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2014
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Bachelor of Clinical Medical Practice (Clinical Associate) student reflections during clinical rotations

Audrey Gibbs

A research report submitted to the Department of Family Medicine, University of the Witwatersrand in partial fulfilment of the requirements for the MFamMed degree.

Supervisor: Prof Ian Couper

May 2014

Declaration

I, Audrey Gibbs, hereby declare that this research (Bachelor of Clinical Medical Practice (Clinical Associate) student reflections during clinical rotations) is my own original work. All relevant sources that are contained in this research have been documented and acknowledged. This research has not been submitted in full or in partial fulfilment of the requirements for a similar degree for academic or examination purpose at any other registered university.

_____ _____

Audrey Gibbs Date

Dedication

I would like to dedicate this research report to the BCMP class of 2011 – a very special group of pioneers in a new programme.

Abstract

Background: The BCMP degree (Clinical Associates) was introduced in South Africa in 2008 and at the University of the Witwatersrand in 2009. This first cohort of students produced challenges and questions around teaching and the learning environment. The clinical experience was mainly in district and regional hospitals, not tertiary academic hospitals, with clinical learning supervised by staff at these hospitals. Faculty therefore relied on student portfolios to ascertain learning and experiences in the clinical setting. This included reflective journals.

Aim: To identify the issues that third year BCMP students in the clinical areas choose to write about in their reflective journals.

Methods: The journals of 24 BCMP students written during the first two clinical rotations of their final (third) year were included in a retrospective study. Thematic content analysis of these journals was employed to examine emerging themes and subthemes. Each student's narrative pieces were then further analysed in detail. Many of the journal entries contained more than one reflection and each of these reflections was analysed and the relevant themes and subthemes were identified.

Results: The reflections show that students focused on staff and health care systems issues, especially resources, attitudes and work ethic. The majority of these staff and health care related reflections were negative but positive experiences and role models were also identified. There were differences noted between hospitals and rotations, with the paediatric rotation showing the most positive responses, and the emergency rotation the least.

Conclusion: The students identified lapses in the health services and health providers which affected patient care. They also recognised positive experiences and role models. This reveals a mismatch between teaching and their clinical experience. These experiences will be used to advise future teaching and research, as well as to provide feedback to the hospitals used for clinical training. Discussions should be held as to ways of reporting these incidents and improving professional standards in the clinical teaching settings.

Acknowledgements

I would like to acknowledge the help and support from Prof Ian Couper, Prof Laurel Baldwin-Ragaven, Abigail Dreyer and the special team of BCMP staff.

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Nomenclature

BCMP – Bachelor of Clinical Medical Practice

HCS – Health care systems

HIV – Human immune deficiency virus

OPD – Outpatients department

Paeds – Paediatrics

PGL – Personal growth and learning

Pt - Patient

UCT – University of Cape Town

Wits – University of the Witwatersrand

1. Introduction

The Bachelor of Clinical Medical Practice (BCMP) is a new degree programme in South Africa, first introduced in 2008 at Walter Sisulu University. The students qualify as mid level medical workers, registered with the Health Professions Council of South Africa as Clinical Associates. The need for this new profession was identified as a response to the shortage of doctors, especially in the rural areas.

The Clinical Associates form part of the clinical team at district hospitals, working under the supervision of doctors. They perform consultations including history taking, physical examination, assessment and management including investigations and procedures, in the emergency room, outpatient departments and clinics. They perform minor surgical procedures and assist in other surgical procedures. They look after hospital inpatients and perform ward rounds and duties under the supervision of a doctor.

The curriculum content of the three year BCMP degree was based on research at district hospitals in South Africa which determined the most common conditions and procedures.

At the University of the Witwatersrand the BCMP degree has an innovative totally integrated curriculum. Medical, clinical and behavioural sciences are all integrated with clinical teaching and skills from the first year. There is a spiral over the three years of the degree with increasing depth and complexity. There is a combination of mainly case based classroom teaching, patient based learning, skills teaching in

the skills laboratory and district hospital based clinical teaching. Clinical experience begins in the second month of the first year and increases annually, with approximately eighty percent of the third year involving clinical experiences.

The University of the Witwatersrand enrolled its first 25 BCMP students in 2009; this study was undertaken with these students in their third and final year in 2011. During the third year the students spend most of their time in District Hospitals in Gauteng and North West Provinces under supervision of the hospital staff, with intermittent contact with the Wits faculty staff. They have five specified rotations during the year, viz Paediatrics, Surgery, Emergency Medicine, Inpatient medicine and Outpatient medicine including HIV management. For each rotation they have a portfolio to submit with different assignments depending on the rotation. These are a compulsory requirement and form part of the assessment for the rotation.

Teaching professionalism and ethics is an integral aspect of medical education and forms part of the BCMP integrated curriculum. Teaching of ethics is through lectures, discussions, clinical examples, bedside teaching and role modelling.

As one way to assess the effectiveness of this teaching, as well as to gain insight into issues experienced in the clinical setting by the students, the students were asked to submit journal entries reflecting on their clinical experiences as part of the portfolio. This assignment was common to all rotations. The purpose of these journal entries was to encourage the students to reflect on their experiences, and also for the faculty to gain greater insight into their experiences in the hospitals.

They identify aspects of the health system and health providers that impact on the students and that students' perceived impacted on patient care.

The following instructions were given to the students:

"Ethical Responsibility. Reflect on the Changing Relationship between Health Care Professionals and Society in the work place. Your reflection should be based on your daily interactions with patients and other members of the health care team taking into account the rights and responsibilities of patients as described in the Patients Rights Charter and the Batho Pele principles. Write one Journal entry, one page in length. Refer to Hatem's definition[1] below of Professionalism [lectures in BCMP 1] as a founding principle on which to base your reflections:

"the extended set of responsibilities that include the respectful, sensitive focus on individual patient needs that transcends the physician's self-interest, the understanding and use of the cultural dimension in clinical care, the support of colleagues, and the sustained commitment to the broader societal goals of medicine as a profession"

The remaining two Journal entries, one page each, can be on any topic related to your experience as a health care provider. Some topics may include: discussion with a patient on health promotion, discussion with a patient on behaviour modification, arguing a management plan with a colleague using evidence based medicine. Or maybe you have read a health related article in a medical journal and can make comments on this. Perhaps you just want to describe the human side of your interaction with a patient, family member or co worker. These last two entries should be at least one page in length each, concerned more with your thoughts,

beliefs and attitudes, reflecting upon science but not concerned with the details of scientific medicine."

After the students completed their first two rotations of their third year their journals made interesting, thought provoking and sometimes disturbing reading.

As a student wrote, "It's amazing how we are able to write journals like these and we never get short of such issues … it's a good thing to observe so that we don't make the same mistakes and these things shape us to be better professionals".

Some of the entries were more theoretical, but most were based on actual circumstances or incidents in their practical setting.

Reading the students journals' revealed many issues, with implications for teaching and clinical experience. The rationale for this research is to document accurately, and quantify the nature of, these student reflections of their experiences, in order to draw informed conclusions and identify common areas of concern.

The researcher agrees with Phillipa Malpas[2(pg 629)] who commented that "It was not enough to read the reports, make comments and move on". This is information that needs to be used.

This study will also provide a baseline for further similar studies in the future. These could look at changes in the same students as their career progresses to

look for ethical erosion, or look at future third year students in the same facilities to see if the same issues were still being recorded.

This information will also give valuable insights into circumstances at the hospitals used for teaching. Research data has more impact than anecdotal evidence when the results are presented to the managers and Family Physicians at the facilities. It is hoped that they will use this information to look at quality improvement in primary care including quality of care, conditions, equipment and staff. Positive reflections will motivate staff working in these facilities.

2. Literature Review

The literature was reviewed to identify similar studies; in order to find out whether researchers had used journals or similar narratives submitted by students, the reason they used them and the methodology they used. It was important to understand the limitations and challenges of these studies and if there were positive outcomes resulting from their findings.

The literature was searched for studies involving any health science students. It was complicated by the different terminology used to describe the students' writing. Similar narratives to the student BCMP journals submitted to Wits with various different terminologies are required by many universities. The Emory School of Medicine in Atlanta calls them critical incident reports[3], described as narrative accounts about health science students' professional experiences. Critical incident essays are used in the community based experience of dentistry students at the University of North Carolina[4]. Professionalism narratives was the term used by Bernard et al[5] for fourth year medical students' recording of professional or unprofessional behaviour observed. This term was also used by Karnieli-Miller et al[6] to refer to the students' records of an event around professionalism. "Thought-provoking episode report" was used by the University of Otago[7] for their student submissions. Ethics reports were required from medical students at the University of Auckland[2] and students at the University of Iowa[8], the University of Western Ontario[9] and the Vrije Universiteit in Amsterdam[10] were asked to write about ethical dilemmas. Ethical issues were required as part of a case assignment by third year students at State University of New York, Upstate Medical University[11]. Similar narratives have been obtained for research

purposes, rather than being a requirement of the course. These include 'most memorable' dilemmas obtained from 680 students at twenty nine UK medical schools[12]. In this study the above narratives will be generically referred to as reflections.

2.1. Rationale for research around these reflections

Numerous reasons are given by researchers for analysing these reflections. These included to inform ethics teaching and curricula[8,9,10,13] to understand the informal and hidden curriculum[5,6,7], to identify positive role modelling[14] and to learn from the students' experiences[2,4]. Other studies had more specific purposes, such as comparing the informal curriculum in emergency medicine and internal medicine[5], and comparing the experiences of medical and dental students[7]. The researchers at Makerere University in Uganda[15] recognised the presence of unprofessional conduct of health care workers and wanted to use the information as the starting point in addressing the problem.

2.2. Methodology and themes

Various methods were used in the different studies, with some using routine student assignments similar to this study, while others used assignments or questionnaires specific for their research. Some of these studies are summarised in Table 1 below.

Table 1: Summary of research articles

Researcher	Students	Type	Specific to research	Instruction	Methodology	Themes	Categorised as pos/neg	Limitations	Validity	Action
Vivian et al[16]	4th-6th year medical students	Questionnaire, followed by individual interviews	Yes	Professional lapses and patient rights abuses	Constant-comparative grounded theory	• Types of abuse witnessed • Identity of perpetrators • Student response • Medical education factors • Health system issues	N/A	Single institution Final year students underrepresented	This researcher believes this is valid in similar context	Contributed to set up of professional standards committee
Geddes et al[17]	Physical therapy students, third semester	Journal entry	Yes	Describe clinical experience and reaction to it	Content analysis with consensus by three researchers	Major themes • Respect • Professionalism • Professional collegiality Minor themes • Allocation of resources • Advocacy for client, society, health policy • Informed consent	No	Not asked to comment on ethical issues	Frequency of ethical issues and student's ability to recognise them not accurate but still valuable information	Suggest curriculum change
Mofidi et al[4]	Final year dental students	Essay about critical incident	No	Event with specific meaning and personal and professional implications	Qualitative content analysis, discussed and checked by team	• Personal and professional growth • Enhanced awareness • Commitment to service	No	Possible socially desirable responses, recall bias	Mofidi et al believe the limitations were minimal, this research her agrees.	Suggest further research
Fard et al[13]	Medical students second year clerkship	Logbook entries	No	Record three ethics related encounters	Independent categorisation by two researchers, then discussion and consensus	• Ethics in medical education • Professional commitment • Confidentiality • Doctor-patient relationship • Informed consent • Doctor-peer relationship • Conflicts of interest • Truth telling • Medical error • Ethics in research • Maternal-foetal conflict • Termination of life • Resource allocation and justice	No	Required to reflect diversity so not true prevalence One university	This researcher believes ethical issues still valid.	Ethics important in curriculum Ethics in medical education important

						• Determining capacity				
Researcher	**Students**	**Type**	**Specific to research**	**Instruction**	**Methodology**	**Themes**	**Categorised as pos/neg**	**Limitations**	**Validity**	**Action**
Satterwhite et al[18]	All medical students	Questionnaire	Yes	Questions about unethical situations and space to describe ethical dilemma	Answers to unethical situations as percentages. Multiple analysis of variance		N/A	Recall bias Multiple reporting of single events	Researcher believes issues are a valid problem, Agree	Ethics curriculum changed, increase student's awareness, need for changes in clinical education environment, introduced department focus group meetings, housestaff orientation, support by leaders for environmental changes
Sharp et al[8]	Fourth year dental students	Written paper	No	Describe and analyse an ethical issue encountered in clinical rotation	Coded by two researchers through consensus	• Patient lack of resources • Conflict between clinicians • Practises inconsistent with standard of care • Identifying surrogate decision maker • Patient's capacity to make decisions • Patient/parent demand for different treatment plan • Patient/parent refusal of treatment plan • Patient's dental health neglected by caregiver • Student competence or confidence in own skills • Difficult patient • Truth telling/disclosure • Mistakes • Treatment with inadequate consent • Cultural issues • Breaking bad news • Breach of confidentiality	No	One dental school Frequency not reliable	Still identifies ethical issues encountered, Agree	Ethics curriculum changes made, change instructions to include specifics, ongoing tracking

Researcher	Students	Type	Specific to research	Instruction	Methodology	Themes	Categorised as pos/neg	Limitations	Validity	Action
Wilson et al[7]	Final year dental students Fourth and fifth year medical students	Thought provoking episode report	No	Story of an event, your response and learning. To be used for discussion for dental students and written feedback for medical students	Content analysis	• Difficult patients • Conflicting advice from tutors • Belittlement • Professional standards/complaints • Treating friends and family • Systems issues • Other teaching issues • Paediatric patient issues • Miscellaneous	No	Might have chosen situations where they required advice	Information still useful	Initiated new courses in professionalism
Huijer et al[10]	Interns	Ethical dilemma	No	Describe a situation or event they viewed as involving ethical dilemma	Recurrent themes. Numbers and percentages. Double analysis, No agreement on the nature of medical failure so no percentage reported.	• Disclosure and non-disclosure of information and informed consent • Medical decisions at end of life • Medical events that interns felt should not have occurred • Problems transferring patients • Other	N/A	One category omitted due to non consensus	Open about this, therefore confident about the rest.	Recommend changes to ethics courses based on actual dilemmas experienced in the clinical areas.
Rees et al[12]	Medical students	Quantitative questionnaire with final optional free text item.	Yes	Professional dilemma.	Quantitative thematic and discourse analysis, large number so chi-squared tests. In depth narrative analysis of one exemplar narrative.	1. Patient care – actions of HCPs 2. Student abuse 3. Patient care – actions of students 4. Consent		Various methods of recruitment in different schools. Retrospective with time delay so feel may have been well rehearsed Female and white students overrepresented. Analytical challenges due to large sample size.	Did not have statistical significance. Even if numbers not accurate, issues raised by students are important.	Develop strategies that empower students to respond to dilemmas. Further research in other health care students.

Researcher	**Students**	**Type**	**Specific to research**	**Instruction**	**Methodology**	**Themes**	**Categorised as pos/neg**	**Limitations**	**Validity**	**Action**
Caldicott et al[11]	Third year medical students	Written paper	No	Describe and analyse a clinical case which presented an ethical issue	Checklist of ethical issues prepared, and additional issues added.. Researcher and two assistants coded independently	• Decision regarding treatment • Communication • Student specific issues • Justice • Quality of care • Professional duties	No. Negative due to instructions	One medical school. May have overrepresented problem cases. Sample too small for statistical significance	They are sure these problem cases do exist. Believe concerns valid even if frequency may not be accurate	Need to examine the moral climate of clinical practise. Need to encourage students to speak up and develop safe structures for reporting.
Karnieli-Miller et al[6]	Third year medical students	Student narratives	No	Events that express professionalism or lack thereof	Thematic content analysis. Consensus through discussion. Results checked by focus groups of students.	Medical-clinical interaction • Respect/disrespect • Communication - patients • Demonstrating responsibility • Patient education • Going above and beyond • Communication-teams Teaching and learning environment • (Un)welcoming environment • Capitalising on teaching opportunities • Learning from peers • Staff or self expectations • Student needs • Privacy • Honesty and integrity	Yes Included hybrid stories	One institution One clerkship	Rich source of information on learning environment	Resource for faculty development and student learning

Researcher	Students	Type	Specific to research	Instruction	Methodology	Themes	Categorised as pos/neg	Limitations	Validity	Action
Bernard et al[5]	Fourth year medical students	Professionalism narratives	No	Record observations demonstrating professional/unprofessional behaviour	Prior categories plus grounded theory ot identify new categories with consensus by two researchers Chi-square analysis to compare frequency with internal medicine research	Medical-clinical interaction • Respect/disrespect • Communication - patients • Demonstrating responsibility • Patient education • Going above and beyond • Communication-teams Teaching and learning environment • (Un)welcoming environment • Capitalising on teaching opportunities • Learning from peers • Staff or self expectations • Student needs • Privacy • Honesty and integrity	Yes, included hybrid	Comparison of two specialities not at the same institution. Third year compared to fourth year	Comparisons prob not valid but data is	Suggest using new approaches based on practise setting to change institutional professional culture
Reddy et al[19]	Third year medical students	Survey pre and post clinical clerkship	Yes	Questionnaire. Closed questions and open ended comments	Qualitative using constant comparative method and quantitative comparing pre and post	List of questions Qualitative themes not clear	Yes/No answers to questions	Lack of pairing of pre and post survey. Poor post survey response rate 62% compared to 100%. May reflect hostility to professional education and may bias result	Bias would mean less likely to see difference therefore findings significant. Therefore believe finding of student's perceiving unprofessional behaviour as more appropriate is valid	Recommend serial assessments. Need for innovative modalities for teaching professional behaviour. Change must include faculty, students and staff.
Christakis and Feudtner[20]	Third year medical students	Written case report	No	To describe and analyse an ethical dilemma. Followed by discussion.	Identified recurring themes	• Performing procedures: Education and patient care • Being a team player • Challenging medical routine • Knowing the patient as a person • Witnessing: To rock the boat or stay the course	No. Pure qualitative	Purpose was to provoke further thought and study	Ideas valid as examples, frequency not valid	Ideas to provoke thought around ethical teaching

Researcher	Students	Type	Specific to research	Instruction	Methodology	Themes	Categorised as pos/neg	Limitations	Validity	Action
Kovatz and Shenkman[21]	Final year medical students	Questionnaire	Yes	No instructions	Closed questions with quantitative analysis and chi squared tests	Answers to specific questions around the witnessing of unethical behaviours.		Relies on student perception of unethical behaviour, subjective especially as higher percent of students who believed ethics was not covered sufficiently reported events.	Issues important even if percentages not accurate	Remind teaching doctors of the need to role model professional behaviour.
Santen and Hemphill[14]	Fourth year medical students	Written reflections	No	Topics of cost, professionalism, diversity/empathy or a critical incident.	Qualitative analysis, grounded theory approach. Each of the two researchers independently	• Demonstration of positive professional behaviour • Observation of unprofessional behaviour • Personal improvement and learning	Categorised as professional or unprofessional behaviour	Single institution. Instruction may have resulted in more negative reflections. Coding subjective.	The goal was to further understanding and not to determine an accurate occurrence rate, This was achieved.	Suggest further studies to quantify and confirm themes. Can be a resource for faculty and student professionalism teaching.
Feudtner et al[22]	Third and fourth year medical students	Mail survey questionnaire	Yes	Asked about ethically problematic situations	Prevalence, bivariate analysis, logistic regression and qualitative thematic analysis	• How do students perceive their ethical environment? • How do students feel about their ethical dilemmas? • Does clinical training lead to ethical erosion?	No	No objective standard to test validity. Associations may not be accurate	Even without accurate figures there is evidence of the presence an d effect of unethical behaviours.	Suggest changes to ethical education.
Kelly and Nisker[9]	Final year medical students	Ethics assignment	No	Describe an ethical dilemma	Line by line coding, supported by software.	• Clinical service rotation • Target of ethical dilemma • Source of ethical dilemma • Nature of ethical dilemma	N/A			

Most of the above research studies were qualitative in nature with thematic content analysis used by many. The themes were usually checked by more than one researcher with consensus being obtained or some data excluded if consensus was not obtained. Some of the bigger studies then used bivariate analysis for comparisons and variables[12,13,22] as well as binary logistic regression[22].

Most studies did not categorise the reflections into positive and negative and discussed the findings under the themes identified. Some studies obtained only "negative" reflections by way of the instruction given, i.e. to write about an ethical dilemma[8,9,10] or by purposefully asking for human right abuses and professional lapses[16]. The studies by Bernard et al in Ohio[5] and Karnieli-Miller et al in Indiana[6] both coded the reflections as positive, negative or hybrid (either ambiguous or with both positive and negative elements). Santen et al[14] categorised the reflections into positive professional behaviour, unprofessional behaviour and personal improvement and learning.

The different studies identified different themes, with no common outline. These are documented in Table 1.

2.3. Limitations

The limitations of many of the studies have been summarised in the table, along with a brief comment on the validity of the study. Most of the studies were on student assignments submitted for assessment purposes, similar to

this research. It was suggested that students may have written to impress their teachers4. The validity of the students' reports was also questioned[22]. Specific events may be reported on by more than one student[18]. The instructions may also have influenced the reflection, for example to write about a troubling event[13], or an ethical dilemma[8,9]. Subjectivity is a concern in qualitative studies[4]. Using only one clerkship[6] or one institution[11,15] were also limitations. Recall bias was possible if the reflection was written some time after the event occurred, especially relevant for some of the survey type studies[11,18]. Most of the studies were not large enough for statistical analysis.

Most of the studies recognised the limitations but believed that the general issues were very important, even if the numbers and prevalence were not completely accurate. On analysing the studies, the researcher would agree with them, especially as the issues raised were common to so many of the studies. It is not the absolute numbers which are important. Despite the different methodologies and themes, the studies revealed many similar findings which may be relevant to this research. In all the studies the students identified unethical behaviour. The revealing of information about the informal and hidden curriculum was identified in a number of studies[5,6,7].

2.4. Comparisons

One aim of certain studies was to compare different rotations or different groups of students. Bernard et al[5] compared the reflections from the emergency department and the internal medicine departments to determine

differences in the hidden curriculum in the two departments. They did find some statistical differences but the study was limited due to the fact that different sites, different instructions and different years of students performed the different rotations. Caldicott et al[11] compared the results from students in different rotations. A difference between rotations was noted, especially in obstetrics and surgery where significantly more students reported a fear of speaking up. Fard et al[13] compared different rotations and found an increase in prevalence of ethical issues in the surgical rotations. At the University of Otago, Wilson et al[7] compared the reflections of medical and dental students, which revealed some similarities and a number of differences. All of these studies had significant limitations, so the results may need to be interpreted with caution.

2.5. Action

It was important to determine whether these various studies resulted in actions being taken or recommended based on the findings of the research studies. This is summarised in the table above. These included to inform ethics teaching and curricula[8,9,10,13], to understand the informal and hidden curriculum[5,6,7], to identify positive role modelling[14] and to learn from the students' experiences[2,4]. Faculty development was mentioned in a number of studies[6,14,15]. In nine of the 69 studies included in the review by Buckley et al[23] tutors were reported to have developed a greater understanding of student needs, and this changed their teaching approach.

It was suggested that the reflections can be used to assist teachers by looking at students who have become discouraged or are at risk of burnout[3] and to gain insight into the individual student[24].

At the University of North Carolina[4] some dental students' writing revealed prejudicial attitudes which resulted in a recommendation to include programmes to address prejudice.

At the University of Auckland[2], the issues raised are being addressed by the university and district health boards; as well as suggesting notification of the findings to professional bodies.

Wake Forest University School of Medicine[18] has instituted faculty focus group professionalism meetings.

Studies performed for specific purposes resulted in related actions. The study on observed human rights abuses at the University of Cape Town[16] formed part of the evidence that led to the professional standards committee being established[25].

2.6. Summary

From the studies included in the literature review, there is evidence that analysis and use of students' reflections is valuable, even with some of the limitations noted. Each context is specific with findings relevant to that context.

The fact that a limited amount of research on this has been done in South Africa, and that none has been done on the BCMP students creates an opportunity for research in this context. The purpose is to emulate the beneficial applications that have resulted from similar research in other contexts.

As stated by Santen et al[14(pg 293)] the reflections may be a resource to “ensure that we remain the people that we hope to be”.

3. Aim and Objectives

3.1. Aim

- To identify the issues that third year BCMP students in the clinical areas choose to write about in their reflective journal.

3.2. Objectives

- To scrutinise the reflective journals completed by students in March and April 2011.
- To document the hospital worked in (coded) and rotation.
- To identify the main themes in each student's reflection categorising them as patient related, staff related, health system related, student related as personal growth and learning, including ethics and professionalism.
- To identify common subthemes and important issues.
- To assess whether each individual reflection in the journal was positive, negative or neutral.

3.3. Research Questions

- What do the Clinical Associate students experience as significant to write about in their reflective journals?
- How can the information provided by students in their reflective journals be used to improve their training and/or clinical sites?

4. Methods

4.1. Design

The research design was a retrospective, descriptive study. The study was conducted on the reflective journals handed in by the BCMP students in the first two clinical rotations of their final year. These clinical rotations were at different sites and in different clinical specialities. The journals were a requirement of the course, and formed part of the assessment process for each clinical rotation. This assessment process was completed and the students had graduated prior to this study. The researcher was the only person who had access to these journals which were then coded and anonymised.

A mixed method research design was used, so that the reflections could be explored and then quantified to determine prevalence and comparisons. Major themes were identified, using a grounded theory approach, by reading and re-reading the journals. Thematic content analysis was employed to confirm these themes and examine emerging subthemes. The reflections were then individually reviewed and coded, using the constant comparative method, on a Microsoft Excel™ spreadsheet. Most of the students' journals were a page or more long and had more than one issue identified; each separate issue is referred to as a reflection. Each reflection was analysed and coded separately. If a single reflection could fall into two themes the most appropriate theme was chosen by the researcher. Microsoft Excel™ was used to determine frequencies and percentages of themes and subthemes.

4.2. Study Population

Twenty five third year BCMP students were registered at the University of the Witwatersrand in 2011. 24 of the students submitted reflective journal entries for each of the first two completed clinical rotations. One student's journal was misplaced after assessment; it could not be found and therefore could not be included in the study.

4.3. Sampling

All third year BCMP students were included in the study.

4.4. Data collection

The study used data from reflective journal entries which were submitted by the students in March and April 2011. Each student had undergone two clinical rotations; 11 students remained at one hospital for the two rotations and 13 did the two rotations in different hospitals.

4.5. Data entry and analysis

Content analysis of the journals was carried out and recurrent themes were identified by the researcher. These were

- health care systems
- patients (attitude, behaviour)
- staff
- student personal growth and learning

Each student's narrative pieces were then further analysed in detail. Many of the journal entries contained more than one reflection and each of these reflections was analysed and the major theme identified. Some reflections could have fitted into more than one theme, but the most appropriate theme was selected to avoid duplication and the resulting effects on the findings.

Each separate reflection was numbered and placed into one of the themes. They were entered into a spreadsheet together with the student's code number, hospital code number and the rotation speciality.

Each reflection was also assessed as being

- positive, for example praise for the staff, a learning experience showing internalisation, reflection and growth,
- negative if there was criticism or shortcomings identified, or
- neutral if it was non judgemental, non emotional reflection or theoretical topic.

Further content analysis identified subthemes, see Table 2 below. These were then included on the spreadsheet, see appendix 9.2.

When looking at the validity of the research, trustworthiness as described by Lincoln and Guba[26] was used. They suggest establishing this by using credibility, transferability, dependability and confirmability. The credibility for this study was aided by the researcher's prolonged and persistent observation of the student journals. Triangulation was achieved by using journals from two rotations in a

variety of settings. Transferability was aided by a description of the setting and detail including quotes from students. However the small sample size and variety of settings may limit transferability. Dependability was enhanced by using the same students, the same instructions and the same analysis. A researcher not involved in the process checked the data and findings, identifying any omissions and inconsistencies. The fact that quantitative analysis was used to complement the qualitative aspects improves the confirmability of the study, as does the use of an external researcher to help to eliminate researcher bias. The themes were checked and confirmed by another researcher, Ms Abigail Dreyer, BA (UWC), Masters in Public Health (UWC). Any differences between the researchers were discussed and consensus obtained.

Table 2: Themes and subthemes

Theme	**Subtheme**
Health Care System	Resources
	Patient management
Patients	Attitude
	Communication
	Traditional / herbal medication
	Refusal of treatment
Staff	Attitude
	Communication
	Consent
	Patient management
	Teamwork
	Work ethic
Student Personal Growth and Learning	Communication
	Management
	Teamwork
	Ethics/professionalism

Representative quotes were identified as examples to illustrate and enrich the findings.

From the Microsoft Excel™ spreadsheet the total number of positive, negative and neutral responses was counted. The number of responses for each theme and subtheme were counted. These numbers and percentages were used to draw up frequency tables and graphs. The sample sizes were not sufficiently large for further statistical analysis.

Microsoft Excel™ was used to sort and manipulate the data, analysing each of the five rotations separately to enable comparisons and hypotheses. The data was not sufficiently large to determine probability. Two of the seven hospitals had an insufficient number of reflections to analyse and compare separately. Specific issues relating to the other five hospitals were identified, with results obtained for each of them.

The key issues and important factors were identified and discussed.

4.6. Ethical issues

The students were subordinate to the researcher, and care has been taken with regard to the ethics around this. The data did form part of the students' written assignments for the course which were received and marked by the researcher. They were however submitted and marked prior to this research, and the research therefore had no impact on this process. The students have now all graduated.

Permission was granted by the University of the Witwatersrand Human Research Ethics Committee to do the research retrospectively.

The students are identified in the research by numbers. Only the researcher had access to this coding. This will be destroyed after completion of the research. Due to the small number of students, no student demographics were recorded to ensure anonymity.

The hospitals are only identified by number and only the researcher will be able to link these to hospital names. No hospital staff members are identified by description or name; the students in fact only used two names (both positive reflections) in their journals. The term “staff” includes all hospital staff, with no differentiation to further maintain anonymity.

The findings for each hospital will be reported back to them individually, without identifying students or staff members.

This protocol was submitted to the University of the Witwatersrand Human Research Ethics Committee and approval was obtained. As the students had all graduated and this was an anonymous retrospective study, individual student consent was not required. Clearance certificate number M110812. See appendix 9.1.

5. Results

5.1. Overview

The results will be introduced and then presented by theme and subtheme. Results for each student rotation are then presented, followed by results from each of the hospitals used.

Of the 24 students, 22 students submitted journals for two rotations and two students for one rotation each. There were a total of nine rotations for inpatient medicine, surgery and emergency, 12 for paediatrics, and seven for outpatients. 11 students remained at one hospital for the two rotations and 13 did the two rotations in different hospitals. Each journal contained one or more reflections. The final total number of individual reflections was 193. The average number of reflections identified per student was eight, with a minimum of three reflections and a maximum of 18 reflections. The number and category of the students' reflections is shown in Figure 1.

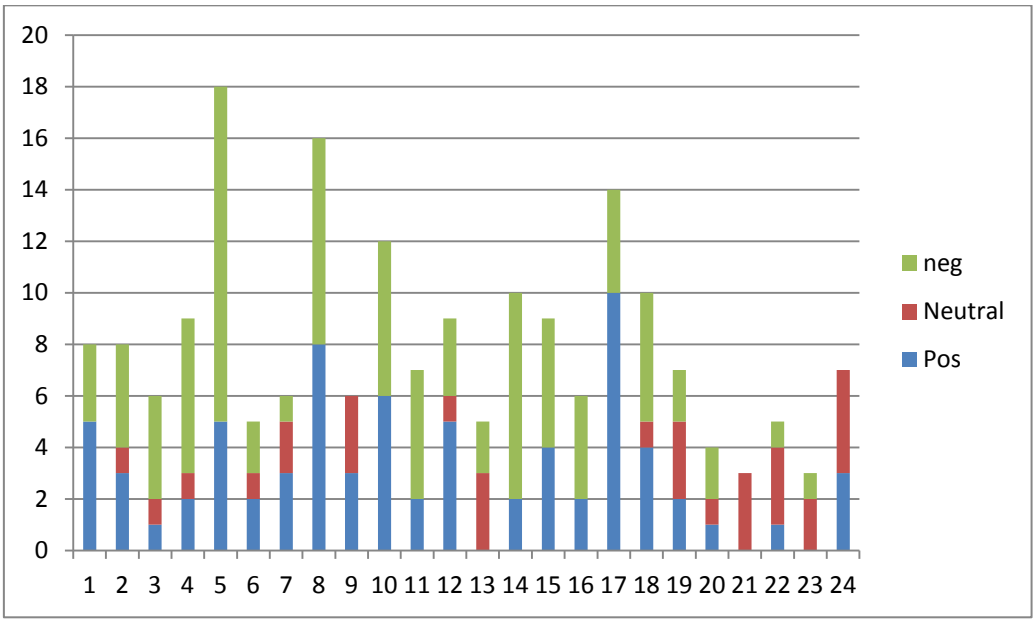


Figure 1: Number of positive, negative and neutral reflections per student, n=193.

The most common theme was related to staff, 91 of 193 (47.2%), with patients the least common at 12 (6.2%), as seen in the pie chart, Figure 2.

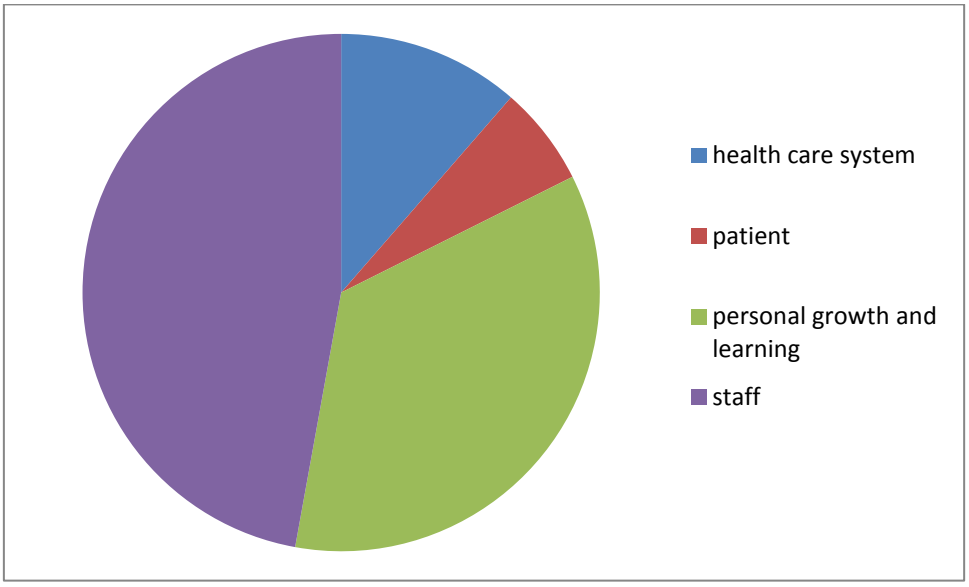


Figure 2: Themes by percentage

Eighty-six (44.6%) of the reflections were negative and 77 (39.9%) were positive, see Figure 3 below.

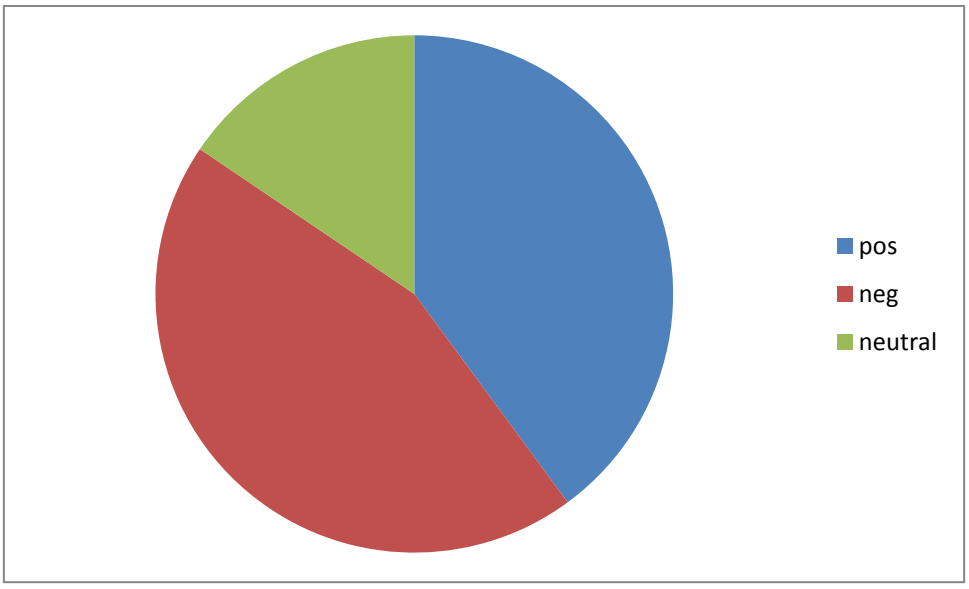


Figure 3: Percentage of positive, negative and neutral responses.

Table 3 details the number of reflections per theme and whether they were positive, negative or neutral.

Table 3: Total number of reflections and categorisation per theme

Theme	Number of positive reflections	Number of neutral reflections	Number of negative reflections	Total number	%
Health Care System	1	0	21	22	**11.4**
Staff	33	2	56	91	**47.2**
Patient	1	3	8	12	**6.2**
Personal growth and learning	42	25	1	68	**35.2**
Total	**77**	**30**	**86**	**193**	**100**
%	**39.9**	**15.5**	**44.6**		

Each of the identified themes was analysed. These were health care systems, staff, patients and student personal growth and learning. Subthemes and some common or important issues were identified and analysed.

5.2. Health care system theme

Reflections were categorised as negative if they revealed a shortcoming in or criticism of the health care system. Twenty-one of the 22 reflections related to the health care system theme were categorised as negative. The single positive reflection related to a good triage system being in place.

Students commented on issues that had adverse outcomes, for example, a lack of ICU beds and the death of a baby; a shortage of staff with results as reflected by the quote, “Waiting time for patients is just unbearable”.

A shortage of resources was the most common subtheme with 14 negative reflections relating to shortages of physical space, equipment or staff.

Table 4: Health Care System subthemes and categorisation

Health Care System Subthemes			
Subtheme	**Issues**	**No neg**	**No pos**
Communication	Poor pt education	2	
Pt management	Triage	2	1
	Lost specimen	1	
Shortage of resources	Space/beds	3	
	Equipment/stock	5	
	Privacy	3	
	Staff	3	
Other	Policy	1	
	Waste management	1	

The one positive reflection related to health care systems was a comment on a good triage system. This compares to two negative reflections around triage from different hospitals, one of which stated, "Triage is not practised at all in casualty thus patients not prioritised and treated according to their needs therefore an increase in mortality/morbidity rate. This makes casualty a mess".

5.3. Staff theme

The staff theme reflections were analysed per hospital and per subtheme.

Reflections were categorised as positive if they praised or complimented staff or their actions, and negative if they criticised or identified shortcomings or bad practices. There were two neutral reflections around discussions about colleagues

in general without positive or negative aspects. These were not included in Figure 4 below.

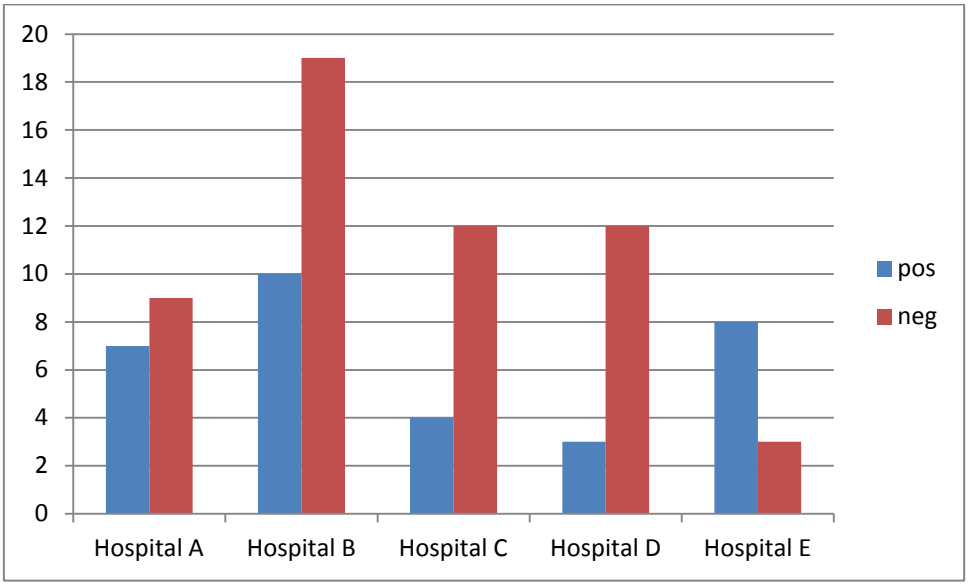


Figure 4: Number of positive and negative reflections for the staff theme per hospital.

Two hospitals were not analysed separately due to the very small number of staff reflections. One had two staff reflections, the other nil.

5.3.1. Staff Subthemes

Subthemes were identified, see Figure 5 below. As can be seen from this graph, students commented on both positive and negative aspects for every subtheme identified. They thus demonstrated an understanding of what constituted professional behaviour.

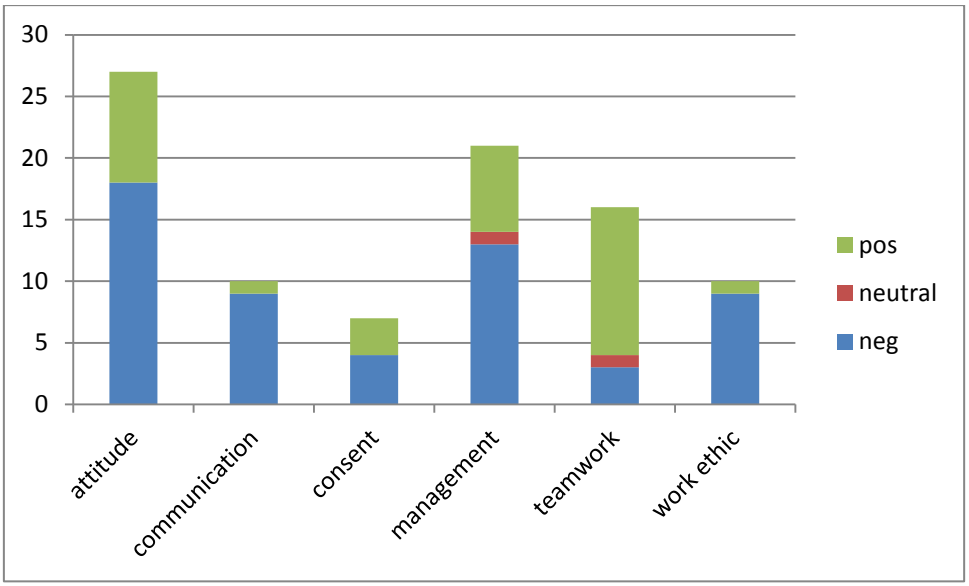


Figure 5: Staff subthemes by number and categorisation.

The staff subthemes are discussed below.

5.3.1.1. Attitude

There were 18 negative and nine positive reflections under the subtheme of staff attitude. Students identified instances where staff attitudes impacted on patients, for example “a patient took African medicine and she goes to the hospital and gets admitted the sisters would shout that patient forgetting that it is her right and responsibility to get help from the hospital even if the African medicine made her to be sick or made her condition to be worse”, and “Two Mozambiquen ladies came to casualty, they did not have identification documents and surely we understand that people should have files before they get proper treatment but if the patient’s life is at stake the file will follow after the patient has been treated, our fellow nurses were judging these patients and they made them sit on a cold floor”, "There are some unprofessional staff who practise judging and paternalistic medicine."

Some reflections were particularly disturbing. For example, "The relationship between patients and some doctors is changing drastically. Patients do no longer see hospitals as a place of safety but rather as a place of horror and discomfort" There were instances of negative staff attitudes towards the student; “He expressed very unprofessional behaviour towards us”.

Positive attitudes were also recognised as demonstrated in the following quotes. “Some doctors and nurses really care about the patients, this is heart warming and motivating.” "I have never seen such dedicated medical officers." There were also positive attitudes related to the students, for example, "People here are really open and loving".

5.3.1.2. Communication

There were nine negative and one positive reflection involving the communication of staff. The positive reflection was around a positive example of breaking bad news.

The negative reflections mainly revolved around poor communication about the diagnosis or management as demonstrated by the following quotes. "In patient care, the patient has their responsibilities and so does the doctor in managing the patient. This is best achieved by involving patient in decision making which in my experience is hardly ever practised at my site of practice". “Health care providers seem to be forgetting that patients have the right to be told about their illness and an explanation of why we take bloods”.

5.3.1.3. Consent

Three positive and four negative reflections pertained to consent issues. The students were able to identify if consent was well done or not. An example of consent that was well done states, "I love how the doctors there handle consent matters. The patient always has the last word when it comes to consent". Poorly obtained consent is also commented on, for example, “It seems as though he was told rather than given an opportunity to choose”. One student wrote, “The best if not only form of informed consent was ‘mama/sir if the need arise for you to need blood, do you agree for us to give you blood if so please sign there’”.

5.3.1.4. Patient management

Twenty-one reflections related to the management of patients. Seven of these were positive, one was neutral and 13 were negative. The positive reflections were mainly generalisations for example, “they are so good at what they do”; “good medicine was to see health care workers doing procedures and prescribing medication according to textbook”; “Patient care....is at the top of the list ....service delivery is of great standards.”; “These cases were well managed at the hospital and all these patients were discharged to go home”.

There were three negative reflections relating to poor sterility; the others in the patient management subtheme were all related to specific incidents, most with negative outcomes described. Examples of negative outcomes included missing a fracture on x-ray, and missing a haemothorax in another patient. A further example states, "On the notes it said ‘talking different after being hit with a bottle. Come

tomorrow'. Nothing was done. Patient had a depressed skull fracture". A death was ascribed to warfarin overdose. A Caesarean Section for a breech presentation was delayed and the baby was born with a gangrenous scrotum and penis.

5.3.1.5. Teamwork

Teamwork was mostly described as positive - 12 out of the 16 reflections (75%). Three reflections were negative and one was neutral. Some related to the students inclusion in the team. For example "We have never been neglected by our co-workers, they have given us the best welcomes", and "it was the welcoming spirit that the entire staff members had". Others related to teamwork in general; for example the staff "help one another", and meet and participate in "group load shedding". One student relates, "I learnt a good deal about the importance of teamwork in the health profession....an effective working environment totally depends on the professionalism of your colleagues".

5.3.1.6. Work ethic

Nine reflections related to a negative work ethic. All were generalisations, not related to a specific person. The one positive reflection noted "I have never not even once seen any of the doctors in Paeds department late or not showing up at work". The contrary applies in other reflections, "Some typical examples we see almost every day. Healthcare workers disappearing from workplace without informing anyone. Late coming. Relaxing and chatting or taking more than stipulated time for breaks and lunch". Another student relates, "they come late at work and disappear during working hours".

5.4. Patient theme

Only 12 reflections involving patients were identified. The low number may have been influenced by the definition of patient used by the researcher. This required that the patient's attitude or behaviour influencing the encounter was reflected on by the student, for example a patient who was verbally abusive or refused treatment. An example of a negative patient reflection "instead of being grateful about what we have done .... she was swearing at us". A positive example is, "they kept saying thank you .... give us the motivation and courage to continue what we are doing".

Due to the small number of reflections directly related to the patient theme, they have been individually itemised in Table 5 below.

Table 5: Patient subthemes and issues by number and category

Sub theme	Description	Pos/neg	No
Attitude	Patient showed appreciation	pos	1
	Patient verbally abusive to staff	neg	2
	Patient drunken and abusive	neg	1
Traditional / herbal medication	Student attributed death of child to traditional medication	neg	2
	Herbal medication used by patient	neutral	1
Communication	Patient did not disclose all information	neg	1
Refusal of treatment	Patient refused admission	neutral	1
	Patient refused treatment by student	neg	1
Other	Patients arriving in casualty inappropriately	neg	1
	Reflection on burns due to patients living conditions	neutral	1

5.5. Student personal growth and learning theme

The reflections were categorised as positive if the student showed insight or reflection, neutral if it was a theoretical discussion and negative if it revealed poor professionalism. There were a variety of issues in the narratives, some fitting into the existing subthemes of communication, patient management and teamwork. An additional subtheme of ethics/professional was identified. Five varied reflections did not fit into any of the subthemes.

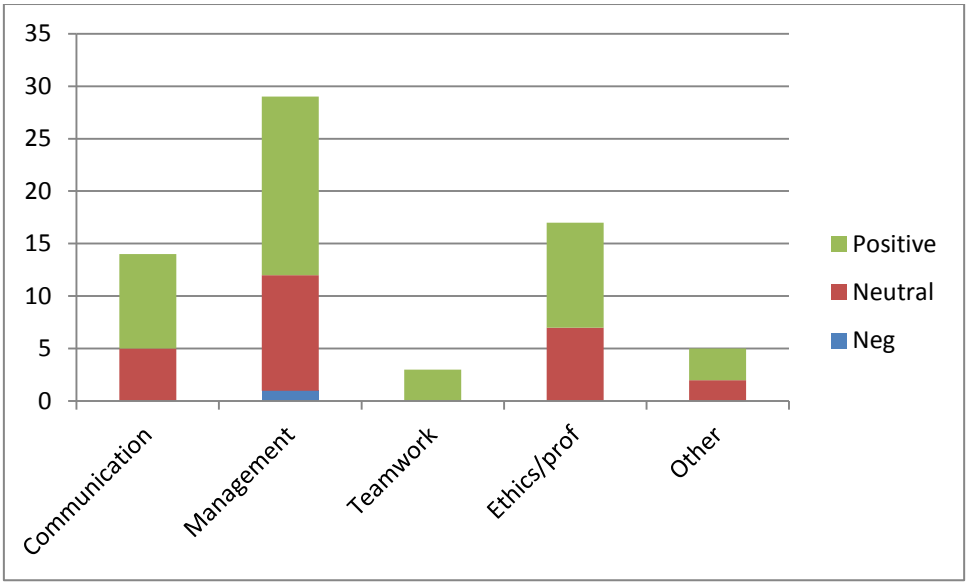


Figure 6: Student personal growth and learning subthemes by number and category.

5.5.1. Teamwork

Three positive reflections around teamwork were classified under student personal growth and learning. They discussed the benefits of teamwork. One wrote about his experiences mentoring junior students.

5.5.2. Communication

The communication subtheme had nine positive and five neutral reflections. The students wrote about communication with patients including the benefits of introducing oneself to the patient. They described the ability to reach out to a patient, writing, "is there anything you would like to tell that is stressing you out". One student identified the benefits of patient understanding, writing, "Helping the patient understand why they take their medication at what time and why yields better compliance". They discussed the consequences of poor communication and one stated that good communication “will provide good compliance / prevent same problem occurring again”. They also wrote about communication with other staff for instance one described a debate about patient management and wrote, “I learnt quite a lot from the argument”.

5.5.3. Patient management

There were 29 reflections concerning the management of patients. 17 reflections were positive and 11 were neutral. Only one reflection was categorised as negative, relating to the refusal to issue a sick certificate. The majority of these reflections related to patient education, behaviour modification and counselling; including the biopsychosocial approach. The students discussed the challenges and benefits of lifestyle modification / behaviour modification including instances where it worked and the frustration when it did not. “Behaviour change is a complex process”; “Behaviour modification is one of the most challenges”. They recognised that. “environmental and cultural factors also play a role”. One student wrote about a particular patient, “He was not going to reduce his alcohol intake

because he knew he was bewitched .... I did not know what to say to him because he had his own belief .... I ended up giving him treatment and he left”.

There were reflections related to the biopsychosocial approach, for example, “I have realised that the more respect I have towards my patient and taking into concern their opinions, the more easier it is to fully manage the patient because they become comfortable and give as much information as possible. Time spent on consultation becomes minimal yet effective”. They were statements such as, “we need to make a connection beyond the lump ... at the end of the day we are not just treating the lump but we are treating the patient as a whole". Another example was, "Biological part was covered, but psychosocial were not covered due to our conduct as health care providers". A further example, "I think if we can try to discover a patient's state of mind, their thoughts, their fears, a lot of things can be discovered .... and perhaps see them as people and not so much as patients”.

5.5.4. Ethics and professionalism

Students debated around the disclosure of information to patients and family, especially related to HIV, including what to tell children. The necessity of chaperones in the clinical setting was recognised. Students examined their feelings and reactions when confronted with difficult patients. A number of students commented on their personal growth, “I’ve learnt to be patient, both with patients and colleagues”, and “I was grateful to have a chance to explore myself as a professionally trained clinical associate student”. A number of reflections

related to patient rights and responsibility as well as equity. They commented on the lack of application of the patient's rights charter, and felt it was their duty to inform patients of their rights. They also recognise that patients have responsibilities. As one student wrote, "Interactions between patients and health care workers is sometimes bad and sometimes good in terms of rights and responsibilities". A student was involved in the care of a patient with extensive burns, with the dilemma of how to treat the patient. Another student wrote, "It's amazing how we are able to write journals like these and we never get short of such issues…it's a good thing to observe so that we don't make the same mistakes and these things shape us to be better professionals".

5.5.5. Cross theme issues identified

The issues of death and confidentiality and privacy were identified in some reflections. They were not classified as a subtheme as the methodology used first classified the reflections into themes and then looked for subthemes under each theme separately. There were not sufficient mentions of death or confidentiality and privacy under each theme to classify as a subtheme, but they did occur in a number of themes in different ways. The relevant reflections in all the themes have been combined and the findings reported below.

5.5.5.1. Death

Death was written about in a number of the student personal growth and learning reflections; also under communication, patient management and ethics. It was interesting to read the experiences of the students. There were seven reflections

relating directly to death. They spoke about the challenges, for example, “A challenge indeed when I had to disclose the death of a child to the mother”. One student described breaking bad news to a mother about congenital heart disease in her baby as, “One of the most difficult interventions that I ever did”. Some reflected on it as a learning experience, for example, “I also had a chance to break bad news to the family of the deceased”; and “I at least had a challenge of breaking bad news”.

Reflections about HIV related deaths described late presentations and patients not accepting their condition. There were discussions about the ethics surrounding death including that of a 700g newborn and another patient with “100% burns”.

Students also showed acceptance of death. “I have found that death has begun to settle well with me especially when the chances of survival are obviously slim”. One student wrote, “I have learnt that patients either die because of late medical intervention, natural causes – which I would deem ‘meant to be’ or patients die due to clinician malpractice”.

5.5.5.2. Confidentiality and privacy

Issues were raised about confidentiality of patient information, “Doctors discuss patient’s illnesses in front of others”. Auditory privacy was reported to be lacking both in the emergency and in the ward settings, for example, “...normally ask about the HIV status in public”. A lack of physical privacy was reported in outpatient departments and wards, “Patients are still examined in front of others because there are no curtains in their beds”. One student wrote, “the cubicles do

not have curtains in each bed but patients were still being examined (PR exam) in front of others". Another wrote, "There was no privacy to the patients genitals at all, but still the doctor asked him to expose. This was wrong and I told the doctor that, and he told me 'what should I do?'". In an outpatient setting one student used the term "bi-consultation" to describe two patients being consulted in one room, including examination. Students also commented on it positively "Patients are examined in a private and confidential manner", "there is good privacy".

5.6. Rotations

The reflections were analysed by the clinical rotations; namely, emergency, inpatient medicine, outpatient medicine and HIV, paediatrics and surgery. One reflection related to obstetrics and was therefore not included in the analysis.

The total number of rotations experienced was 46 as two students did not submit journal entries for one rotation each.

Table 6: Number of rotations and reflections per specific rotation

Rotation	**Number of rotations**	**Number of reflections**	**Number of reflections per rotation**
Emergency	9	48	5.3
Inpatient medicine	9	37	4.1
Outpatients//HIV	7	20	2.9
Paediatrics	12	56	4.7
Surgery	9	31	3.4
Average	**9.2**	**38.4**	**4.08**

Some of the reflections for emergency were experienced during the after hour duties of students in other rotations. If this was evident they were classified under

emergency. This contributed to the higher number of reflections for the emergency rotation.

The analysis in Figure 7 below shows the distribution of positive, neutral and negative responses across the different rotations. Student personal growth and learning was separated so that other reflections about the specific clinical settings could be analysed. The patient reflections were not included in the analyses below because of the low number of 12 reflections.

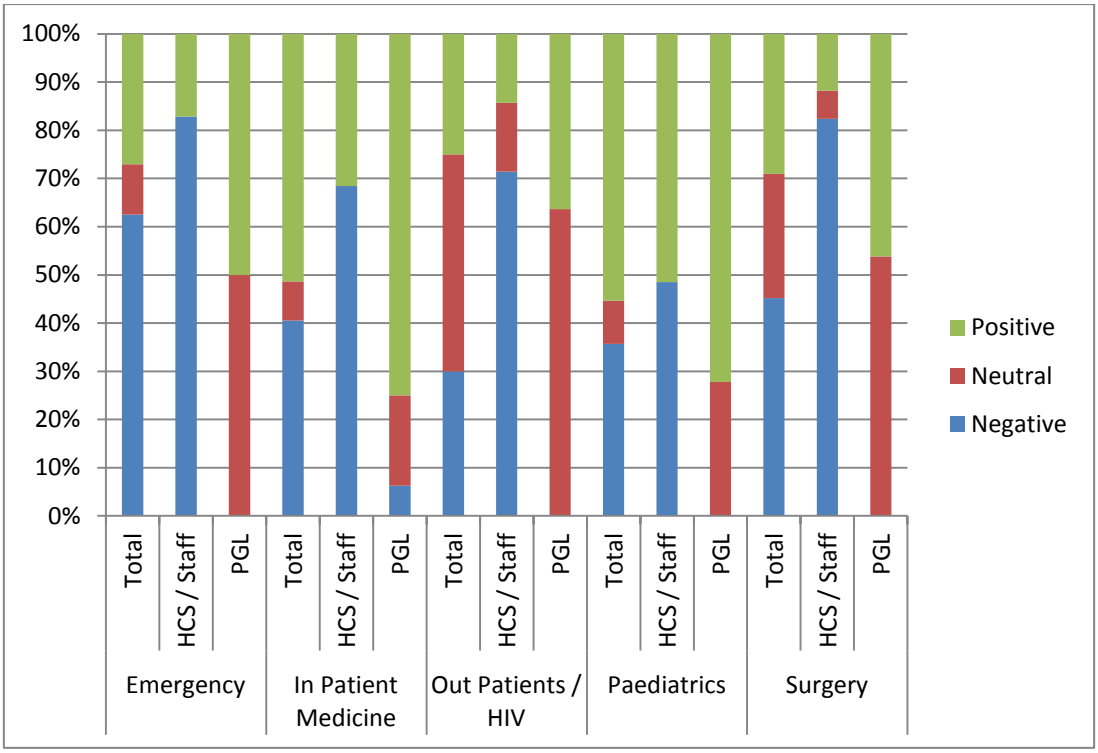


Figure 7: Reflections per rotation per theme and category

As can be seen from the figure above, the staff and health care system themes varied for each rotation with paediatrics the only rotation to have a majority of positive reflections (56%). For surgery the staff and health care systems had the highest percentage of negative reflections at 83%, followed closely by emergency at 82%. Also noted is the range of student personal growth and learning reflections per rotation, as detailed in Table 7 below.

Table 7: Student personal growth and learning reflections per theme by number and percentage

Rotation	Total number of reflections	PGL	Percentage of PGL per rotation
Emergency	48	8	16.7
Inpatient medicine	37	15	40.5
Outpatient med / HIV	20	11	55.0
Paediatrics	56	18	32.1
Surgery	31	13	41.9

Each rotation was then analysed separately, to discover particular subthemes and issues specific to each individual rotation.

5.6.1. Emergency rotation

The majority of reflections for the emergency rotation were related to the staff theme, of which 77% were negative as illustrated in the figure below. One student wrote, “The emergency rotation exposed us to good medicine and bad medicine”.

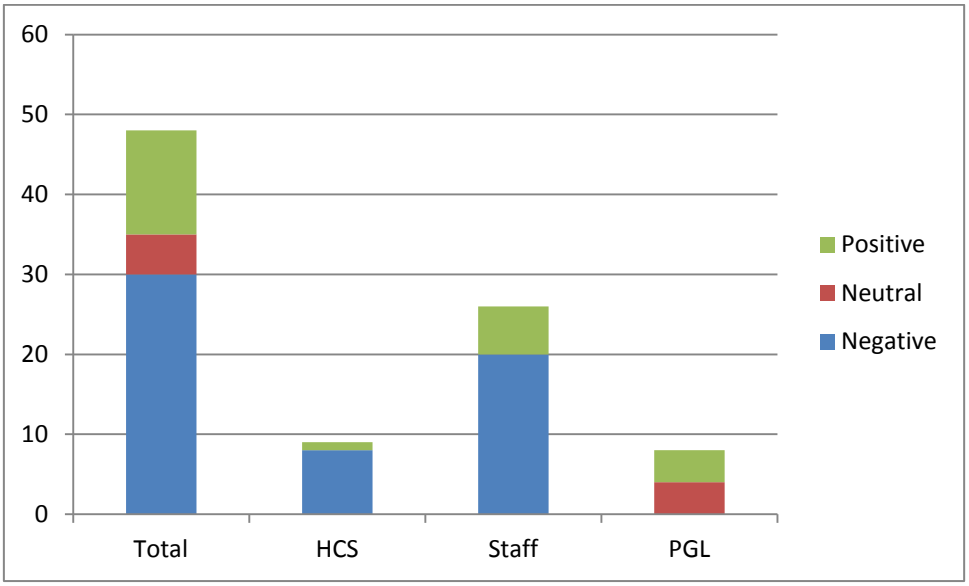


Figure 8: Emergency rotation reflections total and per theme by number and category

The majority of the emergency rotation staff reflections were negative, especially related to patient management, see Table 8 below.

Table 8: Staff subthemes for emergency rotation by number and category

Issue	Total	Positive	Negative
Attitude	8	3	5
Communication	3		3
Patient management	8	1	7
Teamwork	2	2	
Work ethic	5		5
Total	**26**	**6**	**20**

There were issues of missed diagnoses, sterility, not using local anaesthetic or not waiting for it to work. Negative work ethic reflections related to doctors “splitting” a call and not answering their phone or coming when called, for example, “When calling the clinicians from the other clinical area presenting the patient that they should come and see, they don't come at all or they drag their feet". A doctor was called to emergency, “takes ages to come and patient demises”.

5.6.2. Inpatient medical rotation

The reflections for the inpatient medical rotation were more varied in theme and category, see Figure 9 below.

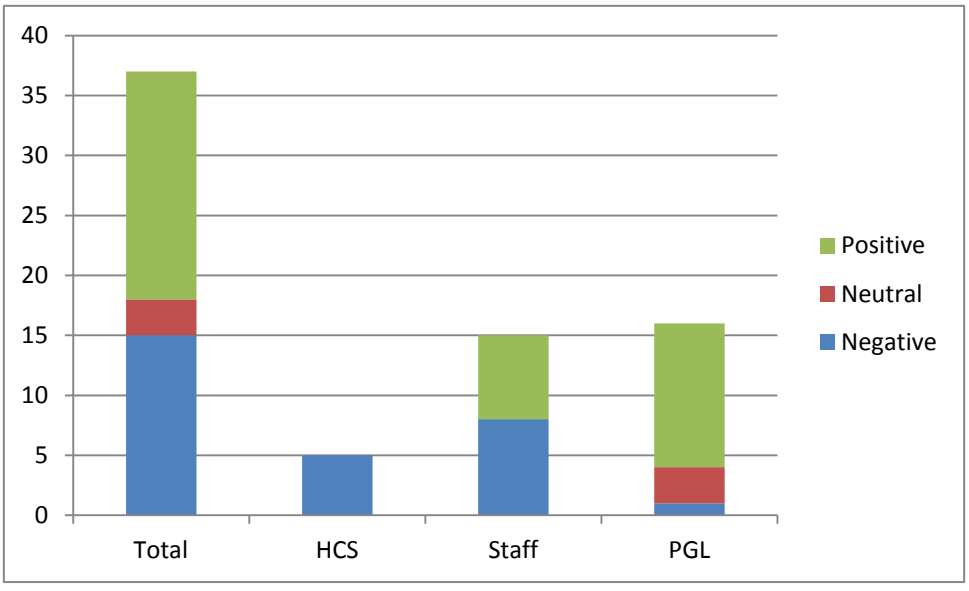


Figure 9: Inpatient medical rotation reflections per theme and category

There was generally a mix of positive and negative reflections for the inpatient medical rotation. The two teamwork reflections were both positive and the three communication reflections were all negative, see Table 9 below.

Table 9: Staff subthemes for Inpatient medical rotation by number and category

Issue	Positive	Negative	Total
Attitude	2	3	5
Communication		3	3
Consent	1		1
Patient management	2	1	3
Teamwork	2		2
Work ethic		1	1
Total	**7**	**8**	**15**

5.6.3. Outpatient/HIV rotation

The majority of reflections for the Outpatient/HIV rotation were neutral and related to the student personal growth and learning theme, as depicted below.

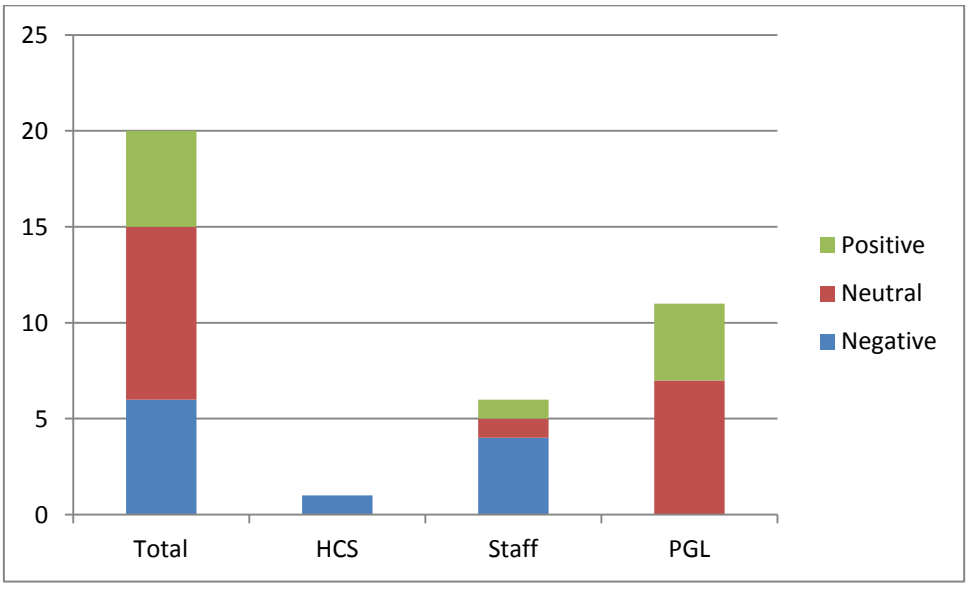


Table 10: Outpatient/HIV rotation reflections per theme and category

Only six outpatient/HIV rotation reflections related to staff. Four of the reflections were negative, with one positive and one neutral reflection related to patient management, see Table 11 below.

Table 11: Staff subthemes for Outpatient/HIV rotation by number and category

Issue	Positive	Neutral	Negative	Total
Attitude			1	**1**
Communication			1	**1**
Consent			1	**1**
Patient management	1	1		**2**
Teamwork				
Work ethic			1	**1**
Total	**1**	**1**	**4**	**6**

5.6.4. Paediatric rotation

55% of the reflections for the paediatric rotation were positive, with 61% of the staff theme reflections positive.

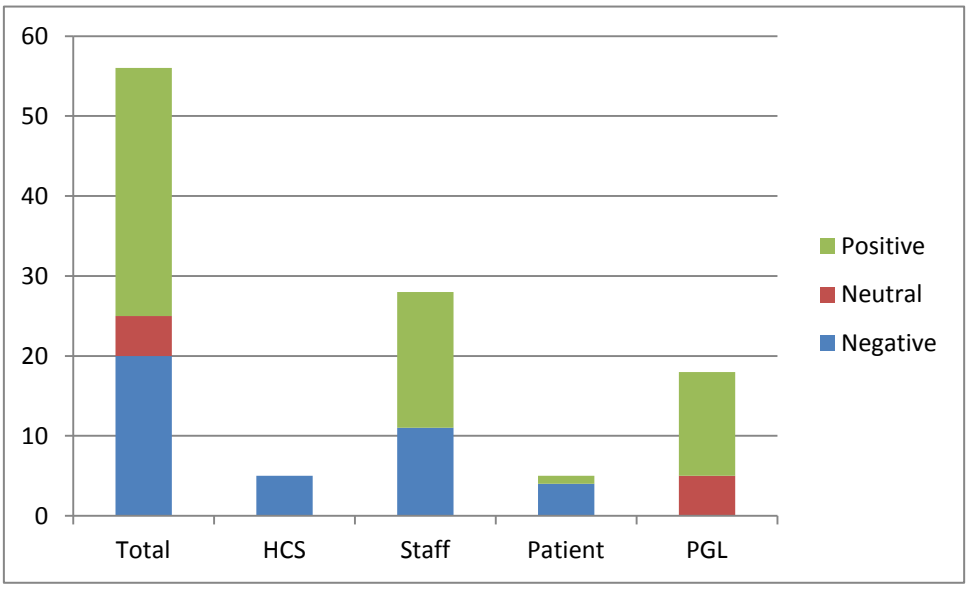


Figure 10: Paediatric rotation reflections per theme by number and category.

As depicted in Table 12 below, 17 / 28 (61%) paediatric rotation staff reflections were positive, especially related to teamwork, with seven of the eight teamwork reflections positive.

Table 12: Staff subthemes for paediatric rotation by number and category

Issue	Positive	Negative	Total
Attitude	4	3	**7**
Communication		2	**2**
Consent	1	1	**2**
Patient management	4	3	**7**
Teamwork	7	1	**8**
Work ethic	1	1	**2**
Total	**17**	**11**	**28**

5.6.5. Surgery rotation

The notable finding for the surgery rotation was that 80% of the staff theme reflections were negative, see Figure 11 below.

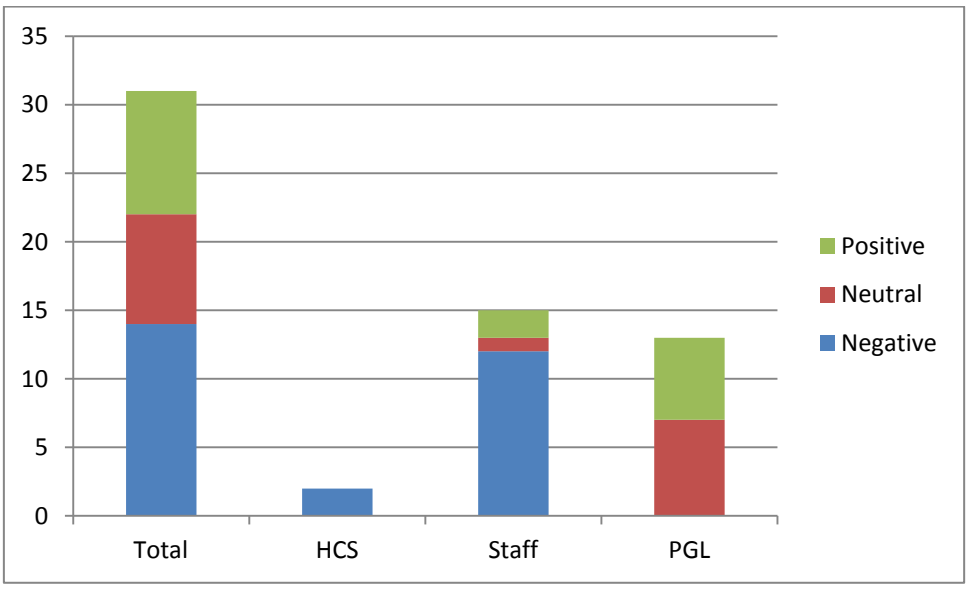


Figure 11: Total and per theme for the surgery rotation

Twelve out of fifteen (80%) of the surgery rotation reflections were negative. Five negative reflections about surgical staff attitudes were recorded, as seen in Figure 12**Error! Reference source not found.** below.

Figure 12: Surgery rotation staff subthemes

Issue	Positive	Neutral	Negative	Total
Attitude			5	**5**
Communication	1		1	**2**
Consent			2	**2**
Patient management			1	**1**
Teamwork	1	1	2	**4**
Work ethic			1	**1**
Total	**2**	**1**	**12**	**15**

5.7. Hospitals

Results for five of the seven hospitals were analysed; the other two hospitals had journal entries for only two rotations with four and five reflections respectively and for this reason were not analysed separately. Four of the hospitals had a mixture of rotations done by students; one hospital had students only in the emergency rotations at the time of this research. All students did after hour work in the emergency department of the hospital and these reflections were classified under emergency if this was evident in the reflection. There were between 3.6 and 5 reflections per student rotation per hospital.

Table 13 shows the number and type of rotations done by students in each hospital.

Table 13: Number and type of rotations per hospital

Hospital	Number of Rotations					Total
	Emergency	Inpatient Medicine	Outpatient / HIV	Paediatrics	Surgery	
A		4	4	4	2	14
B		3		3	4	10
C	4					4
D	4	1	1	3	2	11
E	1	1		1	1	4
F				1		1
G			2			2

The positive and negative reflections for staff at each hospital are shown in Figure 13. The numbers are too small to determine probability.

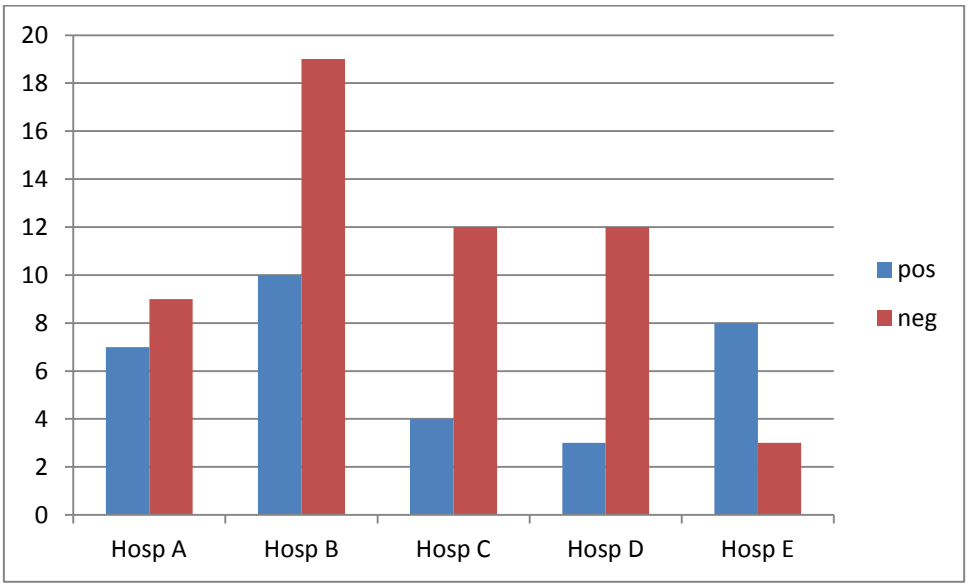


Figure 13: Number of positive and negative staff reflections per hospital

For each hospital, the staff subthemes were identified and quantified, Figure 14 below.

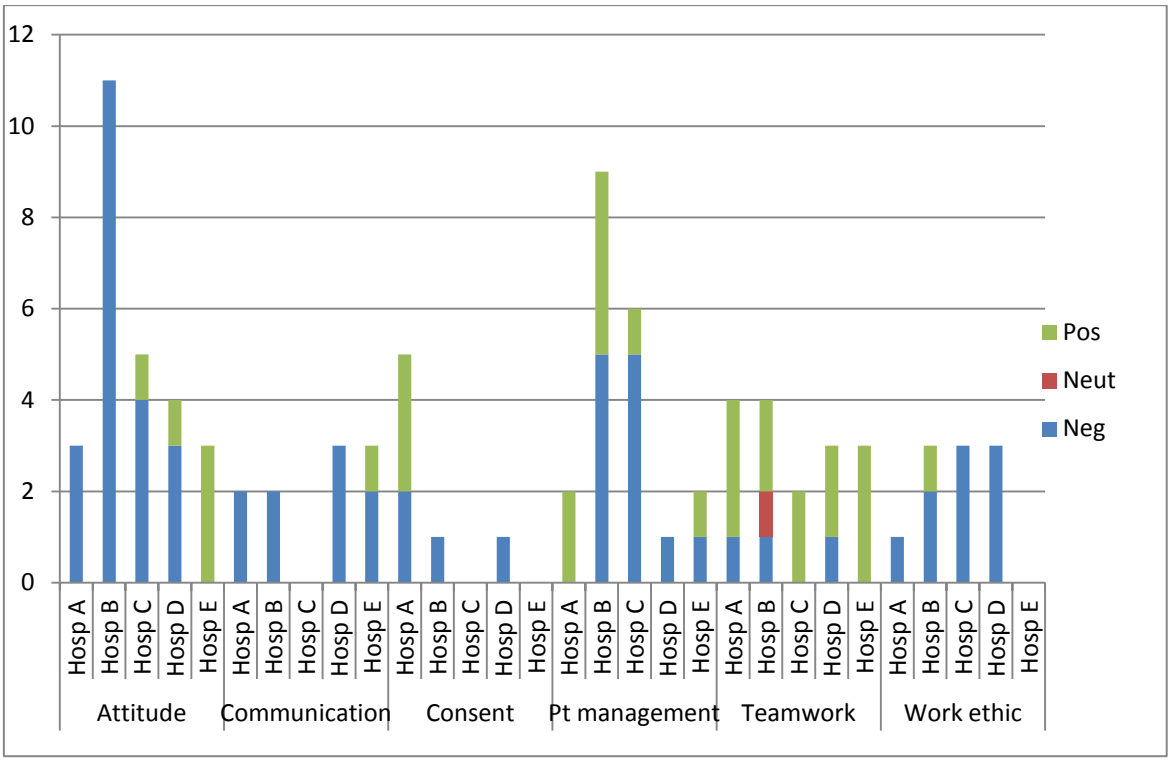


Figure 14: Staff subthemes per hospital by number

The graph demonstrates considerable variation between the hospitals. In order to address specific issues and to give feedback to the hospitals, each of the five hospitals was then analysed separately.

5.7.1. Hospital A

A total number of 14 rotations and 54 reflections were recorded for Hospital A. The majority were under personal growth and learning.

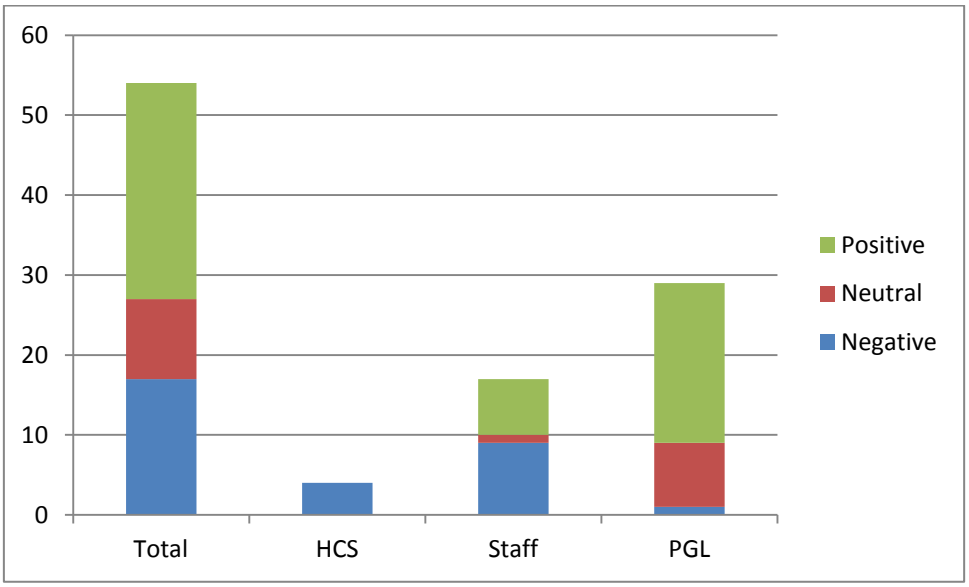


Figure 15: Number of reflections per theme for Hospital A

5.7.1.1. Health Care System Hospital A

All four health care system reflections identified for Hospital A were negative. The reflections were around issues with perceived severe consequences. For example there was a patient management issue about a sputum sample which was lost with a delay in appropriate treatment due to drug resistance and the patient died. Another related to the shortage of neonatal ICU beds and the death of a baby.

5.7.1.2. Staff Hospital A

All of the staff subthemes were present in the reflections for Hospital A. There was a mix of positive and negative reflections, with only negative reflections for the subthemes of attitude, communication and work ethic; and only positive reflections for patient management.

Table 14: Staff subthemes - Hospital A

Subtheme	Positive	Neutral	Negative	Total
Attitude			3	**3**
Communication			2	**2**
Consent	3		2	**5**
Patient management	2			**2**
Teamwork	3		1	**4**
Work ethic			1	**1**
Total	**8**		**9**	**17**

5.7.2. Hospital B

A total number of ten rotations and 66 reflections were recorded for Hospital B. The majority involved staff and 19 / 30 (63%) were negative. There were ten reflections categorised as personal growth and learning, and three each for health care systems and patients.

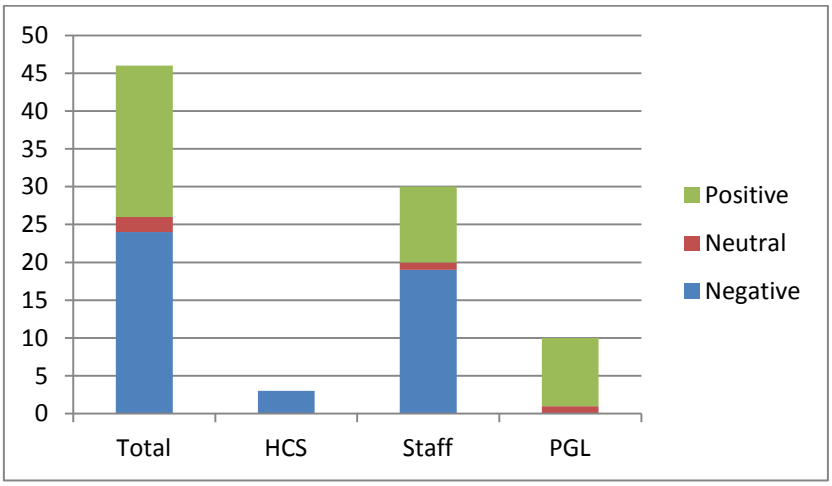


Figure 16: Totals per theme for Hospital B

5.7.2.1. Health Care System Hospital B

Only three health care system reflections were identified for Hospital B, all negative. Two related to shortage of staff and one related to hospital policy;

mothers were not allowed to stay overnight in the hospital with their children and for this reason, a mother did not want her daughter admitted.

5.7.2.2. Staff Hospital B

For Hospital B, 73 percent of reflections in the staff category were negative. The most common finding was the 11 negative reflections regarding the attitude of the staff at Hospital B. As stated by one student "There really are people who don't belong in this profession. I don't ever want to see myself practising in that manner". Patient management, work ethic and teamwork had both positive and negative reflections.

Table 15: Staff subthemes - Hospital B

Subtheme	Positive	Neutral	Negative	Total
Attitude			11	**11**
Communication			2	**2**
Consent			1	**1**
Patient management	4		5	**9**
Teamwork	2	1	1	**4**
Work ethic	1		2	**3**
Total	**7**	**1**	**22**	**30**

5.7.3. Hospital C

A total number of four rotations and 27 reflections were recorded for Hospital C. The majority of reflections were staff related, with 12 / 16 (75%) negative. There

were five positive reflections related to personal growth and learning, four reflections related to health care systems and two relating to patients.

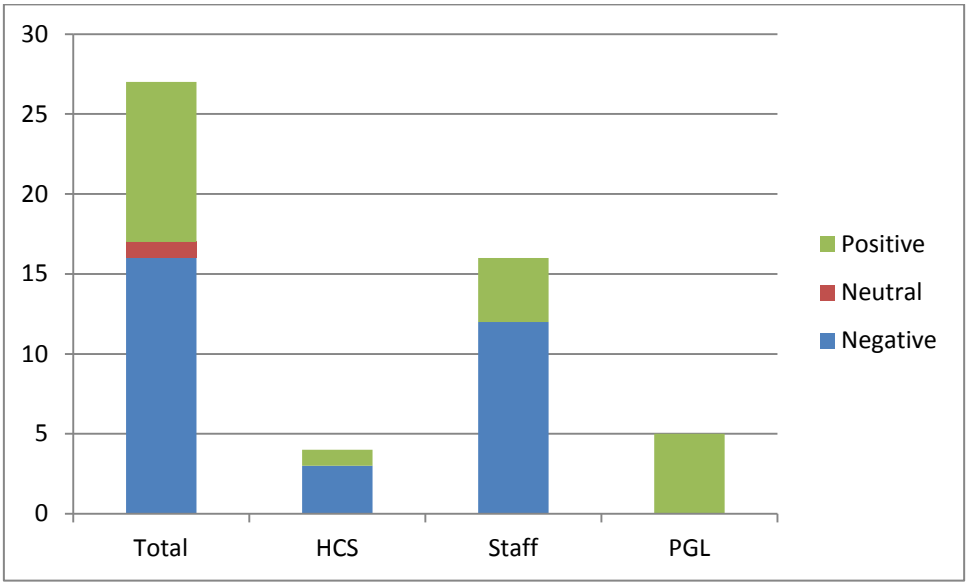


Figure 17: Totals per theme for Hospital C

5.7.3.1. Health Care System Hospital C

Four health care system reflections were identified for Hospital C. There were three negative reflections, relating to poor communication, shortage of equipment, and unsterile equipment. Conversely in this hospital the only positive reflection was that triage was done effectively to the benefit of the patients.

5.7.3.2. Staff Hospital C

For Hospital C there were 12 negative staff reflections (75%) and four positive (25%). Attitude, patient management and work ethic were mostly negative and teamwork had two positive reflections. One of these was more student related "The care and support that I got from my colleagues was absolutely devine", the other about teamwork in general at the hospital. With regard to attitude, a student

reflected that "Most of the health care workers are professional", but then indicated specific instances of unprofessionalism for example “health care workers who shout at patients” and “don’t want to help certain patients because they smell in a certain way or behave in a certain way”.

Table 16: Staff subthemes - Hospital C

Subtheme	Positive	Neutral	Negative	Total
Attitude	1		4	**5**
Communication				
Consent				
Patient management	1		5	**6**
Teamwork	2			**2**
Work ethic			3	**3**
Total	**4**		**12**	**16**

An important issue for Hospital C was related to sterility in the emergency department. This was found in health care system reflections as a lack of sterile packs, as well as in the staff subtheme reflections of attitude and patient management. “Sterility in this hospital is not being implemented”.

5.7.4. Hospital D

A total number of 11 rotations and 40 reflections were recorded for Hospital D. The majority were under staff and personal growth and learning. Twelve out of fifteen (80%) of the staff related reflections were negative. Ten out of fifteen (67%) of the personal growth and learning reflections were neutral. There were eight health care system reflections, all negative, and two patient reflections.

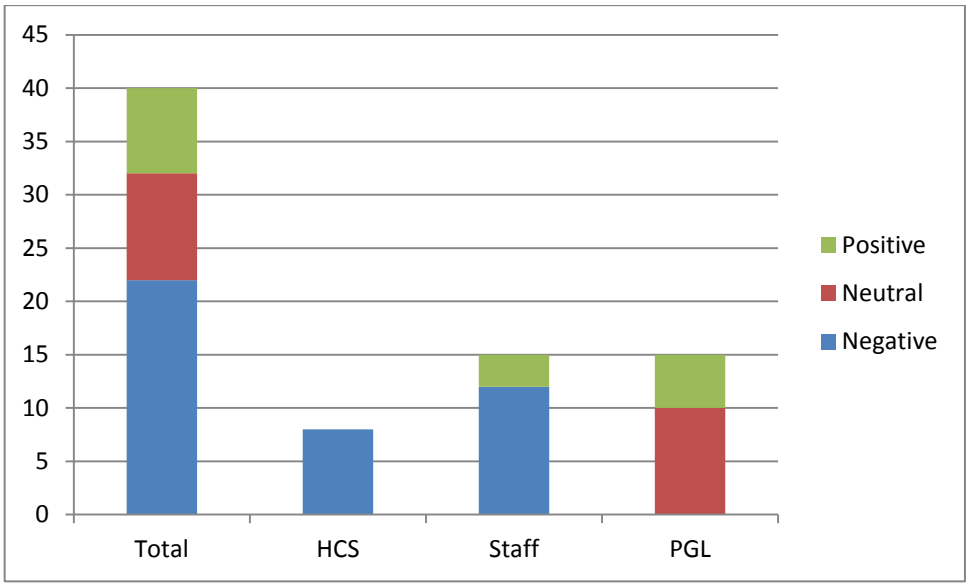


Figure 18: Totals per theme for Hospital D

5.7.4.1. Health Care System Hospital D

Eight health care system reflections were identified for Hospital D, all negative.

Table 17: Negative Health care system issues – Hospital D

Issue	Number
Shortage of staff	1
Lack of privacy in wards	2
Shortage of equipment	2
Poor triage	2
Poor waste management	1

5.7.4.2. Staff Hospital D

For Hospital D, 80% of the staff related reflections were negative, with one positive reflection under attitude and two positive reflections under teamwork.

Table 18: Staff subthemes - Hospital D

Subtheme	Positive	Neutral	Negative	Total
Attitude	1		3	**4**
Communication			3	**3**
Consent			1	**1**
Patient management			1	**1**
Teamwork	2		1	**3**
Work ethic			3	**3**
Total	**3**		**12**	**15**

5.7.5. Hospital E

A total number of four rotations and 17 reflections were recorded for Hospital E, with the majority positive, as depicted in Figure 19 below.

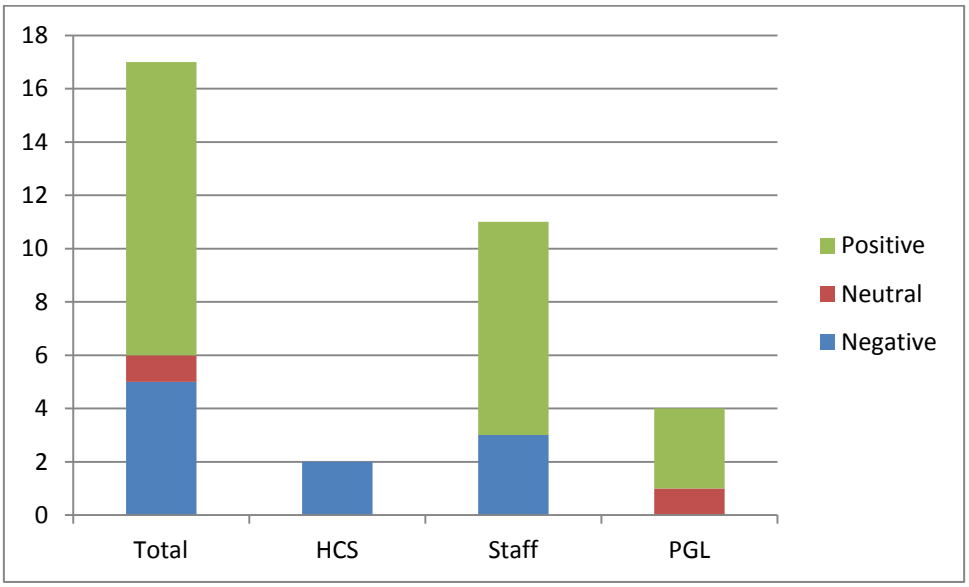


Figure 19: Totals per theme for Hospital E

5.7.5.1. Health Care System Hospital E

Two health care system reflections were identified for Hospital E, one relating to a shortage of beds and one to a shortage of operating theatres.

5.7.5.2. Staff Hospital E

For Hospital E, 8 / 11 (73%) of the staff related reflections were positive. This included reflections for four different rotations and four different students. Three positive attitude and three positive teamwork related reflections were recorded. Work ethic was not mentioned for Hospital E.

Table 19: Staff subthemes - Hospital E

Subtheme	Positive	Neutral	Negative	Total
Attitude	3			**3**
Communication	1		2	**3**
Consent				
Patient management	1		1	**2**
Teamwork	3			**3**
Work ethic				
Total	**8**		**3**	**11**

6. Discussion

The Wits BCMP students were given very broad guidelines for their reflections, and the results reflect this, with students writing about a variety of issues, some more theory related, some more generalised and some relating very specific events. The students described both positive and negative events, with one student writing, ""Doing my first clinical rotation has left me with the most wonderful, hilarious and sometimes demoralising moments". In general, the student reflections demonstrated an awareness of substandard care and identified professional and unprofessional behaviour. This is similar to findings in other studies including Wilson et al[7]. The presence of the negative experiences identified by the students in their reflections is not limited to our clinical teaching sites, or even to South Africa. There is widespread agreement that this hidden curriculum should be recognised and addressed. As D'Eon et al[27, pg 296] states, "We must become more serious about neutralizing and reversing the pernicious elements of the hidden curriculum".

The students' writing revealed they had a very patient centred focus and identified challenges to patient care in the clinical sites. These related to the health care system, staff and patients themselves. They also related many positive experiences. Karnieli-Miller et al[6] were surprised that their students writing showed a balance between positive and negative reflections as they had thought the students might use the journal to write about complaints. Although the Wits BCMP students in this study did experience lapses in care and professionalism, they also had positive experiences and could put this into perspective, with one student

saying, “But hey all in all it was a nice and wonderful experience”, and another, “But above all, I must say I’ve had some of the best experiences of my life”.

6.1. Health Care System

With regard to the health care system, shortages of staff, equipment and beds were identified. “Patients’ rights are violated by the government due to lack of resources and shortage of stock”. The students related these shortages to negative patient outcomes or possible harm, for example the lack of an appropriately sized endotracheal tube to intubate a newborn. A shortage of operating theatres led to a delay in management of a patient with a stabbed abdomen, the student relating, “It was very frustrating because you will get stuck there, watch a patient deteriorate in front of you. I think this is very bad”. They revealed empathy for staff working in difficult situations. One quote states, “we can’t rely on two sisters giving medication to 40-45 patients, obviously somehow they are going to give wrong doses because of tired and working long hours”.

6.2. Staff

The staff theme had mainly negative reflections. The hidden curriculum was revealed by the number of incidences of negative staff experiences reported. "To the best of my knowledge all health providers have an oath that they stand by. With this said we often came across most of them mistreating patients”. "Some health care workers shout, don't want to help certain patients". Only one reflection directly referred to xenophobia, with negative attitudes to non South Africans by the staff. Anecdotally more incidents of poor treatment of non South Africans may

have been expected. It is unknown whether this does not occur so often or whether the students did not choose to write about it. There were also positive reflections such as, “Patients are given respect they deserve, relationship between hospital and society quite good”.

Staff communication issues were reported in the reflections. Some of the reflections were about communication with their supervising doctor, for example to be able to debate the management of a patient. They also wrote about communication with patients, identifying both good and bad examples. The issue of the importance of introductions to the patient were mentioned by two students. They were critical of health care workers who did not communicate well with the patients and related this to adverse outcomes, for instance poor compliance and complications in patients with chronic conditions. Overall the impression was that students could identify good and bad communication and realised the benefit of good communication. A student wrote, "This is best achieved by involving patient in decision making which in my experience is hardly ever practised at my site of practice".

21 reflections related to the management of patients. The eight positive reflections were generalisations about good management for example, “these cases were well managed at the hospital”. All of the negative reflections referred to specific instances. Of the 13 negative reflections it appears that mainly episodes with severe consequences noted by the students were included. Seven of the reflections had negative outcomes described, including one death reported. The

students' perceptions were that the negative outcomes were a direct cause of the mismanagement. There is little detail and no mention of any investigation or confirmation to justify these conclusions. To the researcher's knowledge the students did not report the incidents. This will be further discussed later in the report.

Work ethic was not a theme described in the literature reviewed. There was one mention of laziness in the UCT study[16]. All referred to work ethic in general, not related to single staff members. Most referred to health care workers in general, a few referred to the category of doctors or nurses specifically. They also related this to negative outcomes including one death and long waiting times, "relaxing and chatting or taking more than the stipulated time for breaks and lunch while patients are flocked outside"; "Doctors arrive late at work, some disappear while doing ward rounds making patients to wait in long queues". One student found a benefit from the absence of one of the doctors in casualty whose phone was off. "On this night inserted intercostal drains, pleural taps, lumbar punctures etc. Great night for learning". The only positive reflection on work ethic was, "I have never not even once seen any of the doctors in Paeds department late or not showing up at work". The statement that followed, "I will adopt their good working ethics", is further evidence that the students are critical of bad professional practices and do not want to emulate them.

Privacy and confidentiality was a finding under a number of themes. The students identified many lapses around confidentiality and auditory privacy. They

recognised the difficulty in certain hospital areas, “As much as clinicians want to be professional and ethical by keeping this information about a patient between them and the patient, it is close to impossible”. They also recognised that heavy patient loads had an impact, “The aim is always to push the line and we forget privacy, confidentiality”. Physical privacy was also indentified with patients being examined in front of other patients. The students were all concerned about this, further evidence of the ability to consider the patients.

The obtaining of consent from patients was specifically identified, both positive (3/7) and negative (4/7). It seems that students have learnt the principles of obtaining consent correctly "I love how the doctors there handle consent matters. The patient always has the last word when it comes to consent". They also reflected about problems with informed consent “It seems as though there is a developing ‘sign now I’ll explain later’ mentality regarding consent forms”. These reflections also show their commitment to patients.

There is evidence in the student reflections that they are experiencing and identifying positive role models. "I have never seen such dedicated medical officers" “I am impressed and wish one day I would be like them having so much passion and love for what I do and always being able to put my patients’ needs before mine” “Some doctors and nurses really care about the patients, this is heart warming and motivating” “They instilled the spirit of teamwork in me. They have brought out the best in me.” “He displays a virtual image of what we students

should strive to be like one day". "I feel that if the good still exist, then the good can bring about a change to the bad".

6.3. Patients

This theme was defined as the behaviour or attitude of patients, and was not a common theme in the reflections, with only 12 reflections relating to this. Patients were involved in other themes especially involving communication, consent, compliance and behaviour modification. Although small in number, the patient issues did impact on the students involved. Students attributed the death of two babies to the use of traditional medication. One of these patients was admitted, improved, was discharged then readmitted in a worse condition and died. A student stated, "It makes me sad that this is done to small children". An abusive patient affected a student, "I became so angry I felt like swearing at him". Another student wrote, "She was swearing at us. I got so hurt and it got me thinking why do we continue doing this when patients do not ever appreciate the good work that we do". The same student then relates another incident, "they kept saying thank you and I was so humbled and happy that actually there are people who appreciate what we do".

They were frustrated by patients who did not disclose information or who refused treatment, admission or behaviour modification. There was blame placed on a patient for arriving at the hospital inappropriately. From these reflections it is not clear if they had an understanding of possible reasons behind these patient

actions. This is an area that needs more emphasis when teaching in both the classroom as well as in the clinical areas.

6.4. Student personal growth and learning

A large variety of topics revealing student personal growth and learning were discussed by the students.

Health education and behaviour modification were discussed by many students. The students demonstrated that they realised the necessity and the benefits to the patients as well as to the health facilities. “Health care is of no benefit without health education and promotion because if the patient does not fully understand their condition then they will keep coming back with the same problem”. “Patients will respond better with compliance if they know what is happening to their bodies”. A student writes about a patient who had inappropriately presented to the hospital and was turned away, “And waiting long hours for a service but then turned back is just the worst experience ever, therefore patient education needs definite improvement”. The students recognise their role in this education, “Now this is where I step in as a health care provider”. They also realise that some issues require much broader interventions. As this student wrote following a consultation with a baby with kwashiorkor, “Now such things can really open one’s eyes to the lack of knowledge that our society is currently in, and opens a world of opportunity for education and improvement. But such things are all a collective effort and

require the support of both the government and each member of family and community as a whole".

The biopsychosocial approach was evident in the reflections, with many direct as well as indirect references. "Patient based care is not about treating only the medical condition of the patient, but all aspects that affect the health of the patient". "It is in times like these that our clinical skills become somewhat irrelevant; we take off our scrubs and start working with the mind". They commented on societal factors affecting patients such as poverty, poor living conditions and cultural practices. They empathised with patients reflecting on the impact of their illness and even asked "can one care too much". This is a positive result for the faculty who have tried to instil this holistic approach into the Clinical Associate students.

Some reflections discussed literature read by the student and how "it has given me more insight and understanding". Many references were listed in the reflections. This is again a positive finding as evidence based medicine, self directed and lifelong learning are all emphasised in the curriculum and teaching.

6.5. Death

Death was not reflected on as much as may have been expected. There was definite blame laid in some cases, either on the staff, the parent or the social circumstances. The students reflected on late presentations leading to death and

breaking bad news. It was interesting to find out that the students were the health care worker responsible for informing relatives of the death of their family member, even of their children. It was also evident that most students found this to be a positive learning experience.

6.6. Rotations

It is not evident why there was a considerable variation in the number of reflections in the different rotations. The lowest number was 20 reflections for outpatient medicine/HIV. It is also noted that the reflections for outpatient medicine/HIV were mainly related to student personal growth and learning. It may be that in Emergency there were many other issues for the students to write about, with less of these issues in Outpatients/HIV as seen above. This may be due to the non life threatening scenarios in these departments. The students may also have not had the knowledge to identify management issues in these patients.

An interesting finding was that paediatrics was the only rotation to have a majority of positive staff reflections at 61% positive. It was also the rotation with the highest number of reflections (56). This is an important finding as it negates the suggestion that students are more likely to write about negative issues.

There were many negative reflections for both surgical and emergency rotation staff. In the emergency rotation the students did not ascribe this to staff shortages, but rather to the poor work ethic of staff. Issues of triage and sterility were also

raised. Many of the negative reflections related to surgery were due to problems with privacy on ward rounds and clinics, as well as consent.

6.7. Hospitals

The reason for analysing the hospitals separately is to report back to them individually with specific areas of concern or praise which were identified by the students. Hospital C had only emergency rotation so the results may not be comparable; the rest of the hospitals had a mix of rotations. Four of the five hospitals showed a similar distribution of positive and negative reflections (including Hospital C). Only Hospital E had a different distribution with more positive than negative reflections. For Hospital E 62.5% of the staff reflections were positive. There were no reflections related to work ethic. This would be positive feedback for this hospital. It would be interesting to do further research to identify reasons for this. Hospital C had five negative staff patient management reflections. Three of these were related to unsterile practises at this hospital. A student stated, “Sterility in this hospital is not being implemented”.

6.8. Speaking out

An issue identified in the literature was whether students had reported the incidents. In only one reflection did the student mention that he challenged the doctor, “....there was no privacy to the patient’s genitals at all, but still the doctor asked him to expose. This was wrong and I told the doctor that, and he told me ‘what should I do?’”. One other reflection related to patients staying too long in casualty and stated “at least now the clinical manager is aware and planning to do

something about it". It was not clear if the student had been the one to report the matter. The students only used two names (both positive reflections) in their journals, not naming any staff member involved in "negative" incidents.

Reporting was not mentioned in any of the other journal entries, but from experience and questioning of some students' incidents do not seem to be reported. One reflection about work ethic only mentions "that needs to be dealt with". On speaking to students after the journals were initially read, they were adamant that they did not want the incidents investigated or reported. This is similar to findings in other studies. In the study by Huijer et al at the Vrije Universiteit[10] 9% did not report at all, in 35% there was no reporting mentioned, 12% discussed with their supervisors and only 0.2% discussed with their teaching supervisor. The study by Rees et al[12] involving students from 29 UK medical schools found that only 13.2% of the students acted directly on the dilemmas faced. The study by Kovatz and Shenkman[21] included a specific question about reporting; 71% of the respondents did not report the unethical behaviour observed.

Some serious incidents were reported that resulted in patient morbidity or mortality, these were perceived by the students to be causative in nature. Reporting and investigation could clarify if this was indeed the case and could lead to action if necessary or explanation to the student involved.

From conversations with other staff members at Wits, non-reporting by health science students is a faculty wide issue and is an area which needs to addressed. This was also recognised by Caldicott et al[11] in Syracuse New York, who identified the need for safe reporting structures for their students. The University of Cape

Town[16] instituted a Professional Standards Committee which receives and investigates incidents. No anonymous reports can be submitted. The incident will be investigated without revealing the identity of the student unless permission is given. However this could still result in the staff member recognising the incident so may still result in reluctance to report.

6.9. Future risk

Of interest is that some students recognise that they are at risk of changing their ethical behaviour towards patients. "The longer we have practised, the less serious we take our patients"; "Commitment and passion in medicine amongst health care providers seems to be fading away"; “Burnout get to a lot of people and patient care soon diminish all that we learn to do proper at school get compromised”. This was indeed found in other studies such as a study by Mumford et al from the University of Oklahoma[28] involving doctoral students which found that exposure to unethical events resulted in an increase in unethical decisions. Ethical erosion of students was identified in the study by Feudtner et al[22]. Bissonette et al[24] found a difference between junior and senior students and suggested a decline in moral sensitivity. Future research on these graduates would give valuable information in this regard.

6.10. Educational implications

The overall impression from the reflections was that the students were patient centred and could distinguish between ethical and unethical behaviour, as

observed in other studies[7]. This is a very positive finding and is reassuring for a new programme with a very different educational environment.

A systematic review of using reflection in medical education by Mann et al[29] concludes that reflection may assist in integration of the affective aspects of learning. This would be especially useful in clinical settings, where professionalism is learned and experienced. It also finds that collaborative reflection may be important as a preparation for participation in inter professional teams, which is especially relevant to the Clinical Associates. Carr and Carmody[30] from the University of Western Australia relate the use of reflection to enhancing professional behaviours. O'Connell and Dyment[31] examined the literature on students' reflective journals. They indicate that the literature supports the fact that students benefit from journaling. The Wits BCMP students also derived benefit from writing the journals, as one student wrote, "It's amazing how we are able to write journals like these and we never get short of such issues…it's a good thing to observe so that we don't make the same mistakes and these things shape us to be better professionals". In the future the journals should incorporate more student reflection into the impact on them and how they have learnt from the event. The instructions should be changed to facilitate this.

There were a number of issues that were raised in the reflections which can be incorporated in the teaching to increase student competencies in these areas. These include breaking bad news, especially around death. The programme did not anticipate that students at the beginning of their third year would be required to

independently notify relatives of the death of their family member, including the death of a child.

Students also seemed to cast blame for deaths or negative outcomes on the treating staff or even the patient, as with the use of traditional medicine. It cannot be determined from the reflections whether the events described were causative in nature or whether there were other factors involved which were not identified by the students. This was also mentioned by Caldicott et al[11], who note that students perceive their interpretation of the event as the truth, which may not be the case. As discussed above, the students did not seem to have discussed these events with the staff involved, so there was no opportunity to explore the actual cause of the event. This is a subject that needs to be raised, and similar cases can be used for teaching purposes to provoke thinking and analysis about the presence of multiple factors which could be implicated in an event.

Group discussions about students' experiences would play a valuable role, not only to enhance the ethics teaching, but to explore responses to ethical dilemmas faced by the students. The students experience many situations in the clinical areas which have not been addressed in the ethics teaching. These discussions would also allow students to realise that they are not alone, that other students are having similar experiences. If students can discuss these events in a safe non threatening environment, they may become more comfortable in reporting such events. Rees et al[12] suggest including strategies to respond to these dilemmas in this type of discussion with students. The discussions would also be part of a

debriefing process and enable faculty to identify students who require more support or intervention, as also identified Buckley et al[23].

One aspect identified which requires further educational input, is for students to consider all aspects of their patients and identify possible reasons for their behaviour. One student did write in a general discussion, “Behaviour change takes place in a much broader social context”. When relating to specific patients, a few students wrote about non compliance with treatment or lifestyle without evidence of exploring why this was so, saying “these patients need education”. This is part of the biopsychosocial approach which needs to be emphasised, with theory as well as case discussions.

These reflections also form a basis for discussion by the teachers, both those university based, as well as those in the clinical areas. Group discussions would stimulate thoughts around behaviour and ethics. Following their research, Satterwhite et al[18] are using scenarios around professionalism in their department focus group meetings. Kovatz et al[21] suggested reminding clinical teachers of their role. This should provoke introspection by teachers who should question themselves around the type of role model they have become.

A more difficult question is how to address the clinical settings where students spend a majority of their time and do a large percentage of their learning. Detractors will use this information to discredit clinical teaching sites. As can be seen by the similar picture in most of the hospitals, we cannot just move the

students. Bernard et al[5] suggest using new approaches based on specific issues and departments to address institutional professional culture. It is reassuring to note that the students did recognise the negative influences and did not want to become like that. One hospital had more positive staff and health care reflections and it would be worthwhile to investigate further. Engagement and feedback to the sites should be of assistance. Further studies should demonstrate any significant change in the clinical learning environment.

6.11. Limitations

The journal entries formed part of the students' assessment and were not designated specifically for research. The assignment was graded, and the students wrote accordingly. For this reason they may have given socially desirable responses, to please the lecturer and gain higher marks. It may also be that negative incidents are more likely to be reported, although as noted above, paediatrics had the second highest number of reflections per rotation at 4.7, (emergency was highest at 5.3) and the highest percentage of positive reflections. If more than one student witnessed the same event it may have been recorded more than once, although this was not evident from reading the description of the events in the reflections.

The student entries were analysed and placed into themes and subthemes by the researcher, categorising them as positive, negative or neutral. This was inherently subjective and to minimise inaccuracy or bias these were checked and confirmed

by another researcher. Any differences between the researchers were discussed and consensus obtained.

The reflections are related to the specific rotation of the student, but they also worked in the emergency department after hours. If this was evident in the reflection, the reflection was then classified under emergency. However it may not always have been evident from what was written in the reflection as to which department was involved.

The small number of reflections for two of the hospitals resulted in their exclusion from the individual hospital analysis.

The major themes identified were discussed and relevant quotes identified by the researcher. The researcher's own subjective opinion on what is important may have lead to some bias. This however is also a strength as the researcher is immersed in the data.

7. Conclusion

This research is not about naming and shaming. It is true that negative experiences have more impact and may be more likely to be reflected on. It is also true that they have a significant effect on students. This research acknowledges the students' experiences and perceptions and explores ways to address them. It is definitely not all negative as one student wrote "But above all, I must say I've had some of the best experiences of my life".

As regards the different rotations, the paediatric rotation came out with the most positive reflections, and emergency and surgery had the largest number of negative reflections. One of our hospitals had more positive reflections. This was an interesting finding which deserves further exploration.

The results of this research need to be discussed by the faculty and ways to address the hidden curriculum explored. The results will also be reported to the teaching staff and to the managers of the hospitals. It is hoped that action will be taken especially on specific issues raised such as privacy and sterility. It may act as a stimulus for discussion and self reflection.

The research has identified possible areas of improvement in our ethics teaching, especially around the inclusion of appropriate responses by students to the situations they face. Group discussions may aid this process.

8. Recommendations

The findings of this research should be acted upon in a number of different areas.

8.1. Curriculum/teaching strategies

- Group discussions as part of ethics teaching, to include debriefing
- Teaching to include appropriate responses to situations/events in the clinical areas
- More emphasis on breaking bad news and especially death
- Discussion around reasons underlying patient's behaviour
- Discuss appropriate ongoing ethics training for staff

8.2. Speaking out

- Encourage students to be human rights advocates
- Development of a reporting system for students and staff, preferably anonymous

8.3. Feedback

- Discuss results with hospital managers
- Report results to university and clinical staff

8.4. Future research

- Plan research with future groups of students.
- Track these graduates and do further research to look at possible ethical erosion.
- Student audits could look at some relevant issues identified e.g. sterility, privacy.

9. Appendices

9.1. Ethics Clearance certificate

9.2. Spreadsheet example

DATA ENTRY SPREADSHEET - SAMPLE

Refl No	Student	Site	Rotation	Reflection summary/quote	Theme	Subtheme	Issue	Pos/ Neg
147	S5	B	IP med	Sisters shouting at patients who took trad meds	Staff	attitude	trad meds	Neg
2	S1	A	IP med	Stigma and HIV disclosure	pgl	communication		Pos
83	S18	B	Surg	"Some nursing staff are utterly not willing to assist"	Surg	Staff	Team work	Neg

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