teacher to correct those errors and reinforce their strengths.[23] Clinical learning often happens in a group and peers play an important role in the learning process. Peers often have valuable insights into their clinical partner's behaviour.[24]

The students highlighted that working in a close relationship with a consultant influenced their development of professional identity and how they want to interact with their patients. The observation of role models is one of the most important factors in the development of the professional role in students.[26] Both the learning theories of communities of practice and situated learning are based on role modelling.[27] By admitting that the physician does not know everything, and together with their willingness to learn stimulates students to become lifelong learners.[28]

There are obstacles that need to be addressed, and the student recommendations must be considered in the future. At present, not all the students get the opportunity to rotate on the private hospital platform.

One of the biggest challenges is to get private physicians interested in and committed to the programme. However, there are also rewards that are not financial, such as academic accreditations, academic prestige and involvement with the academic community. As educators, physicians must also ensure that they are following the latest guidelines and protocols and practise a good standard of medicine.

The student`s comment that this experience has reignited their passion for medicine stimulated them to study and to ultimately become better doctors, has made all the effort to put this programme together, worthwhile.

Conclusion

Evaluation of the students` experience of their rotation on the private hospital platform confirms that the Private Hospital Platform can successfully be utilised for undergraduate medical student training. The teaching platform can thus be enlarged to include infrastructure and human resources available in the private sector, more cost-effectively than other initiatives. The enlarged teaching and learning platform will allow access to more students being trained in South Africa for our local need. Ultimately this will provide more doctors and improve medical care for the whole population.

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5.2 The African Journal of Health Professions Education- requirements for research manuscript (appendix 8.14)

See Attached

5.3 Powerpoint presentation made at the Occupational psychologist forum at the Stellenbosch Business school (appendix 8.15)

See Attached

Chapter 6

6.1 Synthesis and future developments

There is worldwide a shortage of healthcare workers. In South Africa, the need is even greater and specifically, for more doctors, due to the current shortages and the increased disease burden. The limiting factor to train more medical doctors is the capacity of the teaching platform. All the current medical schools in South Africa are filled to capacity. Clinical skills are best taught at the bedside. With current student numbers, ward rounds have lost its effectiveness of being the clinical skills teaching platform, with more than twenty students per ward-round. The ideal number for problem-based learning at the bedside would number less than seven.

Alternative and new innovative ways of expanding the teaching platform is thus indicated. Worldwide community-based education has been used to increase the teaching platform, benefitting not only the students rotating on this platform but also the patients in the communities. The students that remained at the traditional teaching hospital benefited as well due to less congestion and competition at the bed-side. One of the limitations of community-based education is the limitation of exposure to specialists. Specialists are more hospital-centred and have more time limitations.

The private hospital sector, with its infrastructure, human resources, including specialists working there, has never been used in an official capacity for the training of undergraduate medical students. Private patients have also been seen as patients who would be opposed to the idea of being used in the training of medical students. However, student electives were successfully completed at the private hospital setting, where this rotation of undergraduate students as part of their mid-clinical rotation in Internal Medicine at Mediclinic Durbanville since 2014 was the first official undergraduate training satellite in South Africa.

This study evaluated the undergraduate medical students experience of their official four-week rotation at the private hospital setting. The students experienced their rotation as very positive, indicating that the private hospital setting can effectively be used for undergraduate medical training, that the private specialist could function as an educator and serve as a role model and that the private patient was very acceptable to be used and be involved in the undergraduate training of medical students.

Due to the success of this rotation in Internal Medicine on the Private Hospital Platform, a task force was formed, with the vice-chancellor of Stellenbosch University as chairmen, including the Dean of the Faculty of Health Science and the chief executive officer of Stadio Multi-varsity and members of the Private Hospital sector. This task force aims to evaluate and plan the possible expansion of the teaching and learning platform to include other disciplines, expanding the teaching and learning platform, to give access to at least another hundred undergraduate students.

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8. Appendices

Appendix 8.1:

Health Research Ethics Committee Approval Notice

Health Research Ethics Committee (HREC)

Approval Notice

New Application

27/03/2018

Project ID :6281

HREC Reference # S18/02/035

Title: Undergraduate medical students` experience of clinical rotations in a Private Hospital setting in South Africa

Dear Dr FC Theron,

The **New Application** received on 28/02/2018 11:12 was reviewed by members of **Health Research Ethics Committee 2 (HREC2)** via **expedited** review procedures on 27/03/2018 and was approved.

Please note the following information about your approved research protocol:

Protocol Approval Period: **This project has approval for 12 months from the date of this letter.**

Please remember to use your **Project ID (6281)** on any documents or correspondence with the HREC concerning your research protocol.

Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

After Ethical Review

Please note you can submit your progress report through the online ethics application process, available at: Links Application Form Direct Link and the application should be submitted to the HREC before the year has expired. Please see *Forms and Instructions* on our HREC website (www.sun.ac.za/healthresearchethics) for guidance on how to submit a progress report.

The HREC will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

Provincial and City of Cape Town Approval

Please note that for research at a primary or secondary healthcare facility, permission must still be obtained from the relevant authorities (Western Cape Departement of Health and/or City Health) to conduct the research as stated in the protocol. Please consult the Western Cape Government website for access to the online Health Research Approval Process, see: https://www.westerncape.gov.za/general-publication/health-research-approval-process. Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research.

For standard HREC forms and instructions, please visit: Forms and Instructions on our HREC website https://applyethics.sun.ac.za/ProjectView/Index/6281

If you have any questions or need further assistance, please contact the HREC office at 021 938 9677.

Yours sincerely,

Francis Masiye ,

HREC Coordinator,

Health Research Ethics Committee 2 (HREC2).

Appendix 8.2 Mediclinic Approval

MEDICLINIC
DURBANVILLE

45 WELLINGTON ROAD
DURBANVILLE
7550

PRIVATE BAG X15
DURBANVILLE
7551

T +27 21 980 2100
F +27 21 975 1880
ETHICS LINE 0800 005 316

www.mediclinic.co.za

29 January 2018

Dear Dr Theron

MEDICAL STUDENTS

I hereby wish to confirm that I do not have any objection to your evaluation of the experience of the medical students rotating through the hospital.

Kind Regards

CHRISTINE TAYLOR
Hospital General Manager

Appendix 8.3

Institutional Permission

UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvennoot • your knowledge partner

INSTITUTIONAL PERMISSION:

AGREEMENT ON USE OF PERSONAL INFORMATION IN RESEARCH

Name of Researcher: Dr FCR Theron

Name of Research Project: Undergraduate medical students' experience of clinical rotations in a Private Hospital setting in South Africa

Service Desk ID: IRPSD 917

Date of Issue: 20 June 2018

You have received institutional permission to proceed with this project as stipulated in the institutional permission application and within the conditions set out in this agreement.

1 WHAT THIS AGREEMENT IS ABOUT	
What is POPI?	1.1 POPI is the Protection of Personal Information Act 4 of 2013. 1.2 POPI regulates the entire information life cycle from collection, through use and storage and even the destruction of personal information.
Why is this important to us?	1.3 Even though POPI is important, it is not the primary motivation for this agreement. The privacy of our students and employees are important to us. We want to ensure that no research project poses any risks to their privacy. 1.4 However, you are required to familiarise yourself with, and comply with POPI in its entirety.
What is considered to be personal information?	1.5 'Personal information' means information relating to an identifiable, living, individual or company, including, but not limited to: 1.5.1 information relating to the race, gender, sex, pregnancy, marital status, national, ethnic or social origin, colour, sexual orientation, age, physical or mental health, well-being, disability, religion, conscience, belief, culture, language and birth of the person; 1.5.2 information relating to the education or the medical, financial, criminal or employment history of the person;

	1.5.3 any identifying number, symbol, e-mail address, physical address, telephone number, location information, online identifier or other particular assignment to the person; 1.5.4 the biometric information of the person; 1.5.5 the personal opinions, views or preferences of the person; 1.5.6 correspondence sent by the person that is implicitly or explicitly of a private or confidential nature or further correspondence that would reveal the contents of the original correspondence; 1.5.7 the views or opinions of another individual about the person; and 1.5.8 the name of the person if it appears with other personal information relating to the person or if the disclosure of the name itself would reveal information about the person.
Some personal information is more sensitive.	1.6 Some personal information is considered to be sensitive either because: 1.6.1 POPI has classified it as sensitive; 1.6.2 if the information is disclosed it can be used to defraud someone; or 1.6.3 the disclosure of the information will be embarrassing for the research subject. 1.7 The following personal information is considered particularly sensitive: 1.7.1 Religious or philosophical beliefs; 1.7.2 race or ethnic origin; 1.7.3 trade union membership; 1.7.4 political persuasion; 1.7.5 health and health related documentation such as medical scheme documentation; 1.7.6 sex life; 1.7.7 biometric information; 1.7.8 criminal behaviour; 1.7.9 personal information of children under the age of 18; 1.7.10 financial information such as banking details, details relating to financial

	products such as insurance, pension funds or other investments. 1.8 You maymake use of this type of information, but must take extra care to ensure that you comply with the rest of the rules in this document.
2 COMMITMENT TO ETHICAL AND LEGAL RESEARCH PRACTICES	
You must commit to the use of ethical and legal research practices.	2.1 You must obtain ethical clearance before commencing with this study. 2.2 You commit to only employing ethical and legal research practices.
You must protect the privacy of your research subjects.	2.3 You undertake to protect the privacy of the research subjects throughout the project.
3 RESEARCH SUBJECT PARTICIPATION	
Personal information of identifiable research subjects must not be used without their consent.	3.1 Unless you have obtained a specific exemption for your research project, consent must be obtained in writing from the research subject, before their personal information is gathered.
Research subjects must be able to withdraw from the research project.	3.2 Research subjects must always be able to withdraw from the research project (without any negative consequences) and to insist that you destroy their personal information.
Consent must be specific and informed.	3.3 Unless you have obtained a specific exemption for your research project, the consent must be specific and informed. Before giving consent, the research subject must be informed in writing of: 3.3.1 The purpose of the research, 3.3.2 what personal information about them will be collected (particularly sensitive personal information), 3.3.3 how the personal information will be collected (if not directly from them), 3.3.4 the specific purposes for which the personal information will be used, 3.3.5 what participation will entail (i.e. what the research subject will have to do), 3.3.6 whether the supply of the personal information is voluntary or mandatory for purposes of the research project,

	3.3.7 who the personal information will be shared with, 3.3.8 how the personal information will be published, 3.3.9 the risks to participation (if any), 3.3.10 their rights to access, correct or object to the use of their personal information, 3.3.11 their right to withdraw from the research project, and 3:3.12 how these rights can be exercised.
Consent must be voluntary.	3.4 Participation in the research project must always be voluntary. You must never pressure or coerce research subjects into participating and persons who choose not to participate must not be penalised.
Using the personal information of children?	3.5 A child is anybody under the age of 18. 3.6 Unless you have obtained a specific exemption in writing for your research project, you must obtain 3.6.1 the consent of the child's parent or guardian, and 3.6.2 if the child is over the age of 7, the assent of the child, before collecting the child's information.
Research subjects have a right to access.	3.7 Research subjects have the right to access their personal information, obtain confirmation of what information is in your possession and who had access to the information. It is strongly recommended that you keep detailed records of access to the information.
Research subjects have a right to object.	3.8 Research subjects have the right to object to the use of their personal information. 3.9 Once they have objected, you are not permitted to use the personal information until the dispute has been resolved.
4 COLLECTING PERSONAL INFORMATION	
Only collect what is necessary.	4.1 You must not collect unnecessary or irrelevant personal information from research subjects.
Only collect accurate personal information.	4.2 You have an obligation to ensure that the personal information you collect is accurate. Particularly when you are collecting it from a source other than the

	research subject. 4.3 If you have any reason to doubt the quality of the personal information you must verify or validate the personal information before you use it.
5 USING PERSONAL INFORMATION	
Only use the personal information for the purpose for which you collected it.	5.1 Only use the personal information for the purpose for which you collected it. 5.2 If your research project requires you to use the personal information for a materially different purpose than the one communicated to the research subject, you must inform the research subjects and Stellenbosch University of this and give participants the option to withdraw from the research project.
Be careful when you share personal information.	5.3 Never share personal information with third parties without making sure that they will also follow these rules. 5.4 Always conclude a non-disclosure agreement with the third parties. 5.5 Ensure that you transfer the personal information securely.
Personal information must be anonymous whenever possible.	5.6 If the research subject's identity is not relevant for the aims of the research project, the personal information must not be identifiable. In other words, the personal information must be anonymous (de-identified).
Pseudonyms must be used whenever possible.	5.7 If the research subject's identity is relevant for the aims of the research project or is required to co-ordinate, for example, interviews, names and other identifiers such as ID or student numbers must be collected and stored separately from the rest of the research data and research publications. In other words, only you must be able to identify the research subject.
Publication of research	5.8 The identity of your research subjects should not be revealed in any publication. 5.9 In the event that your research project requires that the identity of your research subjects must be revealed, you must apply for an exemption from this rule.
6 SECURING PERSONAL INFORMATION	
You are responsible for the confidentiality and security of the personal information	6.1 Information must always be handled in the strictest confidence. 6.2 You must ensure the integrity and security of the information in your possession or under your control by taking appropriate and reasonable technical and

	organisational measures to prevent: 6.2.1 Loss of, damage to or unauthorised destruction of information; and 6.2.2 unlawful access to or processing of information. 6.3 This means that you must take reasonable measures to: 6.3.1 Identify all reasonably foreseeable internal and external risks to personal information in your possession or under your control; 6.3.2 establish and maintain appropriate safeguards against the risks identified; 6.3.3 regularly verify that the safeguards are effectively implemented; and 6.3.4 ensure that the safeguards are continually updated in response to new risks or deficiencies in previously implemented safeguards.
Sensitive personal information requires extra care.	6.4 You will be expected to implement additional controls in order to secure sensitive personal information.
Are you sending any personal information overseas?	6.5 If you are sending personal information overseas, you have to make sure that: 6.5.1 The information will be protected by the laws of that country; 6.5.2 the company or institution to who you are sending have agreed to keep the information confidential, secure and to not use it for any other purpose; or 6.5.3 get the specific and informed consent of the research subject to send the information to a country which does not have data protection laws.
Be careful when you use cloud storage.	6.6 Be careful when storing personal information in a cloud. Many clouds are hosted on servers outside of South Africa in countries that do not protect personal information to the same extent as South Africa. The primary example of this is the United States. 6.7 It is strongly recommended that you use hosting companies who house their servers in South Africa. 6.8 If this is not possible, you must ensure that the hosting company agrees to protect the personal information to the same extent as South Africa.
7 RETENTION AND DESTRUCTION OF PERSONAL INFORMATION	
You are not entitled to retain personal information when	7.1 Personal information must not be retained beyond the purpose of the research project, unless you have a legal or other justification for retaining the information.

you no longer need it for the purposes of the research project.	
If personal information is retained, you must make sure it remains confidential.	7.2 If you do need to retain the personal information, you must assess whether: 7.2.1 The records can be de-identified; and/or whether 7.2.2 you have to keep all the personal information. 7.3 You must ensure that the personal information which you retain remains confidential, secure and is only used for the purposes for which it was collected.
8 INFORMATION BREACH PROCEDURE	
In the event of an information breach you must notify us immediately.	8.1 If there are reasonable grounds to believe that the personal information in your possession or under your control has been accessed by any unauthorised person or has been disclosed, you must notify us immediately. 8.2 We will notify the research subjects in order to enable them to take measures to contain the impact of the breach.
This is the procedure you must follow.	8.3 You must follow the following procedure: 8.3.1 Contact the Division for Institutional Research and Planning at 021 808 9385 and permission@sun.ac.za; 8.3.2 you will then be required to complete the information breach report form which is attached as Annexure A. 8.4 You are required to inform us of a information breach within 24 hours. Ensure that you have access to the required information.
9 MONITORING	
You may be audited.	9.1 We reserve the right to audit your research practices to assess whether you are complying with this agreement. 9.2 You are required to give your full co-operation during the auditing process. 9.3 We may also request to review: 9.3.1 Forms (or other information gathering methods) and notifications to research subjects, as referred to in clause 3;

	9.3.2 non-disclosure agreements with third parties with whom the personal information is being shared, as referred to in clause 5.4; 9.3.3 agreements with foreign companies or institutes with whom the personal information is being shared, as referred to in clause 6.5.
10 CHANGES TO RESEARCH	
You need to notify us if any aspect of your collection or use of personal information changes.	10.1 You must notify us in writing if any aspect of your collection or use of personal information changes (e.g. such as your research methodology, recruitment strategy or the purpose for which you use the research). 10.2 We may review and require amendments to the proposed changes to ensure compliance with this agreement. 10.3 The notification must be sent to permission@sun.ac.za.
11 CONSEQUENCES OF BREACH	
What are the consequences of breaching this agreement?	11.1 If you do not comply with this agreement, we may take disciplinary action or report such a breach to your home institute. 11.2 You may be found guilty of research misconduct and may be censured in accordance with Stellenbosch University or your home institute's disciplinary code.
You may have to compensate us in the event of any legal action.	11.3 Non-compliance with this agreement could also lead to claims against Stellenbosch University in terms of POPI and/or other laws. 11.4 Unless you are employed by or studying at Stellenbosch University, you indemnify Stellenbosch University against any claims (including all legal fees) from research subjects or any regulatory authority which are the result of your research project. You may also be held liable for the harm to our reputation should there be an information breach as a result of your non-compliance with this agreement.
12 CONTACT US	
Please contact us if you have any questions.	Should you have any questions relating to this agreement you should contact permission@sun.ac.za.

Annexure 'A'

Instruction:

Please send this Notice to permission@sun.ac.za. If you have any difficulty completing the Notice, please contact the Division for Institutional Research and Planning at 021 808 9385. You must confirm that the Notice was received.

NOTIFICATION OF INFORMATION BREACH

Name of Researcher: _____

Name of Research Project: _____

Service Desk ID: _____

A security breach happens when you know (or you **reasonably believe)** that there has been:

(a) loss of Personal Information ("PI")
(b) damage to PI
(c) unauthorised destruction of PI
(d) unauthorised access to PI
(e) unauthorised processing of PI

Date and time of security breach:	
Brief description of the security breach (what was lost and how). Please identify the equipment, software and/or physical premises and whether it is by hacking, lost device, public disclosure (email), theft or other means:	
Name of the person/s responsible for the security breach (if known):	
Is the security breach ongoing?	
Describe the steps taken to contain the security breach:	
What steps are being taken to investigate the cause of breach?	

Appendix 8.4

Student Survey

Since 2014 undergraduate medical students have rotated at the Private Hospital Platform as their official mid-clinical rotation in Internal Medicine. This is the first official rotations of undergraduate medical students in private hospital settings in South Africa. Your response and comments on your experience of this rotation are therefore critical or pivotal for the continuation, improvement or expansion of the program.

Please note

1. Your response will remain anonymous.
2. Your participation is voluntary.
3. Your participation (or not), will not have any effect on your academic outcomes.
4. This survey will only take 10-15 minutes to complete.

A. Demographic Information

1. Age: ___ years
2. Sex: M ☐ F ☐
3. Race: Black ☐ Coloured ☐ Indian ☐ Caucasian ☐ Other ☐

   Please specify if other _____
4. Year group: 4th ☐ 5th ☐
5. At which hospital did you rotate

   Durbanville ☐ Panorama ☐ Cape Gate ☐

B. Teaching and learning environment assessment

1. What effect (if any) did the private hospital environment had on your learning experience?

2. Was there anything at the Private Hospital platform that hindered your learning experience?

3. What would you have liked to be different and why?

4. How does the Private Hospital environment differ from the Public Hospital platform?

5. Did the Private Consultant made you feel part of the team, or did you feel in the way?

6. Where you part of the treatment team?

7. On average, did you spent more or less time with the consultant than what you spend with the consultant at the Public platform?

8. Did the consultant have an effect on your skills in regards of:

   a) History taking Yes ☐ No ☐
   b) Examining a patient Yes ☐ No ☐
   c) Presenting cases Yes ☐ No ☐

   Can you explain the effect?

9. How did your interaction with the Private Consultant differ from your previous interactions with consultants?

10. Did this experience help to develop your professional identity?

    Yes ☐ No ☐

    Please elaborate

11. Would you recommend the private platform rotation to your fellow students?

    Yes ☐ No ☐

    Please explain your answer

C. Your learning experience with patients in the private hospital

1. Were you exposed to enough patients/clinical cases? Yes ☐ No ☐

   Explain your answer.

2. Did your experience with the patients improve your clinical skills?

3. How did you experience the attitude of private patients towards you as a medical student? Does it differ from the attitude of the patient in the public sector?

4. Did any of the private patients refused to be seen by you as a medical student?

5. Did you examine all your patients under the supervision of a consultant or did you get the opportunity to see patients by yourself?

D. Any other comments you want to make on your experience as a student rotating in a private hospital?

E. What would you regard as to be the main difference between rotating at the private hospital setting versus your previous experience in the public sector?

Appendix 8.5

Questions of the focus group interviews

The following questions will be used to prompt students to discuss their experiences while rotating at the private hospital setting:

Questions

1. Based on your experience, what would you describe as the main difference between the private versus public rotation? Please elaborate.

2. Do you think that there are differences between the private specialist as an educator and the teachers at the public platform? Explain

3. How did you experience the accessibility of the patients in the private hospital? Explain

4. Did you see the same spectrum of diseases in the Private Hospital as at Public/Academic Hospital? Please elaborate.

5. Do you think there is benefit in rotating on both platforms? Why or why not?

6. Must all students get the opportunity to rotate on the private platform? Why or why not?

7. How will you describe your overall experience in the private hospital?

8. Any other comments that you want to add?

Appendix 8.6

Informed Consent: Participant information leaflet and consent form

TITLE OF THE RESEARCH PROJECT: The Undergraduate Medical Students` experience of the mid-clinical rotation in Internal Medicine at a Private Hospital setting in South Africa

HREC REFERENCE NUMBER: S18/02/035

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0827884788

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee at Stellenbosch University** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

What is this research study all about?

Since 2014 undergraduate medical students have rotated at a Private Hospital platform as their official mid-clinical rotation in Internal Medicine. This is the first official rotation of undergraduate medical student at a private hospital setting in South Africa. Your response and comments on your experience of this rotation are therefore critical or pivotal for the continuation, improvement or expansion of the program.

This research will include your participation in:

- Completing a survey questionnaire
- Taking part in a focus group interview

The survey questionnaire will ask some demographic data including your age, gender, race and academic year group. The survey is mostly tick-block answering and will be anonymous. If you do not want to answer certain questions, you are allowed to skip them. However, we shall value your response as complete as possible.

The focus group interviews will be audio-taped and transcribed. Your identity will not be revealed in the transcriptions. The interview will also include 14-16 of your fellow students who are rotating with you at the time. The discussion will be guided by an independent facilitator.

Why have you been invited to participate?

Only students doing their mid-clinical rotation in Internal Medicine at Mediclinic Durbanville, Panorama and Cape Gate (the Private Hospital platform), will be invited to take part in this research project. You are the best equipped to give an opinion on your experience.

Your participation is totally voluntary, but much needed and appreciated. If you choose not to participate it will have no effect or reflecting on your rotation evaluation, academic evaluation or progression.

What will your responsibilities be?

Your involvement will only be required for the focus-forum interview and the completion of the survey questionnaire. The focus group discussion will be done in the last week of your rotation and will not last longer than 40 minutes. Time will also be set aside for you to complete the questionnaire.

The survey questionnaire will ask some demographic data including your age, gender, race and academic year group. The survey is mostly tick-block answering and will be anonymous. If you do not want to answer certain questions, you are allowed to skip them. However, we shall value your response as complete as possible.

The focus group interviews will be audio-taped and transcribed. Your identity will not be revealed in the transcriptions. The interview will also include 14-16 of your fellow students who are rotating with you at the time. The discussion will be guided by an independent facilitator. The knowledge we get from this research will be shared with you and your feedback and opinion will help to validate these results.

Will you benefit from taking part in this research?

The aim of this study is to use the data collected to improve and expand undergraduate medical education and in doing so – patient care.

Are there in risks involved in your taking part in this research?

The questionnaires will be completed anonymously. Transcribed data of the focus group interviews will not identify any of the participants involved. The information that is collected from the research, will be kept private. We will ask you and others in the focus group to keep any information shared in the group during the discussion confidential. We, however, cannot guarantee that all participants in the focus group, will honour the confidentiality.

If you do not agree to take part, what alternatives do you have?

You do not have to take part in this research if you do not wish to do so. You may also stop your participation at any time should you wish so. At the end of the focus group interview, time will be given to review your remarks. You can then ask to modify or remove portions of your response if you do not agree with our data capturing.

Who will have access to your questionnaires and transcribed data?

All data generated, completed questionnaires and transcriptions will be stored in a secure facility for a period of at least 5 years. Electronic data will be password protected and the identities of all participants will be kept confidential.

Will you be paid to take part in this study and are there any costs involved?

No, you will not be paid to take part in the study but your transport and meal costs will be covered for each study visit. There will be no costs involved for you if you do take part.

Is there anything else that you should know or do?

- You can contact Dr Rust Theron at 0827884788 if you have any further queries or encounter any problems.
- You can contact the Health Research Ethics Committee at 021-938 9207 if you have any concerns or complaints that have not been adequately addressed by your study doctor.
- You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I …….. agree to take part in a research study entitled "The undergraduate medical students` experience of the mid-clinical rotation in Internal Medicine at a Private Hospital setting in South Africa".

I declare that:

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) ..... on (*date*) …….. 2018.

Signature of participant **Signature of witness**

Declaration by investigator

I *(name)* …… declare that:

- I explained the information in this document to ……..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above

Signed at (*place*) ..... on (*date*) …….. 2018

Signature of investigator **Signature of witness**

Appendix 8.7

First Discussion Forum – 5th year students

BASED ON YOUR EXPERIENCE, WHAT WOULD YOU DESCRIBE AS THE MAIN DIFFERENCE BETWEEN THE PRIVATE VS THE PUBLIC SECTOR ROTATIONS?

For me the main difference would be the actual clocking of a patient. The patient gets admitted, you see the patient, you make the diagnosis and you basically start from scratch without the help of your consultants. Then you report back to your consultant and they would assist you and continue the actual plan, whereas in private, everything has been done already. They have already made up their minds on what the illness is and what must be done. You don't get that exposure of actually thinking for yourself. They guided you on what the likely diagnosis is before you even examine the patient or start to take the history.

I do agree, but you have a lot less responsibility in private than you do in the public sector. The doctor and sisters is there to draw bloods, etc. What was good is that your doctor kept on asking me why - whatever I said. This made me think and they wanted to understand and help me with my thinking pattern.

DO YOU THINK THAT IS A GOOD THING OR A BAD THING?

I think for the patients it is a good thing, but I think for our learning experiences (not a bad thing), but you don't learn as much. You don't get that sense of responsibility.

I actually experienced it otherwise. In private you are allowed to be a student, so you focus on your studies, which is really nice. If you look at the time management you don't waste time in the wards, waiting for ward rounds. When you are on ward rounds in public, you get bored. When you are in a consultation you don't get bored, so you're not wasting any time. You are learning the whole time. You have the opportunity to be a student and focus on you studies. When you go home, you can actually sit down and read up on what you did and learn from that. In Tygerberg, we don't have time for that. What you learned in the ward is done and then you just hope for the best.

You have the opportunity to talk to the consultant, much more on a one to one or two to one basis. You go with the consultant on a ward round and you keep learning from the consultant, while at Tygerberg you worked with the registrar or the intern, but you don't have the opportunity to present to them or the consultant on a daily or second daily basis and have them critique you on your presentation on what you found. You only see the consultant on a direct order or after call and then it is in a group environment. You don't have the freedom to ask questions, or you can, but not as such on one to one.

DO YOU THINK THAT ADDS TO THE LEARNING EXPERIENCE TO WORK EITHER WITH CONSULTANTS VERSUS A REGISTRAR?

Definitely. I think we learned a lot more than we would at Tygerberg. Not necessarily from a practical point of view, but I think the input that you receive is so much greater. You work with someone who has a lot more experience.

I learned how to study from him. In Tygerberg you present your case and they will tell you that the answer is wrong, but not why it is wrong. Here the doctor would listen and then say: "I see what you are getting at, but did you think about this and how did you approach this". He taught me a lot of ways in which I will now adjust my approach to thinking to make it more practical for me. Even just in taking the history. Constant feedback on why I do

something the way I do or why I don't do something and then to redo it to see if it works better. It formed a good habit in the way I approach history taking, presenting patients and studying my work. I think I learned a lot of skills that I can use for the rest of my career.
I agree. The doctors told us to say whatever we think out loud, because they want to see how we think. In Tygerberg we were trying to do it for weeks, but once a doctor specifically told us don't think out loud, you are wasting everybody's time.
There is a lot of misconceptions that we have, but no one is saying what they really think. It is not brought up as an issue, when in private they told us it is ok. They want to know how we think, what mistakes we are making and how to correct that.

DO YOU FEEL THE PACE IS SLOWER AND THE TEACHER MORE UNDERSTANDING?
Definitely. I think it is a less stressful environment both for the consultants and for the students. That and the time together creates a better learning environment.
Even though we saw less patients (amount), the patients I saw, I was part of the whole process – from the doctor diagnosing them with the illness, the chosen treatment, the x-rays and all the tests done as well as getting the test results. In Tygerberg it is all very rushed. You see a patient and just accept the diagnosis like it is, but there are a lot of small things that you wonder about along the way. Everything here was explained and you had a very thorough case for every patient.

HOW DO YOU EXPERIENCE STRESS? WHAT MAKES A STRESSFUL ENVIRONMENT?
Private sector is less stressful, because on the ward round it is you and your consultant and maybe 2-3 other students. It is a small group of people. In Tygerberg there can be third year students and there are easily up to 10 people around a bed and we have to present by ourselves without someone guiding us. It is a lot less stressful when it is a small group.

ARE YOU ALL IN AGREEMENT?
For me the private sector was a less toxic environment compared to Tygerberg. The doctors at Tygerberg are very "aggressive". They are stressed and want things done in a specific way. In private sector everything was a learning experience. They started us with the basics and the doctors were more lenient and actually taught us. The private was a much better learning experience on the middle rotation specifically. They touched on all the basics of internal medicine - the examination and history taking and they help fix any problems we had with it. They gave us time to study. At Tygerberg you don't have the time to go back and study. Clinical skills are fine, because you are not worried about your presentation. You are worried about whether you are going to look stupid.
In Tygerberg the consultants are like Gods and registrars and students just stay out of their way. You just do your own thing. Here, every morning they asked how are you, how was your day and I am feel that everyone actually appreciated me being present. They embraced the teaching opportunity and enjoyed having us learn. With the examination for example, the Doctor showed us to do a neurological examination, just a part of it, but in Tygerberg we never have the opportunity to have a Consultant show you how to do a neurological examination. You have one of the senior students or interns to show you how to do it and they also taught themselves.

DO YOU MISS THE OTHER STUDENTS?

No.
I think it is a friendlier or easier environment to only be a few students, because the patients are more accepting as they don't have hundreds of students moving around. It is a more comfortable environment, because you have less students in front of you. You are more comfortable with each other.
There is no place to hide, but it is not threatening. You can look up your answer afterwards and the next day we get another opportunity to talk about it again.
It was a comfortable environment where we could answer the question or not answer the question or even just try to answer it. I think that is a big difference between private and Tygerberg. At Tygerberg they would ask you a question on a ward round and it is a very intimidating environment to answer a question. When you are just two students with a doctor and he asked you a question, it is not to make you feel stupid, but he is asking you because he wants you to think about it. If you are thinking wrong, he wants to help you to think right and understand it better.

IT IS ALL VERY POSITIVE, IS THERE ANYTING ELSE IN THIS COMPARISON, SOMETHING MORE NEGATIVE?
I think the only thing I felt was negative for me, was in terms of patients and being practical and actually getting practical experience. I felt they didn't give us more exposure than we would have at Tygerberg.
The Doctor struggled to get patients that had proper signs, because they were all chronic patients and didn't really have proper signs like the ones we got in the OSCE
I hardly got a chance to examine patients in the different fields and one of the patients the doctor told me to examine refused to let me examine her as she was tired and felt that it was not the right time, but I could examine her later at a better time. It never happened in public and I felt a bit offended. That was the only negative experience.
I think the disease spectrum in private is not realistic. It is not seen in public. For me, I felt it was quite unfair and I don't know whether the private doctors have been well informed as to what is expected from students during examinations. In Tygerberg they have been doing OSCE`s for so long that they know to rather focus on clinical skills or focus on clinical examination. Yesterday with my OSCE, I got something intense, something that was way above my experience. I did not understand what was going on. The history was very confusing and even after that, the doctor did not care much about my general examination or clinical signs. He was more focused on whether I could get to the diagnosis. So he basically spent 30 minutes on this. According to my understanding it is not the point of an OSCE The essence of it is to see if students can take the history, can do a proper clinical examination and find signs. He wanted me to get to the diagnosis and I felt that it was way above my head as a 5th year medical student.

DO YOU THINK IF YOU HAD DONE YOUR ROTATION IN THE PUBLIC SECTOR YOU WOULD HAVE BEEN BETTER EQUIPED FOR THAT SPECIFIC OSCE?
No. The doctor himself said it was above undergraduate level. It was unfair for me and after that there was still a 15 min compulsory session on my portfolio. The doctor asked a few questions and said that he would read it in his own free time. I don't know whether the doctors in private is well acquainted with what is supposed to happen in an OSCE or not.
One more negative point, there is no exposure for procedures where you can perform it yourself. There is no opportunity for that.

We need 15 weeks of internal medicine in total. Doing the procedures in the 11 weeks before the time and then doing 4 weeks in private medicine as well, I think we get more than enough exposure. That is my personal opinion.
I never got the opportunity to do a LP and now in 6th year you are probably required to perform one and teach the juniors, but I haven't gotten the opportunity to perform something like that.
I did my previous internal rotation in Tygerberg and we did a lot of procedures, but had to do an ECG and give it to the doctor. I never learned to analyse them. Here in Private I can read an ECG, I can read a chest x-ray and I know what blood gas results mean.

DO YOU THINK THAT THERE IS DIFFERENCES BETWEEN A SPECIALIST IN THE PRIVATE SECTOR AS AN EDUCATOR AND THE TEACHING IN THE PUBLIC SECTOR?
There is no personal connection in Tygerberg. If you don't know something, they will tell you that they gave you a lecture on this in your second year and why don't you know it now. In the private sector, they know you personally and are a little bit more respectful.
The teaching is very similar.
It is the same, but it depends on what you enjoy.

IS THERE A DIFFERENCE IN LENGTH OF EXPOSURE TO A SINGLE CONSULTANT?
In public you see the Consultant only on the Academic ward round, which is one to two times per week and this lasts for about two hours. In private you see the Consultant every day. You see about 10 patients with the doctor and every day you are talking about the patient. There is always something else that you get asked about.
I think the major difference between the private and public doctor, is their level of education. We work with registrars and interns and that can't compare with the specialist field. Their background, education and their experience.

SO YOU ARE SAYING THAT YOU LEARNED MORE FROM AN EXPERIENCED PRACTITIONER.
Yes, much more.
We spent much more time with them. You can ask questions and learn their approaches and how they want you to think about things.

DID YOU FIND THEM OPEN IN COMPARISON TO THE PUBLIC SECTOR? OPEN TO YOUR CRITICISM OR YOUR QUESTIONING OF WHAT THEY WERE DOING?
Yes, I think so.
The doctor we had, she took a personal interest in us as students. She was much more open to hearing from us and expected more of us, but in a good way. That was different from Tygerberg. They are sometimes more focused on the studying.

DID YOU APPRECIATE THIS AND DIDN'T FIND IT STRESSFUL?

I found it slightly stressful. In Tygerberg the doctors know at what level you are supposed to be performing as a 5th year medical student. Here the doctors don't know what is expected from you. So you can get away with things and don't know certain things and they are fine with it, because they don't know as a fifth year medical student you are actually supposed to know it.
The doctor shared of his own personal experiences. Not in a medical sense, but as a person studying medicine and hopefully practicing one day as well. The sort of pitfalls that you can fall into with things on the outside - your family life and how important it is to make sure that you have balance. That sort of wisdom was more valuable to me than any other academic input we got. So that was pretty cool for me.

DID YOU FEEL YOU COULD SEE MORE OF THESE DOCTORS OR TEACHERS AS PEOPLE (HUMAN BEINGS?)
For me I don't think it is more so here than in Tygerberg. I think it is just the luck of the draw that we happened to have great doctors who did that for us since the beginning of the rotation. If I had to compare the two, I don't think so. That's just my personal experience.
I think it is your interaction with the doctors, because you don't get that one on one with a Consultant at Tygerberg. You don't really get to know them so they don't easily share information. They don't easily assist whereas here, you got to know him/her over 4 weeks. So you are more comfortable. Teaching is easier as well. You are able to ask questions and you are able to answer wrong and not be afraid to give your answer.

IS THERE ANYTHING ELSE ON THIS TOPIC OF COMPARING THEM AS TEACHERS?
In private I am assuming they all volunteer to do it, whereas in Tygerberg, if you are a registrar or maybe even an Internal consultant working there, you didn't volunteer to teach and it may not be your strong point. You get 20 students and you just have to do it. So I think that is also a big thing - the willingness comes from a place where they actually volunteered and gave up their time. They were not forced, but it is part of the program.

HOW DO YOU EXPERIENCE THE ACCESSIBILITY OF THE PATIENTS IN THE PRIVATE HOSPITAL? EXPLAIN
I think they are quit accessibility. I didn't have the experience where someone refused to be examine. They were all very happy to help us in our career to be a doctor. The only issue is over here I didn't find it that comfortable to go to another patient who was not our doctor's patient.
Often they will tell the patient ahead of time that the students are coming and if it is ok, where at Tygerberg, especially the last 2 weeks, students see lots of different patients in different wards, as many as you tell them about before an OSCE That is very different. They're acceptable to that if they are pre-warned, but if they're not, I didn't feel comfortable. You just can't walk into the ward and have access to an interesting patient lying there. It is personal information. In Tygerberg, they know exactly if they can see a patient.

WHEN TAKING HISTORY OF PATIENTS, DO YOU THINK THEY WERE OPEN AND FAIR?
In that sense they are very similar to Tygerberg. They are open and allow you to perform the examination on them. There was no difficulty in that or any difference between the two.

The patients in private are better informed over their diagnosis than in Tygerberg. These patients will tell you they have pulmonary oedema. They are fully clued up on what they have and what medication they are taking as well as why they are taking the medication. I feel that these patients are sometimes more keen to be examine and that they enjoy chatting to you. In Tygerberg, it is not that they don't want you, but sometimes so many students have examined them already, especially if they have nice signs. Then everybody just wants to examine the patient. They are depersonalized, because you are not going to see the patient and chat to them and examine them as part of your presentation, only to see their signs. Here they are more accepting.

THE THING THAT PATIENTS ARE BEING MORE INFORMED ABOUT THEIR OWN DISEASE, HOW DO YOU THINK THAT INTERACTED WITH YOUR LEARNING PROCESS?

The patients can also lead you astray. They will say it with so much confidence that you are eager to present it to the doctor. For example, if you say it is a cyst in the lung. When the doctor asks you how you picked it up in your clinical examination, you are not sure. So it can go either way.

They all have an idea of what they have which is not completely correct always. They draw a conclusion as to what disease they have and the way they explain it to you can confuse you. It is positive and negative.

I felt you had to be surer of yourself. They actually asked you if you would do something differently. Your medical knowledge had to be on point. In Tygerberg you can fluff your way through it.

I felt there was less different sort of patients that we saw in comparison to what you actually see in Tygerberg. Most of the patients we saw were lifestyle disease and rheumatologic things. I never saw TB, which is very rare. It is good for the learning experience in terms of your studying, but in terms of the practicality of you becoming a doctor one day, it is not a real reflection.

DID YOU SEE THE SAME SPECTRUM OF DISEASE IN THE PRIVATE HOSPITAL AS PUBLIC ACADEMIC HOSPITAL?

On the one hand it is nice to see other things, but then after this rotation our OSCE's in Tygerberg will be very uncomfortable because there is a completely different spectrum of diseases that you see there. It does not really prepare you for future exams in Tygerberg.

It is actually a wide spectrum except for TB and HIV which we probably need to know well, especially in Tygerberg. I think I saw a lot more the last 4 weeks and a wider spectrum as in Tygerberg. One day you will do cardio, then rheumatology and neuro the next day. We had a good exposure here.

The disease spectrum here is not as progressed and clinical signs are not as evident because the disease process gets caught earlier, so the patients are healthier.

IS THAT A GOOD OR BAD THING?

I think you can argue both ways. It is a good thing, because you need to start thinking. It brings you in contact with the disease process earlier, so you start thinking about things different. In Tygerberg you see the obvious, like barrel chest when the patient can't breathe. Here the COPD is a subtler. You need to actually go and look for it. You start to

think of prevention and the different types of management for the disease more than you would think about it at Tygerberg.
I think it is sort of nice being exposed to the chronic diseases. You do not focus on diabetes and hypertension in Tygerberg. I learned so much about all the complications. In Tygerberg there is just so much more serious diseases and no one focus on the co-morbidities, but I also felt that I got more exposure to the lifestyle diseases and was not really exposed to typical OSCE cases that will prepare me for my OSCEs at Tygerberg as well as the internship in terms of a wide variety of diseases.
I think the Hospital where we were does it different that the rest of Hospitals. Monday you have cardio, then in afternoon general internal medicine. On Tuesdays we were at Tygerberg, Wednesday we did gastro scopes and that was a very nice way of doing it.
The diseases we see in Tygerberg is bad and that is not what we necessarily are going to see when we are interns. This is actually good that you start seeing it earlier because that is what you are going to get when you are an Intern.
If this is for medical education advancement and you want people to be prepared for internship to prepare for the public sector, then should something like this not rather focus on district hospitals and having students go there more rather than the private sector, because yes this is perfect and nice for learning and studying and you don't see a disease that is not complicated and you have all these resources, but when you go to Khayelitsha or somewhere else, you don't have the resources. It is a more realistic view of medical health care in South Africa. I don't know how worthwhile it is not seeing complicated cases in private.
I think that it is more medical education we actually need.

SO IS IT REALISTIC OR IDEALISTIC?
It is very idealistic I think.
I don't know if anyone else saw patients in ICU, but my doctor took me there every day. I really did see very progressed cases. It also depends on if you are seeing patients in the ward that are stable. I saw that as well as ICU patients.

DID YOU ALL ACTUALLY HAD DIFFERENT EXPERIENCES?
We also went to the ICU on Monday afternoons and there were chronic cases. For me, I really enjoyed to get focussed on cases that were really nicely described in the text books. Chronic diseases, things that you see outside of South Africa without the infectious component. I am willing to sacrifice 4 weeks of my internal to get on top of that, because in Tygerberg I feel we see enough infectious diseases. The doctors don't really expect us to focus on the infectious cases, but rather things they are busy treating right now like hypertension and diabetes. That is not going to kill the patient right now.
I feel that even though TB and HIV takes the main page at Tygerberg, lifestyle diseases are just like all the patients have diabetes and hypertension. It is just not what we are focus on. It is not what we get taught about.
I think it was good to have exposure to life style diseases, because it is more out of control in the private sector. If we managed to get a good health care system implemented in South Africa, we would see a better mix of this in all the sectors.

DO YOU THINK THERE IS A BENEFIT IN ROTATING ON BOTH PLATFORMS? WHY OR WHY NOT?

Yes, I think there is. I am sure there are some people we would like to end up here, so it is good to get an idea of both worlds.
My previous internal medicine rotation was so negative, because everyone dies or is in pain. It is horribly bad and now I have an idea that you can actually help people early in a disease and
manage it plus cure it. There are different diseases you see and the demographic of people that you see that aren't coming in when they all really dying.
I think it changed my idea about internal medicine a lot for the better. We take away a lot of things from just seeing patients – you do not even have to be academically. In Tygerberg you have this mentality of just going and seeing the patients - you don't always give them enough respect. Here you kind off get back in touch with people. You ask the patient before the time if it is ok with him/her.
The only reason why I respected some patients, is because I know they are paying to be here. Their medical aid is coughing up so they can be here, they already know exactly what is wrong with them. Most of the disrespect I feel we show towards patients in public is because we know that these people are literally here because they don't know what is going on and they are in pain. They are not in charge of their situation.

IT IS A VERY INSIGHTFUL THING YOU ARE SAYING. IF YOU RECOGNIZED THIS, IT IS ALREADY SOMETHING.

In a different rotation I saw a Doctor who was in private for long before coming to work in the public sector again. The doctor I had here - just the amount of time, interaction and actually physically touching the patient talking to them, shaking their hands, looking in their eyes is so much different than at Tygerberg where it is a machine. It works, it runs and the Consultant is there to listen to the student. Just taking the skills of sitting with your patient, explaining to them and taking time. I feel that role model is not necessary there in Tygerberg, because a lot of doctors there have been working in public the whole time which is a stressful environment.
It is nice to see those other skills that we don't get expose to. I would definitely want to retry that, because now I have seen it and will go back into the public sector and have so much more respect for that.
I think in Tygerberg there is a big mentality that the patient needs me. In private it is more - I need you. You both know what you're getting out of it. In Tygerberg, I saw a lot of the doctors who feel that the patient needs them and must shutup and listen.

MORE THOUGTHS ON BOTH PLATFORMS? SHARE IT WITH US.

I do think that both platforms should be addressed. Tygerberg is a very stressful environment and this exposes you to the idea that medicine is not as toxic as we now experience in public sector. It really can be something different if it is better managed.
The system runs much smoother and that was actually nice to see. In the same breath however, it also makes me realize that I don't want to go in private, because here you are at the expenses of the patient, whatever the patients want, you are going to do. I don't think I can do that. It is not for me.

I completely disagree with that. You must take the risk to go into private and see if you enjoy it. When you get there, you can decide if you want that life.
The level of relationships is way better in private and you actually see the interest from the doctor's side towards the patients. My doctor would report back on all the results that came out e.g. Cholesterol. At Tygerberg you just walk on to the next patient. No report back. In public, I had a patient that was diagnosed with cancer and we all knew about it for a week, but she did not know at all and she was asking me the whole time what was happening. I was not the person to tell her. I think here in Private there is more of an interest and concern about how you are feeling that day and if I can help you. This is your next step and that is the explanation.
The doctor always asked the patients if they had any questions for him. He kept asking them and I don't know if I have ever seen that at Tygerberg.

I CAN SEE YOU ARE QUESTIONING THE UNDERLYING VALUES, BECAUSE EVEN THOUGH A PATIENT CAN PAY OR NOT, THEY ARE STILL A PATIENT.
There were international students that had the greatest amount of time and patience with the patients. That is how they get trained. They get trained in a private setup like this and we get trained in a whole more stressful and toxic setup. We adapt to what we see. I think it is very valuable coming to Private and seeing the different setups and values that we can take back to the public sector.
I think that it was really beneficial seeing the therapy being used in private and it is something we can take with us in the way we practice for the future.
Having the experience at Tygerberg and having the experience in private helps you to connect the two. It helps you to shape your values of how you want to treat a patient.

DO YOU FEEL THE EXPOSURE TO PRIVATE HAS PERHAPS INFLUENCED THE WAY YOU WILL DEAL WITH A PATIENT IN PUBLIC?
No
In third year we went to Karl Bremer and then the nurse was completely livid that we just walked in. From that day onwards we literally introduce ourselves to every single nurse. Every single day when we went into the ward we introduced ourselves. It is not dependent on where I am how I treat people.

MUST ALL STUDENTS GET THE OPPORTUNITY TO ROTATE ON THE PRIVATE PLATFORM? WHY OR WHY NOT?
I don't know if it would be the same, because a lot of the benefits we see here is because the groups are so small. I think that you would lose a lot of the advantages that we see here for instance having just two people per consultant.
I think some of the benefits will be lost if the groups were bigger, but at the same time it is also not fair to having a small percentage of people get this experience.

IF YOU EXPAND THIS PLATFORM?
I know each doctor's times are different, but I think there should be a schedule for all the private hospitals. We only had exposure to whatever our doctor had, his program and his schedule.

SO WOULD YOU LIKE MORE EXPOSURE TO SPECIALISTS IN THE PRIVATE SECTOR RATHER THAN TO BE ATTACHED TO A SINGLE DOCTOR?

Not necessary, I just think you only get to see what you doctor see. You doctor might not be on call or maybe she did not get any new patients for that day. You're not exposed to all the patients in the hospital, it is only what your doctor sees and know.

I think that being attached to a single doctor is good, because I really enjoyed our ward rounds. We got taught well because the doctor liked teaching. It thinks it would be fairer if everyone could attend like at Panorama where they have different sessions with a few doctors. We had the cardiology tut which were very valuable, but not so much Neuro. More of those and maybe one of us can go see a patient and present the patient and as a group discuss them. More specialist orientated teaching.

I completely agree with that. At Cape Gate they don't have specialist tuts at all. The only ones we had, was the ones on a Thursday. We did not have cardio or endo tuts. I think it would be nice to have a good structure at each hospital and have tuts that all the students can attend.

To bring this back in relation to getting more students. We only had tuts, so we can have a single ward round. We had tuts every day. Different tuts, e.g. bedside tuts. I think it is easier to sell it to private hospitals that way and get more to participate. If you need 10 doctors, each one only had to give up an hour of their day and that is not as much as asking for one doctor to have 2 students for 4 weeks the whole time. For me personally, if I was a specialist I would rather say Monday afternoon I see students for an hour and next Monday again.

Yes you can do it, depending on how big you want to increase the platforms. Not necessary to keep it limited. I still say the system needs to be improved. If it is meant to be expanded, then a lot of things needs to be improved, e.g. the tuts. There needs to be a system in place. Also the examination itself. Do the doctors exactly know what cases they are supposed to give us and at what level? We got conflicting things from two different doctors. It needs to be standardized to the level we are as students. We can't just say we're going to expand the platform and then involve more hospitals, but the doctors itself do not know what to do with the students.

WHAT I HEAR FROM YOU IS THAT THERE NEEDS TO BE BETTER INTEGRATION BETWEEN THE PRIVATE AND PUBLIC SECTORS IN THE TEACHING CURRICULUM. IF YOU COMPARE YOURSELF NOW WITH A STUDENT WHO DID NOT HAVE THE PRIVATE EXPERIENCE, DO YOU THINK IT WOULD BE AN ADVANTAGE OR DISADVANTAGE TO HAVE THIS EXPERIENCE.

It depends. We learn the different areas of being a doctor in the different sectors. So they might have more theory and clinical knowledge but we have gained a lot of other skills that is very necessary to be a doctor.

It depends on where you are and what you want out of the rotation. I personally wanted to study, so we asked to be placed in the private rotation and we got time to study. I didn't draw any blood or anything like that. It really depends on yourself.

DID YOU MEET YOUR EXPECTATIONS ON THAT?

Yes

If you came into this really wanting to fill in your knowledge gaps, there was an opportunity.

HOW WILL YOU DESCRIBE YOUR OVERALL EXPERIENCE IN THE PRIVATE HOSPITAL?
I felt that our doctor did not really have the time. You see the patients on ward rounds, then you go and see a patient and then a few hours later you come back to present to your doctor. There are hours in between and you see him for only half an hour. I felt our time was wasted in that sense. No formal facility here at Durbanville to actually go and study. No active learning environment.
I think it may be beneficial to get every hospital's students to say what was good and bad about their hospitals, because there is not much negative stuff, but we had a different hospital. Different experiences at different hospitals.
I think the one thing where I feel a bit disadvantage, was that the hospital that I was at – on ward rounds I felt I was following my doctor and not learning. I felt that I had to ask questions about everything. I was not given active teaching. But other than that, I really had good experiences.
It was pleasant for us. Our doctor was amazing. I think she is probably the reason why I would recommend someone who doesn't understand Afrikaans to come here. I didn't feel comfortable a lot of the time about the way it makes me feel (Afrikaans). I don't think it is appropriate to have teaching in an academic setting, in a language that is not the common one.
It was not the Doctor, but the other students asking questions in Afrikaans. My doctor translated it when it was in Afrikaans and asked us if we understood.

WAS IT A PROBLEM FROM THE PATIENT SIDE FOR YOU?
I do my examination on the patient in Afrikaans if the patient is Afrikaans. We usually start by asking the patient in what language he/she is comfortable in. Whatever they are comfortable with, we go with.
Even when our doctor had to speak to a patient she usually spoke in Afrikaans and then came back and translated it for us in English.
It is just more formal academically to speak English. That is my only negative feeling. If someone doesn't understand Afrikaans at all, I don't even suggest that they come to private teaching sessions. Beyond that, the experience itself was amazing for me.

THIS IS WHY IT IS SO IMPORTANT TO UNBURDEN THE HEART, BECAUSE THIS SHOULD BE SOMETHING THAT IS EASY TO CORRECT.
Personally, if everyone already knows, why is it necessary for me to say "Hi excuse me -you keep asking in Afrikaans" or "do you mind". I just feel it is an awkward position to be in. I don't feel it was intentionally, because with my doctor I could speak Afrikaans, but when it comes to medical terms, I don't always know it in Afrikaans.
Our doctor had the ability of going on and then changing into a different language. He does not necessary mean to, but it is his first language.
You are misunderstanding me. That was not the root of the problem in my opinion. I think it is very difficult, because the doctors are very Afrikaans in this hospital and I think if you are Afrikaans as a student as well, it is kind of automatic that you address him/her in Afrikaans.
I think in formal tuts the doctors should be aware if students do ask you in Afrikaans to repeat the question in English and then go on in English from there.

We also spoke Afrikaans to our doctor in our private ward rounds and then he would start talking medical Afrikaans and I had to ask him to repeat that word in English.
We all study in English. I think the doctors should be told beforehand that if a student asks a question in any language, the answer should be given in English.
We did not come here with negative intentions. The intention was to learn, so with regards to the language we just told ourselves that we would treat patients in Tygerberg by respecting their language.
Language has been an ongoing issue in South Africa where there is so much diversity. When you look at the colour of my skin, you should have an idea that this person does not understand Afrikaans. It should not be something that I should bring to your intention. So for you to expect me to say that I do not understand Afrikaans the whole time, makes me feel like a burden. If a person feels like a burden, he wants to withdraw. No one wants to feel like a burden to someone.
English and Afrikaans is not my first or Second language. I speak so many languages. If I for example were to encounter a doctor that speaks Xhosa, I would never ever in my life switch to another language. I do not understand why things becomes complicated when it comes to Afrikaans.
It is not the doctors themselves who are initiating this, it is the students who would start speaking and asking questions in Afrikaans. These students can speak English. It is just not fair. The aim is to learn from this institution. If you don't know how to explain something in English, excuse yourself and say "I am finding it difficult to form the words in English at the moment, so I am asking it in Afrikaans, but can you translate it into English?" That should be the student initiative and not the Doctor's. They studied at a different time when things were Afrikaans.

THIS IS WHY DISCUSSION IS IMPORTANT. ANYTHING ELSE?

Appendix 8.8

Coding of first focus group interview: Fifth year group

Coding

Patients are referred, already worked out and students do not clerk them initially.

Student felt less responsible because they see already diagnosed patients.

Students felt more like students and less than workers, more time focussed on improving skills and studying.

Not wasting time, more time efficient, learning the whole time, can discuss with a consultant, can ask and are motivated to ask questions, one on one basis.

Ward rounds not to work, but to learn with bedside tutorials. You get to see the consultant in action and keeps on learning from them.

At Tygerberg the students do not get to see the consultant regularly, only on an uptake or discharge round- work more with interns and registrars.

Input from the consultants much more actively in Private hospital

Working with someone with more experience

Constant feedback on history taking, examining techniques and presenting skills

Motivated in Private to say out loud what you think, consultant interested in how you think, to identify mistakes and to help shape approaches.

Students found the private setting a less stressful environment

Could understand how diagnosis where made, discussed diagnostic tests and results

Less stressful because less people; only the consultant and 2 or 3 students, peers or clinical partners.

Versus TBH where there are ten or more students at the bedside.

Doctors at TBH are more aggressive, they are under pressure, teaching to many students, their workload and their own studies.

At TBH consultants are like gods, registrars and students try to stay out of their way.

At private they are interested in you as a person and as a student.

They embrace the teaching opportunity and enjoy seeing you learn.

In Private the consultants show you how, where at TBH senior students or interns show you.

Prefer smaller groups

Patients not overwhelmed

More comfortable with own clinical partner or peer

No place to hide, but did not felt threatened

Encouraged to ask question, answer question and discuss more freely what is right or wrong

Negative experiences;

Felt that did not get opportunity to do procedures, like drawing blood, inserting a drip or doing a lumbar punch.

Not all the doctors were on the same page, did not always knew what is expected from a student in their mid-clinical rotation

OSCE were not done the same or at the same level, and portfolios were not discussed or questioned at the OSCE Need for more structure and correlation

Most students felt that there is enough time to do procedures when they are at TBH and the time is better spend here to learn and improve their clinical or diagnostic skills. Mentioned that they did a lot of ECG at TBH, but got the opportunity here to interpret the e ECG`s

Doctors at private connect with the students, but not at TBH, get to know personally and there is respect.

See consultant every day in private

Differences in level of education; specialist in Private versus a registrar or intern at public

Because of personal interest felt that the consultant expects more from the students, do not want to disappoint them

Private specialists shared also more personal experiences, even of personal live and family, adding to becoming a professional. Interaction because of smaller group and more personal contact.

Doctors in Private take part in the programme voluntary, where registrars are forced to take part and have bigger groups and have to study themselves.

Patient accessibility

No one refused to be examined

Patients were happy to help in career and becoming a doctor

Could not just walk in on every patient, had to introduce and ask permission

At TBH patients do not have a choice

Patients in private are more informed about their disease and their medication

Patients more open due to the smaller groups and enjoyed the personal attention

Patients interaction helped the learning process, because of their knowledge about their disease and medication the students felt that they were also tested by the patients on what they know.

Spectrum of disease

Less patients but a wider spectrum of diseases, less Tb and HIV, more degenerative, metabolic or lifestyle and autoimmune, endocrine diseases

Diagnosis are made earlier. Signs are not all ways as progressed as in public.

Private focusses more on co-morbidities and prevention of complications.

Rotations must be expanded to also include district hospitals to better prepare for work in the public sector.

Seen enough infective disease at TBH, need the exposure to the metabolic, degenerative and endocrine diseases

Benefit of rotating on both platforms

Private rotation changed their view/impression of internal medicine in a positive way

Doctors took more time and personal interest in the patients, touching them, looking them int eye, not seen as machine- personal touch

Want to apply the personal approach- role model on the private doctor

In TBH the patient is dependent on the doctor, in private the doctor is also dependent on the patient for an income. Some patients in private behave if they own the doctor.

Relationships are better in private, more respect for the patients and other staff. Asking the patients if they had any questions for them.

All students must get the opportunity to rotate on both platforms, but must keep the groups small.

Consider rotating between the doctors as some might not have a broad enough spectrum of diseases

Tutorials helped, they want more on more different topics

The panorama model where they spend time with different discipline instead of only one doctor can be more time efficient for the doctors involved and ensures that everyone get exposed to a wider spectrum of disease.

There must be more standardised approach between all the hospitals, need more doctors and hospitals to get involved

Students preferred to present and be taught in English

More personal skill and experience, helping to become and behave like a professional

Appendix 8.9

Quotes: Experience of interactions with the private physician

Student 2: I realize that doctors can work in a happy environment and I would like to create such an uplifting space around me as a professional as well. More relationships between all healthcare workers.

Student 3: Recommend that all students be allowed to apply to private rotation

Student 4: the way our doctor interacted with us made me realise how I would like to one day interact with others.

Student 5: taking interest in your patient, to develop a good bedside manner

Student 6: we were exposed to a wide range of illness that broadened our knowledge. It was great to be acknowledge and involved in ward rounds. Tuts on the patients along the way instead of aimless following

Student 7: In public you sometime only do admin and bloods, aren't given any attention

Student 8: Being the only student with a consultant helped my learning and it did not feel as intimidating as it can in a bigger group.

Student 9: It inspired me again

Student 10: seeing patients interact with the doctor, I liked the one on one approach, No procedures, lots of learning.

Student 11: better structured way of clinical reasoning, the subtler and individualized aspects of disease process became more obvious.

Student 12: Gave me a better perspective of medicine, actually sad that rotation is over.

Student 13: Felt like I could add value to cases, I felt more confident and comfortable. The private consultant are more eager to teach us.

Student 14: At TBH you are just a face in a sea of students and mostly deal with registrars. In private the help to become a good clinician, in public they fail due to all the ward work.

Student 15: I think that theoretical combined with clinical skills is vital at this stage of my studies. The main thing is that Doctors are teaching on a voluntary basis, not because they have to. I always felt like they wanted to help and felt very comfortable to ask them questions.

Student 16: It is important to form genuine relationships, personal attention and teaching.

Student 18: The consultant actually knows our names.

Student 19: we were given feedback after every case. One of the best teaching experiences. I will always cherish my experience.

Student 20: it allows time to develop knowledge, but lack in procedure skills.

Student 21: It was nice to work with doctors you admire, a very refreshing break from working in public.

Student 22: The knowledge you gain – invaluable. It is done in an environment conducive to learning

Student 23: The opportunity to present to a consultant on a daily basis, improved both my skills and confidence.

Student 24: Good exposure to specific diseases, need more exposure to clerking patients.

Student 25: The patients we saw were friendly, very eager to help us along our academic careers becoming doctors.

Student 26: Good exposure to someone who will add value to your structure and approach to medicine.

Student 27: The personal attention was definitely beneficial and made me feel more comfortable in ales intimidating environment.

Student 28: The type of doctor that I' like to be, more open – safe to ask questions.

Student 29: the private platform offers a unique opportunity to learn from a consultant in a very personal environment. I feel much more confident in my approach to patients and clinical examination technique at the end of this rotation.

Student 30: Needs improvement in the Doctor`s understanding of OSCE`s and what is expected from them.

Quotes: experience of interaction with the private patient

Student 2: unlike public where patient has been seen by hundreds of students

Student 3: keen to help the future doctors of South Africa

Student 4: tutorials in the morning interfered with ward round, were unable to complete ward round and exposure to more clinical cases. The patients were very open to being examined and most of them understood their conditions and could point out relevant signs and symptoms, helping to integrate my knowledge and exam findings. The patients also wanted to know more about their conditions from us.

Student 6: More friendly and willing to give information.

Student 7: We saw twice the number of patients compared to public. The academic aspect and pathophysiology focus really helped.

Student 8: I never saw a patient on my own to present.

Student 9: The patients gave more in-depth history.

Student 10: Patients were happy to have me sit in on consultation, in public they just accept it.

Student 11: There is a difference in engagement and the extend of discussion. They also tend to be more aware of their rights and assertive and would regularly ask for explanation and justification of certain situations or investigations.

Student 12: The patient in private sector are more knowledgeable about their conditions, which made it easier to examine them and get a good history.

Student 13: missed not clerking patients. The doctor handpicked the patients and all of them were very accommodating.

Student 16: It definitely improved my bedside manner.

Student 17: I was able to examine at least two different cases per day. Patients surprisingly more willing to be examined.

Student 18: Only saw a patient if the doctor asked us to see them for a bedside tut.

Student 19: Taught how to do certain physical exams specifically and was shown how by the consultant.

Student 20: all the patients were discussed on the ward round.

Student 21: It was nice to see that even patients paying for health-care did not mind being examined by students.

Student 22: We saw a lot of patients on ward round every day and received teaching at every single bedside. It was nice to work with patients who were well informed and motivated to improve their health.

Student 24: Saw all the patients on ward round, but would be better if able to do alone.

Student 25: I was pleasantly surprised. The patients we saw were friendly and very eager to help us along on our academic endeavour as doctors.

Student 27: One of the patients refused to have me see her, when the doctor had not informed them prior.

Student 29: Patients were very friendly and enjoyed spending time with you (as 2 medical students). Patients in the public sector can be frustrated with students.

Student 30: Patients were obviously much friendlier than the public hospital patient, because they don`t get harassed by students every 5 minutes.

Appendix 8.10

Themes

Themes Results

Data was collected on the last Thursday of both rotations, with the students taking part in a focus group discussion and completing a questionnaire after written consent was given. Trustworthiness of the data was enhanced in a variety of ways. Two students of each rotation, as well as the facilitator of the focus group discussions, evaluated the transcribed data and gave written consent that it was a true reflection of the focus group discussions. The development of codes at each level of the analysis was documented to enhance confirmability. Triangulation of themes generated from both sources of data (questionnaires and focus group discussions) assisted in establishing credibility.

Thirty students took part in the study – sixteen fourth year students and fourteen in the fifth year group. Three students were either absent or busy with their exams and were excused from the discussions. There were only seven male students in the study group, twenty-five students were in the age group of 20 – 25 with the rest being older. 53% of the group was Caucasian, with the coloured and black students presenting 16% respectively. Two students chose not to indicate their race.

All the students, irrespective of race, language or culture, found the mid-clinical rotation at the Private Hospital Platform to have been a positive learning experience, some more so than others. One thousand one hundred and forty-six comments were made by the students, 805 originating from the open-ended questionnaires and 341 from the two focus group discussions about their experience rotating at the private hospital platform. These comments were coded and categorized into themes. The following themes developed from coding the research questionnaires and transcriptions of the focus group discussions.

Patients

The students found the patients surprisingly willing and acceptable to be examined by them. Patients were mostly excited by the attention and one even commented to the students that this was like Grey`s Anatomy. They commented that the patients, on average, are more informed and knowledgeable about their disease, diagnostic tests and treatment regimes. Communication skills and history taking were also found to be better, as there were no communication or language barriers. Most were helpful and willing to speak in English, despite a greater percentage of the patients being Afrikaans speaking.

Only one student had a patient initially refuse to be examined, but that was a patient not informed in advance by his physician of the student`s involvement. There might, therefore, be a biased in that patients taking part in this programme where all selected by their physicians to take part, introducing the students and asking the patients permission.

Disease profiles are different at the two platforms. Patients are, on average, older at the private platform and focus is more on lifestyle disease, endocrinology and rheumatology versus HIV, tuberculosis and infective diseases at the public platform. The students overwhelming response is that rotation on both platforms are needed to complete their patient experience.

Language

Although there were no communication or language barriers experienced talking to patients, some students were upset about their fellow students initiating discussions between them, the doctors and the patients or even communication with the group via Whatsapp or SMS in Afrikaans. All the doctors were willing to speak, translate or explain in English when asked to, but some students felt that the consultants should anticipate that there are students who do not understand Afrikaans or use Afrikaans as an academic language. They felt uncomfortable having to ask a question or explanation to be repeated in English.

The Private Physician as Educator

All the students commented on the consultant's willingness to teach, share their knowledge and their experience. They argued that because the private physicians are taking part voluntary, that they all want to teach and give back. In comparison, their peers at the public platform were mostly being taught by the registrars, who they found to be overloaded by their patient burden, clinical work and own studies – now they were forced to teach as well.

The one-on-one daily contact with the consultant was the single most important distinguishing factor between the rotation on the private versus the public platform. They experienced the consultants to be supportive of them here for them, where at TBH the consultants were more there for the registrars and contact with them as mid-clinical rotations are limited to one or two academic ward rounds per week, where they were part of a much bigger group.

Because of the smaller group of maximum two students per consultant, they found the consultants were welcoming, less threatening and eager to get to know them better, not only as students, but as persons. The consultants made them feel part of the team and valued their opinions, taking time to teach and help them. The consultant who is already a specialist with years of experience, according to the students, was also better equipped to teach them than the registrars, interns or senior students.

The rotation was much more academically orientated than what they expected. There was more focus on acquiring knowledge and skill and much less on doing procedures like drawing blood or putting up drips. One-on-one contact led to a much better identification of gaps in their knowledge and skills and helped to correct it. All the students reported that this rotation helped to improve their skills of history taking, doing proper clinical examinations and presenting patients.

Relationships between the physicians and the students were totally different from their previous experiences, mostly due to the smaller groups and personal interaction, leading to more respect between physician and student and vice versa.

Two students complained that the consultant that they were allocated to had shared responsibilities between the private and public sector and although he made time for them, they did not know where they belong.

The Environment

The students found the environment good for teaching and learning with it being more academic than they expected. The hospital as well as the patient`s wards, were quieter, cleaner and there was more space between patient beds and less people around the bed. The equipment worked and the turn-around time of diagnostic tests was a lot shorter.

The interaction between the staff was better and even the nursing staff were helpful and accommodating to the students, not making them feel in the way. Free Wi-Fi was an added bonus.

They however felt that they lacked a proper allocated place where they could work, study or relax between ward rounds, consultations or while waiting for tutorials.

The Teaching and Learning Experience

The main difference that the students experienced was the small groups in Private, being allocated either one or two students per consultant, except at Panorama Mediclinic where they rotated daily in a group of four between different sub-specialties. The small group led to more personal contact and relationships developing between the students and the consultants.

Ward rounds were experienced as learning opportunities and not just to do ward work. Bedside teaching took place on every ward round with mini-tutorials being done with the patient as the focus. Due to the smaller and more intimate groups the students felt more comfortable to raise their opinions and to ask more questions, without the fear of being ridiculed. The students missed doing clinical procedures, but all said that there are enough other rotations where they could develop their skills and the time saved of doing ward work was well spent on teaching and learning.

The patients, being more informed and knowledgeable about their disease and treatment regimes, stimulated the students to be better prepared for ward rounds as they did not want the patients to think that they know less than what they do.

Being in a small group made it easier to give and receive feedback, without feeling belittled in front of a big group. Feedback were given on how the students examined and presented clinical cases, during action and also after action, leading to an improvement of their clinical skills. Because of the more personal relationship with the consultants, they experienced the feedback in a positive way.

By observing the consultants daily working with the patients, their families, their interaction with the staff and other colleagues, had a direct effect on how the students claim that they want to practice one day. The smaller groups and more intimate or personal contact led to a much more positive impact by role-modelling than any other action. Nearly all the students mentioned in the questionnaire that this stimulated and motivated them with some even mentioning that it reignited their passion for medicine, to become the professional healthcare worker that they want to be.

The tutorials that were arranged for them were found to be practical and interactive. The students, in fact, asked for more tutorials to be arranged and identified certain practical topics that they wanted to be addressed. They requested that the tutorials must not interfere with their ward rounds and must rather be done in the afternoon sessions. The tutorials must also follow on each other in

order for students that have to travel from other hospitals not to waste time having to wait in between tutorials. The Cape Gate students specifically requested that more tutorials must be done at their hospital and by their consultants.

Relationships

Because of the small group rotation, the one on one contact with the consultant, the students experience of their relationship differs from their previous exposures to specialists. They did not experience the hierarchy that exists at TBH. The consultants knew them personally, asked about their personal life's and shared personal experiences with them; work and family related.

Patient- doctor relationships are also different from the public sector in most cases. The patient, in most cases is referred to a specialist of their choice. They are also paying to be seen by the doctor and some of them are chronic patients of the doctor, knowing them and their families for years. The private physician also has to communicate more, not only giving information about their disease, tests and results to the patient, but also to their families and referring doctors.

The interdisciplinary relationship, where patients are referred between disciplines, is also much more of a team experience, where specialists work together to address a patient`s problem.

Differences experienced between the different groups, either between the fourth and fifth years or the different hospital groupings.

The students who rotated at Mediclinic Panorama were very impressed with their daily exposure to the different sub-specialties and the patients and tutorials that were given to them on a daily basis. They missed the bonding and the relationship building that some of the other students developed with their consultants working with them one on one the whole four-week rotation. They also missed the opportunity to be on call or clerk a patient on intake.

Some of the Durbanville students complained that they ended up with a consultant who was not always busy enough or who did not have enough patients with different disease profiles or pathology and suggested rotating in the cycle after two weeks to a busier firm at the hospital, maybe sacrificing the student consultant relationship. They still experienced the consultant to be extremely helpful in teaching them and doing tutorials with them on the approach to specific clinical presentations.

Students at Cape Gate Mediclinic wanted their own consultants to be more involved in giving tutorials in order for them not to travel to the other hospitals.

The fourth year students all felt that this rotation stimulated and motivated them to learn and ask questions. They mentioned that it did not only prepared them to pass an exam, but to become better doctors. Some of the fifth year students, being closer to their exams, were more concerned about the uniformity or lack thereof, of the locally done clinical exam and evaluation of their portfolios. OSCE`s were done differently and some had oral exams on their portfolios where others had not. As these marks become more important for their final rotations they pleaded that the private consultant must know what is expected of a student in their mid-clinical rotation and that the structure or rubric for the OSCE and portfolio evaluation must be uniformly conducted.

Stress

The students experienced the rotation on the private platform as less stressful. They felt their days were more structured and organised, that it was not rushed and that there was more time spent with the patients and the physicians. The ward rounds are less stressful when it is only you and your

consultant (discussion group 1, student 4). In the smaller group there is no place to hide, but they did not experience it as threatening.

They described the environment as less toxic, “consultants are like gods” at the public platform and as a student you try to avoid making contact, where at the private platform they appear to be interested in you as a person” (discussion group 1, student 6). They found TBH to be an intimidating environment to answer questions, but at the Private Platform they felt that the consultant wanted to know how the think in order to help and correct or guide them (discussion group 1, student 6).

According to the students, the level of education also plays a role in the stress level. The private physician, with his experience and relationship with the patient and the student, is not as stressed as the registrar, who is overworked, has to study and is also forced to teach.

Student Recommendations

All the students gave positive feedback on their experience of this rotation, some even mentioning that this was the best clinical rotation of their career and that it had ignited again their passion for medicine. However, there were certain elements identified that can be improved or must be addressed when planning to expand the private hospital platform.

Students in the questionnaires and the focus group discussions made the following recommendations:

1. They would like their own designated space where they could work in their free time, waiting between tutorials or ward rounds. A place where they could safely store their valuables and belongings. It will also help with transport as student who travel together, can wait on each other, having different time schedules of each physicians

2. They would like to have more tutorials, finding them very practical, but they would like them to take place later in the day, not to interfere with their ward-rounds.

3. Tutorials must also be arranged to follow on each other, not to waste time if they had to travel from other institutions to attend.

4. Formal transportation arrangements are needed for all students to get access to the private hospital platform. Currently only students that have access to transport are selected to rotate on the private hospital platform. They do get a petrol allowance or support from the university according to a driver’s log-book. Transportation arrangements or a shuttle service are in place for students working of the main campus such as Brooklyn Chest Hospital or at some of the clinics and there is no reason that a system cannot be developed to accommodate all students.

5. All the consultants, private and public, must be on the same page, knowing what is expected of a student in their mid-clinical rotation (knowledge and skills).

6. The evaluation of OSCE`s and Portfolios must be more uniform and the same on both platforms to ensure fairness, validity and reliability.

7. The preferred language to be used for academic purposes must be English. Even the Afrikaans speaking students felt uncomfortable or did not understand Academic or Medical Terminology in Afrikaans.

8. The two platforms, public and private, do complement each other and all the students must get an opportunity to experience both platforms.

Appendix 8.11

African Journal of Health Professionals Education' requirements for publication

Author Guidelines

Author Guidelines

Please view the Author Tutorial for guidance on how to submit on Editorial Manager.

To submit a manuscript, please proceed to the AJHPE Editorial Manager website: www.editorialmanager.com/ajhpe

To access and submit an article already in production, please see the guidelines here.

Author Guidelines

Please take the time to familiarise yourself with the policies and processes below. If you still have any questions, please do not hesitate to ask our editorial staff (tel.: +27 (0)21 532 1281, email: submissions@hmpg.co.za).

Publication Fees

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When submitting a Research article to the *AJHPE*, the submitting author must agree to pay the publication fee should the article be accepted for publication. The publication fee is payable when your manuscript is editorially accepted and before production commences for publication. The submitting author will be notified that payment is due and given details on the available methods of payment. Prompt payment is advised; the article will not enter into production until payment is received.
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If authors' names are added or deleted after submission of an article, or the order of the names is changed, all authors must agree to this in writing.

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journal. Successful completion of the questionnaire with a pass rate of 70% will earn the reader 3 CEUs. Administration of our CPD programme is managed by Medical Practice Consulting. To complete questionnaires and obtain certificates, please visit MRP Consulting

Manuscript preparation

Preparing an article for anonymous review

To ensure a fair and unbiased review process, all submissions are to include an anonymised version of the manuscript. The exceptions to this requirement are Correspondence, Book reviews and Obituary submissions.

Submitting a manuscript that needs additional blinding can slow down your review process, so please be sure to follow these simple guidelines as much as possible:

- An anonymous version should not contain any author, affiliation or particular institutional details that will enable identification.
- Please remove title page, acknowledgements, contact details, funding grants to a named person, and any running headers of author names.
- Mask self-citations by referring to your own work in third person.

General article format/layout

Submitted manuscripts that are not in the correct format specified in these guidelines will be returned to the author(s) for correction prior to being sent for review, which will delay publication.

General:

- Manuscripts must be written in UK English (this includes spelling).
- The manuscript must be in Microsoft Word or RTF document format. Text must be 1.5 line spaced, in 12-point Times New Roman font, and contain no unnecessary formatting (such as text in boxes). Pages and lines should be numbered consecutively.
- Please make your article concise, even if it is below the word limit.
- Qualifications, ***full*** affiliation (department, school/faculty, institution, city, country) and contact details of ALL authors must be provided in the manuscript and in the online submission process.
- Include sections on Acknowledgements, Conflict of Interest, Author Contributions and Funding sources. If none is applicable, please state 'none'.
- Abbreviations should be spelt out when first used and thereafter used consistently, e.g. 'intravenous (IV)' or 'Department of Health (DoH)'.
- Numbers should be written as grouped per thousand-units, i.e. 4 000, 22 160.
- Quotes should be placed in single quotation marks: i.e. The respondent stated: '...'
- Round brackets (parentheses) should be used, as opposed to square brackets, which are reserved for denoting concentrations or insertions in direct quotes.

If you wish material to be in a box, simply indicate this in the text. You may use the table format –this is the *only* exception. Please DO NOT use fill, format lines and so on.

Preparation notes by article type

Research

Guideline word limit: 3 000 words (excluding abstract and bibliography)

Research articles describe the background, methods, results and conclusions of an original research study. The article should contain the following sections: introduction, methods, results, discussion and conclusion, and should include a structured abstract (see below). The introduction should be concise – no more than three paragraphs – on the background to the research question, and must include references to other relevant published studies that clearly lay out the rationale for conducting the study. Some common reasons for conducting a study are: to fill a gap in the literature, a logical extension of previous work, or to answer an important question. If other papers related to the same study have been published previously, please make sure to refer to them specifically. Describe the study methods in as much detail as possible so that others would be able to replicate the study should they need to. Where appropriate, sample size calculations should be included to demonstrate that the study is not underpowered. Results should describe the study sample as well as the findings from the study itself, but all interpretation of findings must be kept in the discussion section. The conclusion should briefly summarise the main message of the paper and provide recommendations for further study.

- May include up to 6 illustrations or tables.
- A max of 20 - 25 references

Structured abstract

- This should be no more than 250 words, with the following recommended headings:
  - **Background:** why the study is being done and how it relates to other published work.
  - **Objectives:** what the study intends to find out
  - **Methods:** must include study design, number of participants, description of the research tools/instruments, any specific analyses that were done on the data.
  - **Results:** first sentence must be brief population and sample description; outline the results according to the methods described. Primary outcomes must be described first, even if they are not the most significant findings of the study.
  - **Conclusion:** must be supported by the data, include recommendations for further study/actions.
  - Please ensure that the structured abstract is complete, accurate and clear and has been approved by all authors. It should be able to be intelligible to the reader without referral to the main body of the article.
  - Do not include any references in the abstracts.

Here is an example of a good abstract.

***Scientific letters*/short reports**

These are shorter length, scholarly research articles of no more than 1500 words. Single-institution, and/or studies with sample sizes <100 are better submitted as short reports.

Guideline word limit: 1500 words

- Abstract: Structured, of about 250 words, with the following recommended headings: Background, Objectives, Methods, Results, and Conclusion.
- May include only one illustration or table
- A maximum of 8 references

Forum articles

Are personal opinion pieces that address an area in health professions education that would be of interest to the readership. Forum pieces while reflecting the authors personal views, should be scholarly, and arguments well-supported.

- They should not exceed 1000 words
- Up to 5 references are allowed.

Short communications

Are very brief articles that share work in progress, lessons learnt or innovations in medical education.

- They should be no more than 500 words in length
- A maximum of 3 references, and 1 table or figure.
- Short Communications should be structured under the following headings: Why was the idea necessary (Problem), What was tried (Approach) and What were the lessons learnt (Outcomes).

Correspondence (Letters to the Editor)

Guideline word limit: 400 words

Letters to the editor should relate either to a paper or article published by the AJHPE or to a topical issue of particular relevance to the journal's readership

- May include only one illustration or table
- Must include a correspondence address.

Obituaries

Guideline word limit: 400 words

Should be offered within the first year of the practitioner's death, and may be accompanied by a photograph.

Illustrations/photos/scans

- If illustrations submitted have been published elsewhere, the author(s) should provide evidence of consent to republication obtained from the copyright holder.
- Figures must be numbered in Arabic numerals and referred to in the text e.g. '(Fig. 1)'.
- Each figure must have a caption/legend: Fig. 1. Description (any abbreviations in full).
- All images must be of high enough resolution/quality for print.
- All illustrations (graphs, diagrams, charts, etc.) must be in PDF form.
- Ensure all graph axes are labelled appropriately, with a heading/description and units (as necessary) indicated. Do not include decimal places if not necessary e.g. 0; 1.0; 2.0; 3.0; 4.0 etc.
- Each image must be attached individually as a 'supplementary file' upon submission (not solely embedded in the accompanying manuscript) and named Fig. 1, Fig. 2, etc.

Tables

- Tables should be constructed carefully and simply for intelligible data representation. Unnecessarily complicated tables are strongly discouraged.
- Large tables will generally not be accepted for publication in their entirety. Please consider shortening and using the text to highlight specific important sections, or offer a large table as an addendum to the publication, but available in full on request from the author.
- Embed/include each table in the manuscript Word file - do not provide separately as supplementary files.
- Number each table in Arabic numerals (Table 1, Table 2, etc.) consecutively as they are referred to in the text.
- Tables must be cell-based (i.e. not constructed with text boxes or tabs) and editable.
- Ensure each table has a concise title and column headings, and include units where necessary.
- Footnotes must be indicated with consecutive use of the following symbols: * † ‡ § ¶ || then ** †† ‡‡ etc.

Do not: Use [Enter] within a row to make 'new rows':

Rather:

Each row of data must have its own proper row:

Do not: use separate columns for *n* and %:

Rather:

Combine into one column, *n* (%):

Do not: have overlapping categories, e.g.:

Rather:

Use <> symbols or numbers that don't overlap:

References

NB: *Only complete, correctly formatted reference lists in Vancouver style will be accepted. If reference manager software is used, the reference list and citations in text are to be unformatted to plain text before submitting..*

- Authors must verify references from original sources.
- Citations should be inserted in the text as superscript numbers between square brackets, e.g. These regulations are endorsed by the World Health Organization,[2] and others.[3,4-6]
- All references should be listed at the end of the article in numerical order of appearance in the Vancouver style (not alphabetical order).
- Approved abbreviations of journal titles must be used; see the List of Journals in Index Medicus.
- Names and initials of all authors should be given; if there are more than six authors, the first three names should be given followed by et al.

- Volume and issue numbers should be given.
- First and last page, in full, should be given e.g.: 1215-1217 **not** 1215-17.
- Wherever possible, references must be accompanied by a digital object identifier (DOI) link). Authors are encouraged to use the DOI lookup service offered by CrossRef:
  - On the Crossref homepage, paste the article title into the 'Metadata search' box.
  - Look for the correct, matching article in the list of results.
  - Click Actions > Cite
  - Alongside 'url =' copy the URL between { }.
  - Provide as follows, e.g.: https://doi.org/10.7196/07294.937.98x

Some examples:

- *Journal references:* Price NC, Jacobs NN, Roberts DA, et al. Importance of asking about glaucoma. Stat Med 1998;289(1):350-355. http://dx.doi.org/10.1000/hgjr.182
- *Book references:* Jeffcoate N. Principles of Gynaecology. 4th ed. London: Butterworth, 1975:96-101.
- *Chapter/section in a book:* Weinstein L, Swartz MN. Pathogenic Properties of Invading Microorganisms. In: Sodeman WA, Sodeman WA, eds. Pathologic Physiology: Mechanisms of Disease. Philadelphia: WB Saunders, 1974:457-472.
- *Internet references:* World Health Organization. The World Health Report 2002 - Reducing Risks, Promoting Healthy Life. Geneva: WHO, 2002. http://www.who.int/whr/2002 (accessed 16 January 2010).
- Legal references
- Government Gazettes:

National Department of Health, South Africa. National Policy for Health Act, 1990 (Act No. 116 of 1990). Free primary health care services. Government Gazette No. 17507:1514. 1996.

In this example, 17507 is the Gazette Number. This is followed by :1514 - this is the notice number in this Gazette.

- Provincial Gazettes:

Gauteng Province, South Africa; Department of Agriculture, Conservation, Environment and Land Affairs. Publication of the Gauteng health care waste management draft regulations. Gauteng Provincial Gazette No. 373:3003, 2003.

- Acts:

South Africa. National Health Act No. 61 of 2003.

- Regulations to an Act:

South Africa. National Health Act of 2003. Regulations: Rendering of clinical forensic medicine services. Government Gazette No. 35099, 2012. (Published under Government Notice R176).

- Bills:

South Africa. Traditional Health Practitioners Bill, No. B66B-2003, 2006.

- Green/white papers:

South Africa. Department of Health Green Paper: National Health Insurance in South Africa. 2011.

- Case law:

Rex v Jopp and Another 1949 (4) SA 11 (N)

Rex v Jopp and Another: Name of the parties concerned

1949: Date of decision (or when the case was heard)

(4): Volume number

SA: SA Law Reports

11: Page or section number

(N): In this case Natal - where the case was heard. Similarly, (C) woud indicate Cape, (G) Gauteng, and so on.

NOTE: no . after the v

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

From submission to acceptance

Submission and peer-review

To submit an article:

- Please ensure that you have prepared your manuscript in line with the AJHPE requirements.
- All submissions should be submitted via Editorial Manager
- The following are required for your submission to be complete:
  - Anonymous manuscript (unless otherwise stated)
  - Author Agreement form
  - Manuscript
  - Any supplementary files: figures, datasets, patient consent form, permissions for published images, etc.
  - Once the submission has been successfully processed on Editorial Manager, it will undergo a technical check by the Editorial Office before it will be assigned to an editor who will handle the review process. If the author guidelines have not been appropriately followed, the manuscript may be sent back to the author for correcting.

Peer Review Process

All manuscripts are reviewed initially by the Editor-in-Chief and only those that meet the scientific and editorial standards of the journal, and fit within the aims and scope of the journal, will be sent for external peer review. Each manuscript is reviewed by two reviewers selected on the basis of their expertise in the field. A double blind review process is followed at AJHPE.

Authors are expected to receive feedback from reviewers and an editorial decision within approximately 6 weeks of submission. The time period of the entire review process may vary however depending upon the quality of the manuscript submitted, reviewers' responses and the time taken by the authors to submit the revised manuscript.

Manuscripts from review may be accepted, rejected or returned to the author for revision or resubmission for review. Authors will be directed to submit revised manuscripts within two months of receiving the editor's decision, and are requested to submit a point by point response to the reviewers' comments. Manuscripts which authors are requested to revise and resubmit will be sent for a second round of peer review, often to the original set of reviewers. All final decisions on a manuscript are at the Editor's discretion.

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Production process

The following process should usually take between 4 - 6 weeks:

1. An accepted manuscript is passed to a Managing Editor to assign to a copyeditor (CE).
2. The CE copyedits in Word, working on house style, format, spelling/grammar/punctuation, sense and consistency, and preparation for typesetting.
3. If the CE has an author queries, he/she will contact the corresponding author and send them the copyedited Word doc, asking them to solve the queries by means of track changes or comment boxes.
4. The authors are typically asked to respond within 1-3 days. Any comments/changes must be clearly indicated e.g. by means of track changes. Do not work in the original manuscript - work in the copyedited file sent to you and make your changes clear.
5. The CE will finalise the article and then it will be typeset.
6. Once typeset, the CE will send a PDF of the file to the authors to complete their final check, while simultaneously sending to the 2nd-eye proofreader.
7. The authors are typically asked to complete their final check and sign-off within 1-2 days. No major additional changes can be accommodated at this point.
8. The CE implements the authors' and proofreader's mark-ups, finalises the file, and prepares it for the upcoming issue.

Changing contact details or authorship

Please notify the Editorial Department of any contact detail changes, including email, to facilitate communication.

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- Description of error and details of where it appears in the published article
- Full detail of proposed correction and rationale

We will investigate the issue and provide feedback. If appropriate, we will correct the web version immediately, and will publish an erratum in the next issue. All investigations will be conducted in accordance with guidelines provided by the Committee on Publication Ethics (COPE).

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- Journal, volume and issue to which article was submitted/in which article was published
- Article title and authors
- Description of reason for withdrawal/retraction.

We will make a decision on a case-by-case basis upon review by the editorial committee in line with international best practices. Comprehensive feedback will be communicated with the authors with regard to the process. In case where there is any suspected fraud or professional misconduct, we will follow due process as recommended by the Committee on Publication Ethics (COPE), and in liaison with any relevant institutions.

When a retraction is published, it will be linked to the original article.

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- AIM
- AJOL
- Crossref
- Sabinet
- EBSCO

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1. Named authors consent to publication and meet the requirements of authorship as set out by the journal.
2. The submission has not been previously published, nor is it before another journal for consideration.
3. The text complies with the stylistic and bibliographic requirements in **Author Guidelines**.
4. The manuscript is in Microsoft Word document format. The text is 1.5-spaced, in 12-point Times New Roman font, and contains no unnecessary formatting.
5. Illustrations/figures are high resolution/quality (not compressed) and in an acceptable format (preferably JPEG or PDF). These must be submitted as 'supplementary files' (not in the manuscript).
6. For illustrations/figures or tables that have been published elsewhere, the author has obtained written consent to republication from the copyright holder.
7. Where possible, references are accompanied by a digital object identifier (DOI).
8. An abstract has been included where applicable.
9. The research was approved by a Research Ethics Committee (if applicable)
10. Any conflict of interest (or competing interests) is indicated by the author(s).

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Appendix 8.12

PowerPoint presentation

TITLE: UNDERGRADUATE MEDICAL STUDENTS` EXPERIENCE OF CLINICAL ROTATIONS IN A PRIVATE HOSPITAL SETTING IN SOUTH AFRICA

Dr FCR Theron
10861440
Supervisor: Dr A Louw

Introduction

- Major shortage of Healthcare Professionals worldwide (WHO Transformative Medical Education, 2014)
- Need More prominent in SA - Shortage of HP
  - Disease Burden

(Econex,2015)

- Clinical teaching – Bedside teaching (La Combe, 1997)
- Clinical Teaching Platform is filled to capacity (Mullan et al,2011; Batemab, 2015)
- Dr Aaron Motsoaledi, has stated that he plans to triple the number of medical graduates to at least 3600 per year in preparation of implementing the NHI
- Due to the shortage of healthcare professionals in South Africa, new and innovative ways of expanding the teaching platform is needed

Literature review

- Community based Teaching (Barrett, Lipsky, 2011)
- Parallel Rural Community Curriculum (Walter, Worley 2003)
- Improved student outcome and professional identity (Hirch, Walter, Pencelot,)
- Patient Benefit – Improved care, more time with the Patient
- - Better Adherence to Treatment Guidelines (Walter, 2007; Walter,2009)
- Specialist engagement with program was poor- Hospital based and Time insufficient

Literature Review continue

- South African Based Community / Rural programmes
  - Walter Sisulu (WHO,2014; Couper, 2015)
  - Stellenbosch Rural Clinical School (Van Schalkwyk, 2015)
- Private Clinical Education Programme – Urban Private General Practice (Mahony, 2013)
- Private Hospital Collaboration Programme – (Crawford, 2010)

Theoretical Perspectives

- Workplace education (Karina, 2014)
- Social cognitive theory
- Community of Practice
- Service Learning
- Reflective Practice, portfolio`s, case studies
- Feedback (Bezuidenhout, van Schalkwyk,2015)
- Role modelling (Ramani, 2005; Couper, 2015)
- Positive environment (Gravett,2004)

Expanding Medical Training in the Private Sector: Perspectives on a New Frontier in Medical Training

Prof Darrell HG Crawford
University of Queensland
Brisbane, Australia

Why Some of Australia's Private Hospitals Should Be Centres of Academic Excellence ?

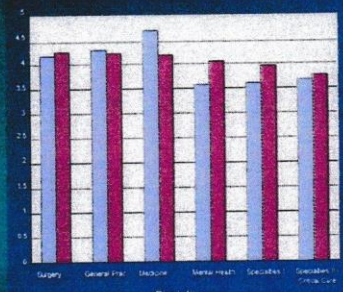
- Traditionally the major public teaching hospitals in each State have been the centres of medical learning at undergraduate and postgraduate (ie specialist training) levels.
- There was no dialogue on the proposition that private hospitals could, or even, would participate with any conviction in the educational agenda.
- Major change in mind-set of Executives of Private Hospitals, Deans of Health Faculties and Vice-Chancellors, as well as DOHA and the Colleges such that education outside of public hospitals and in the private sector is increasingly regarded as an important environment for medical education.

Let's dismiss some myths

Myth 1

"Teaching will not be as good in the private sector as the public sector"

Mean Score 'Teaching' Rating by Discipline, Greenslopes

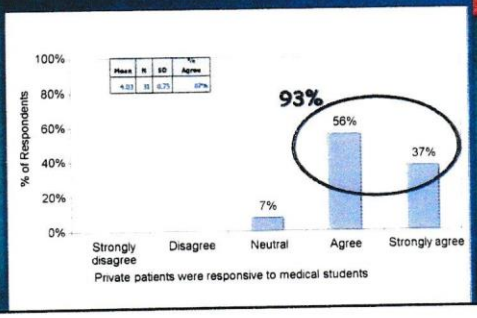


Let's dismiss some myths

Myth 2

"Private patients do not want to be bothered by medical students"

Private Patients Responsive to Medical Students

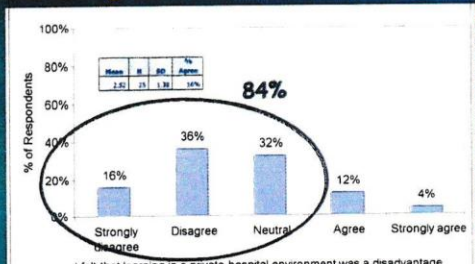


Let's dismiss some myths

Myth 3

"Students will feel disadvantaged being educated in the private sector"

Learning in Private vs Public hospital



I felt that learning in a private hospital environment was a disadvantage compared to learning in a public hospital environment.

The University of Queensland School of Medicine: Organisational Chart of a Multi-Dimensional School

Multi-Dimensional School that provides opportunities for study in metropolitan public hospitals, as well as regional environments, international sites (USA, Brunei) and the private sector (GPH).

What are the Other Requirements for Medical Education in the Private Sector

- Appropriate patient load – 550 beds for 50 students
- Physical Facilities – Teaching, Administration & Research
- Commitment to the process by Hospital and Company Administration, and all levels of the University
- "Champions" on the ground

What is in it for Private Hospitals?

- To develop an attachment between your hospital and medical graduates to increase the likelihood that an individual trained at your institution will conduct their future practice at your private teaching hospital, or that general practitioners trained at your hospital will refer to specialists practicing at your hospital
- There is no doubt that the development of educational models and peer review practices improve the standards of care and probably facilitate accreditation

What is in it for Private Hospitals?

- To provide private hospital sector with a greater voice in decision making in relation to health care policy
- To facilitate closer cooperative arrangements that exist between public teaching hospitals and co-located or geographically aligned public hospitals
- To improve educational facilities in the hospital
- To be a genuine contributor and share responsibilities in the education of your future workforce ie Good Citizen

Context

- A collaboration project between Stellenbosch University and Mediclinic Durbanville was launched in 2014. Undergraduate medical students rotated at Mediclinic Durbanville as part of their official undergraduate training (Bateman, 2015). This is a first of its kind project in the South African context where the private sector officially contributes in clinical training. No scientific research has been done to determine the educational value of this project.

Research question

- How do the undergraduate medical students experience their rotation at a private hospital setting in South Africa, with regards to their teaching and learning environment, the private physician as educator and the private patient?

AIMS and OBJECTIVES

- To use the experience of students rotated at the private platform to make informed decisions if the platform is adequate and accessible to undergraduate teaching.
- To determine if the students experienced the private specialist physicians as capable and to have sufficient time to be an effective educator.
- To determine if the students experienced the private patient accessible to student training.
- To determine if there are differences between the experiences of the fourth and fifth year students rotating at the private clinical platform.

Research Methodology

- Study design: This is a qualitative study which follows an interpretivist paradigm The design is a cross sectional descriptive study with convenient sampling.
- Participant selection: Non-probability sampling (convenience sampling) took place, selecting only students rotating at the Private Hospital Platform. Only students from 2 rotations will be used (one fourth year group and one fifth year group)
- The intervention: The four-week clinical rotation at the Private Hospital Platform is the intervention.

Ethical Consideration

- Ethical approval was obtained
- Institutional clearance and MB ChB programme Committee

Data Collection

- Survey Questionnaire: 3 sections
  1. Demographic data
  2. Experience of the Private Hospital setting and the private physician as educator. (DREEM)
  3. Experience of the private patient
- Focus Group Interviews

Data analysis

- Framework Method of Data analysis (Gale, 2013)
  - "The excellence of the research rest in large part on the excellence of the coding". (Anselm L Strauss, Qualitative Analysis for Social Scientists, 1987)
- Triangulation (Bradley, Curry and Devers, 2007)
- Member Checking (Pope, Ziebland and Mays, 2000)

Results

- Demographic data
- Themes
  - Patients
  - Environment
  - Teaching & learning experience
  - Private Physician as educator
  - Difference between 4th and 5th year groups

Demographic data

- 30 Students took part
  - 4th year group – 16
  - 5th year group – 14
  - 6 males vs 24 females
  - 16 Caucasian, 5 black, 2 students chose not to fill in race

Environment

- 100% of the students found the environment good for teaching and learning.
- More academic than expected
- Wards were quieter and cleaner with more space around the beds
- Working equipment and quicker turnover time for tests
- Interaction with staff more positive
- Free wi-fi

Teaching & Learning experience

- Small group/one on one
- Bedside teaching
- Feedback
- Role model
- Community of practice
- Different disease and patient profile
- Both platforms

Private Physician as Educator

- Volunteer vs being forced
- Expertise as specialist vs Registrar
- No hierarchy
- Personal relationships
- Respect

Patients

- Surprisingly willing and open to students.
- More informed and knowledgeable about their disease, tests and treatment options.
- Only 1 patient refused student – was not informed in advance by treating Physician.
- No communication barrier.
- Grey's Anatomy
- Different disease profile

Difference between 4th year and 5th year students

- 4th years – stimulated to become better health care workers
- 5th years – more interested in passing exams, structure of osche's and rubric of examinations

Student`s Recommendations

- 1. Dedicated workspace
- 2. Tutorials
- 3. Uniformity of what is expected
- 4. Uniformity of evaluations of the OSCHE`s and Portfolios
- 5. English as the Academic language
- 6. All students need to rotate on both platforms
- 7. Transport

Conclusion

- 100% described this rotation as a positive learning experience
- Some as the best rotation of their medical training
- Igniting passion

Utilization of the study

- This study proves the hypothesis to be true, that undergraduate medical education can effectively take place in the private hospital setting, it can lead to the successful expansion of the teaching platform.
- Allowing more students to be trained
- Addressing the shortage of Doctors in South Africa
- Improving patient care.

Some of the most Famous Hospitals in the world are Private Institutions

Johns Hopkins Hospital, Baltimore

Massachusetts General, Boston

Mt Sinai Hospital, Manhattan Island New York

"We must acknowledge ... that the most important, indeed the only, thing we have to offer our students is ourselves. Everything else they can read in a book."

DC Tosteson