

Experiences of health science students during clinical placements at the University of Zimbabwe

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Abstract

Background: Clinical placement is an essential component of training in health sciences because it is where theory and practice interface.

Objective: To explore experiences of health sciences students during clinical placement in terms of supervision, challenges and coping strategies.

Design: It was a cross sectional survey.

Setting: University of Zimbabwe, College of Health Sciences.

Participants: 179 multidisciplinary health science students.

Materials and Methods: A cross-sectional survey was conducted using a self-administered questionnaire. Ethical clearance was obtained. Descriptive statistics were used for analysis.

Main Outcome Measures: These were perceptions of students with regard to supervision, challenges faced during clinical placement and coping strategies used.

Results: 179 participants responded to the questionnaires. Participants enjoyed linking theory to practice. Perceptions on supervision were both positive and negative. Inadequate supervision and inappropriate behaviours by supervisors were some of the challenges faced. Almost 89% used stress-relieving strategies such as focusing on why they were doing the clinical placement and the importance of successful completion. Ninety-one per cent had never used cannabis/mbanje but 41% had engaged in sexual activity to cope with challenges.

Conclusion: This study found that the perceptions of health sciences students about supervision clinical placement, challenges faced and the coping strategies are almost the same as those found elsewhere. It is therefore important to plan clinical placement with the involvement of clinical educators.

Recommendations: Supervisors' workshops should be held to create a forum to discuss clinical placement issues. Follow-up of students by academics is recommended. Students should be empowered to cope with challenges.

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Introduction

The theoretical core of health professional education at the University Of Zimbabwe College of Health Sciences (UZ-CHS) takes place in lecture rooms through academic instruction, but clinical competence is acquired in health institutions during clinical placements. Clinical placements are important for both the perceptions and outcomes of the education of health professionals because students will integrate theory into practice as well as understand complexities and challenges of their different professions.¹ If carried out properly clinical placements will help achieve the aims of clinical education in the practice environment.² They will also help students develop their skills, socialise into their professions and bridge the academic and

workplace learning gap as students and other health professionals see clinical placements as influential learning experiences in a student's quest towards becoming a confident and competent professional.^{2,5}

The Context

UZ-CHS trains health science students in the areas of dentistry, medicine, nursing, pharmacy, laboratory sciences, health education and promotion, occupational therapy, physiotherapy and radiography. These students go on clinical placements for different durations depending on the requirements of the program. For example, medical students attend rural attachments in the 2nd, 3rd and 5th years and attend City Health primary care clinics at varying stages of their training. Health professional students are supervised

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by qualified health professionals, with support visits from faculty. Zimbabwe has faced considerable economic challenges in the past 15 years with payments for health care becoming harder. Brain drain of experienced and qualified clinicians and inability by responsible authorities to source resources required for proper clinical teaching has resulted in an inadequate teaching environment for students. Clinical placements and supervision have also suffered from these constraints and have not been completed according to schedule and teaching objectives. In order to improve this learning experience it is necessary to establish the challenges faced by students during their clinical placements, their perceptions of the supervision received and coping strategies used during that time.

With the advent of Community Based Education (COBE), the experience of students in community placements has been more extensively studied. Andrews *et al*⁷ reported that in Canada many students had negative experiences whilst attending 'remote' settings away from their educational centres, thereby missing opportunities for learning and are left with negative impressions of potential places for future employment. With inappropriate supervision, students may feel overprotected and without autonomy, also feeling that the supervisors are ill-prepared for their role.^{1,6}

Alternatively, experiences may be positive if mentors value students and spend quality time with them.⁷⁻¹⁰ Tension may arise when clinical learning occurs in environments designed for clinical service rather than education.¹¹ During clinical placements, students are expected to demonstrate initiative, maturity, confidence and independence for the many responsibilities they face. Failure to do so may result in "poor attitudes, negative perceptions of a clinical venue, lack of enthusiasm, motivation or initiative which are barriers to learning".¹²

Other barriers to satisfaction and success in the clinical learning environment are "occupational stress and workplace incivility and aggression" leading to students being thrust into roles for which they are ill prepared.⁴ Scarce human resources in places of practice may lead to difficulties in finding clinical educators who can supervise students.¹² There are reports of complex problems such as questions about quality of the placement process and its management that have been echoed beyond the academia into the public health arena with governments investigating the issues across health jurisdictions globally leading to increased concerns with regards to students' competencies and confidence to practice. Among these are lack of belongingness which reduces self-esteem, well-being and happiness while increasing stress and anxiety and depression in students.^{2,5} Students may experience stress due to lack of experience, unfamiliarity with the work environment and procedures as well as fear of other colleagues and making errors. They may be working in a foreign

environment where they do not know the staff, patients or the routines of the departments, with supervisors unwilling to supervise.¹³⁻¹⁴

Furthermore, supervisors, patients and other team members may have overly high expectations of them yet the students may be fearful when approaching new cases and of being ignored by supervisors.¹⁵ In studies conducted on supervisors' expectations of the skills students should have on clinical placement, authors found different perceptions between students and supervisors to be a source of stress.^{16,17} Students may use certain learned behaviours such as rules from their home cultures to interpret nonverbal cues leading to communication breakdown which may compromise and challenge supervisor-student relationships.¹⁸ Difficulties may also be encountered if supervisors are unaware of changes in the curriculum.¹

Students therefore need to be oriented into places of practice and get more contact and support from faculty.^{19,20} Greer *et al*²¹ described good supervisors as those who spend quality time with students, pacing their teaching time to meet the students' needs. The author suggested that supervision during placements could be enhanced by better coordination between the faculty teaching staff and clinical settings, which also facilitates the delivery of clinical services and ensures adherence to practice.⁸ Student styles of coping with problems differ with less experienced students using problem-focus or direct coping strategies such as asking questions and seeking help, while more experienced students use personal and emotional coping strategies that reinforced their attitudes and beliefs.²² Students also use active coping strategies such as religious coping, positive reframing, planning, acceptance more than avoidant strategies such as denial, self-blame and alcohol and substance abuse.²³

This study explores the clinical placement experiences of health science students in their third and fourth year. The results will help the clinical placement coordinators in the UZ-CHS develop strategies that promote positive learning experiences. Killam and Carter²⁴ suggested that "by understanding the challenges faced by students unfamiliar with remote settings, educational and organisational strategies can be developed to promote positive learning experiences and so enhance recruitment".

Objectives of the study

- To determine what part three and four health science students at UZ-CHS enjoyed during their clinical placement;
- to determine the students' perceptions of their supervision during clinical placement;
- to highlight the challenges the students faced during clinical placement and
- to identify the coping strategies used by the students.

Definitions

Clinical placements at the UZ-CHS are when health science students undergo supervised practice at clinical settings approved by the university with emphasis in different specialty areas as required by their year of study. Overall supervision is provided by senior health personnel at the facilities hosting the students, but may also be done on a task basis by various health professionals. Visiting faculty from the training institutions attend the clinical placement sites on an occasional basis to monitor the overall learning experience, the extent of which depends on availability of staff.

Methodology

Ethical clearance was obtained from the Joint Parirenyatwa and College of Health Sciences Research and Ethics Committee (JREC/60/12) and all participants provided written informed consent. A cross-sectional study was carried out with health science students in the third and fourth years of study at UZ-CHS between April and July 2012. A self-administered questionnaire was adapted from the National Association of Education of Physiotherapy at the University of Columbia²⁶ and a study by William et al.²⁷ The questionnaire had five sections that collected information on socio-demographics, perceptions of clinical supervision, challenges students faced during clinical placement and coping strategies used to deal with challenges faced and what they enjoyed about clinical placement. Statements on perceptions of clinical supervision were rated on a 5-point Likert-type scale ranging from 1 (strongly agree) to 5 (strongly disagree). The section on coping strategies had statements with a 5-point Likert scale ranging from 1 (always) to 5 (was never used). The sections on what they enjoyed most during clinical placement and on challenges faced during clinical placement were open ended.

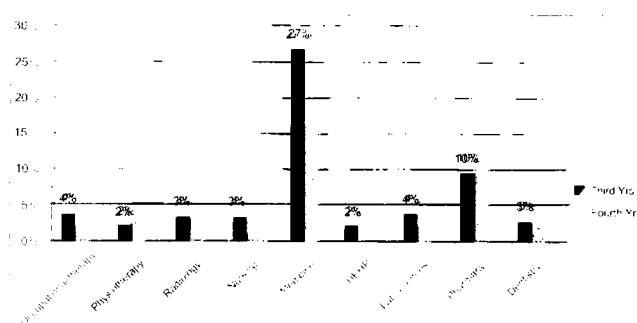
The sample size calculation was done according to a prevalence of stress among students set at 41.9% in a study by Mohd Sidik (2003).²⁵ Only students in the third and fourth years of study at UZ-CHS were considered as this would allow inclusion of students in all programs for these years of study who had completed their clinical placements. The total number of students in the two years of study for all the programs in 2012 was 648. To calculate the numbers to be selected, the total number of students in each program and their ratios for third to fourth year students were used. The calculated sample size was 263. Proportionate sampling was used according to the number of students in each program, to get the representative number of students to be selected from each program and years of study. The program registers were used to systematically select the students to participate and the sample from each program (see

appendix). The selected students were then approached soon after a lecture or in their study rooms. The purpose of the study was explained and informed consent requested from those who agreed to participate who were given the questionnaires to fill in while the researchers waited. The questionnaires were collected on the spot to increase the response rate. Those that were not willing to participate were not replaced. Data was entered and analysed in Microsoft Excel. Descriptive statistics were used to analyse the results. Frequencies and percentages were used for analysis. The answers from the open ended questions were put into themes, analysed and reported verbatim.

Results

A total of 179 students (94 male, 85 female) participated in the study, 68% of the calculated sample size. Thirty-two per cent of the students did not return the questionnaire because they felt the time was not conducive to them as they were busy during the examination period. The majority of students (59%) were in their third year of study. At the extremes of the range of respondents 43% were from Medicine while 2% were from Health Education and Health Promotion (HEHP) (Figure 1).

Figure 1. Distribution of participants according to program and year of study.



The aspects students enjoyed during clinical placement.

Most students did not respond to this open ended section. Of the 43 who did, 17 (39.5%) enjoyed learning practical skills in their line of profession. Seven students said they enjoyed working with other members of the health team, highlighted by such statements as "working with other health care members was great, I learnt how to use team work on difficult cases".

Some students said they enjoyed working in departments with supportive members of staff as one student said "the members of staff were very friendly and assisted us with difficult cases and we were free to ask questions" (Table I).

Table I: Aspects students enjoyed during clinical placement (n=43).

Things students enjoyed	Frequency	%
Learning practical skills	17	39
Supportive members of staff	6	13.9
Doing practical work responsibly working with other health care	4	9.3
Team members	7	16.3
Exposure to the real situation	1	2.3
Gaining more understanding of theory through practical work	2	4.7
Follow up by academic supervisors	1	2.3
Exposure to a variety of conditions	4	9.3
Seeing the patient improving after treating them	1	2.3
Total	43	

Table II: Students' perceptions with regard to supervision.

Items	n	Agree or Strongly Agree %	Neutral %	Disagree or strongly disagree %	+ve/-ve perceptions
Expectations and rules explained	179	70.4	16.2	13.4	+ve
Learning plan developed with supervisor during first week	179	57.6	19.6		+
Adequately supervised	179	31.2	30.5	38	-
Timely and appropriate positive feedback	179	33.6	31.3	35.2	-
Supervisor available to address students' concerns	179	38.5	35.2	26.3	+
Supervisor resourceful in clinical skills	179	39.6	34.6	25.7	+
Appropriate time scheduled for discussions on patient care	179	31.3	32.4	36.3	-
Supervisor provided progressive independent responsibilities	179	48.6	27.9	23.4	+
Supervisor encouraged critical thinking to solve problems	179	62	26.3	12.8	+
Supervisor encouraged critical evaluation of own performance	179	58.7	38.5	12.8	+
Supervisor encouraged student self-directed learning skills	179	61.4	25.1	13.1	+
Supervisor served as role model	179	48.6	24	27.1	+
Supervisor was receptive to students' feedback	179	52.5	28.5	19	+
Supervisor facilitated achievement of learning objective	179	53.1	33.5	13.4	+
Supervisor feedback and evaluation accurately reflected student's overall performance	179	34.1	49.7	16.2	-
Discussions with regard to improving student performance occurred	179	42.4	33.5	24	+

Key: SA - Strongly Agree; A - Agree; N - Neutral; D - Disagree; SD - Strongly Disagree

Challenges faced by students during clinical placement.

Twenty students answered this aspect of the questionnaire. The responses were recorded verbatim. One participant said 'Clinical placement is survival of the fittest, you have to work your way through.' All the twenty students faced some form of challenge with supervision. These experiences were elaborated by

Perceptions of clinical supervision.

The majority of students agreed to strongly agreed that their supervisors discussed with them their general expectation, roles and responsibilities in the first week of clinical placement. Sixty-two per cent also agreed that their supervisors encouraged them to critically think through problems and to develop self-directed learning skills. A number of students (41.3%) disagreed that the supervisor provided them with positive feedback and 38% also disagreed with the statement that they were adequately supervised (Table II).

comments such as, "The doctors usually left us to treat outpatients with little or no supervision. We were like mini-consultants." Some of the students said they had challenges with supervisors who were not willing to help students, giving statements such as, 'I felt like a sheep among wolves.' Two students stated that understaffing in the wards resulted in work overload for the students (Table III).

Table III: Challenges faced by health science students during clinical placements.

Challenge	Frequency
No supervisor in some of the hospitals	1
Inadequate supervision	5
Conflict between students and diploma supervisors	4
Supervisors not willing to assist students	5
Lack of follow ups from academic supervisors	2
Inadequate clinical exposure	2
The supervisors being harsh on students	2
Confusing instructions from supervisor	1
Excessive work load	2
Uncooperative members of the health team	1
Total	

Table IV: Coping strategies used by students.

Coping Strategy	n	Always and Very often %	Sometimes %	Rarely and never %	+ve/-ve strategy
Look to power above self	179	36.9	49.2	14	-
Take time to reflect on life and stay aware of important things	179	80.7	14.5	7.8	-
Attend place of worship	179	65.4	26.3	8.3	+
Take time for interests outside university work	179	60.3	28.5	11.2	+
Exercise to help self feel better	179	27.3	34.6	37.4	+
Engage in sexual behaviours to improve mood and state of mind	179	14.5	14	71.5	-
Maintain healthy sleeping habits	179	37.5	25.7	36.8	+
Take alcohol	179	11.1	10.6	78.2	-
Use cannabis/mbanje	179	3.4	5.6	94.1	-
Engage in harmful behaviours to relieve emotions (e.g. self injury)	179	5.6	6.7	87.8	-
Go to sleep to avoid problems	179	14.6	17.3	68.2	+
Use compulsive habits to deal with pressure, like computer games	179	17.8	28.5	53.6	-
Use humour or comedy to improve mood or state of mind	179	31.8	38	30.2	+
Take frustration out on others	179	90.5	26.8	63.6	-
I let negative feelings out through emotional outburst (e.g. scream)	179	10.1	26.3	63.7	-
I put off doing assignments for university or placement work	179	7.9	39.4	54.7	-
I am purposefully late for placement etc. as a means of avoiding things	179	12.3	19	68.7	-
I ask for support/advice from others	179	48.6	29.1	22.4	+
I discuss my workload and ask for help from supervisor/lecturers	179	40.2	29.6	30.1	+
I talk about things and ask for advice/support from friends or family	179	57.3	12.8	14.5	+
I acquire personal skills useful in my life. (e.g. time management, assertiveness)	179	69.8	22.9	7.2	+

Key: A = Always; V = Very often; S = Sometimes; R = Rarely; N = Never

Gender differences in coping strategies used.

There were some differences in how male and female

Coping strategies.

The response categories of 'always, very often, sometimes, rarely and never were selected by students to respond to questions on coping strategies used. The majority of students (65.4%) dealt with challenges in a religious way especially through prayer or attending a place of worship. Almost 37% 'always or very often' took comfort in a power greater than themselves while 49% sometimes did so. Nearly 81% of the participants took time to reflect on their lives and stayed aware of what was important to them.

Some students 'always' and 'sometimes' used methods that are not socially acceptable such as taking cannabis (16; 9%); taking alcohol (35; 21.7%); engaging in harmful behaviours such as self-injury (22; 12.3%) and engaging in sexual activities to improve mood and state of mind (51; 28.5%) (Table IV).

students coped with challenges (Table V)

Table V: Used coping strategies by males and females.

Question	Male (n=94)	Female (n=85)
I take time to reflect on my life and try to stay Aware of whats really important for me	72 (76.8%)	66 (77.7%)
I acquire personal skills that could be useful In my life	64 (68.4%)	61 (71.8%)
I regularly attend place of worship	58 (62.1%)	59 (69.4%)
I express my feelings, talk about things and ask for advice/support from friends/family	-	53 (62.4%)
I take time of interest outside university work	58 (62.1%)	-

Discussion

Our study set out to explore the clinical placement environment as perceived by third and fourth health science students at UZ-CHS with regard to aspects they enjoyed during clinical placements, their perceptions with regards to supervision, the challenges they faced and the strategies they used to cope with the challenges. Overall, the students rated their clinical placement environment 'more positive than negative' as indicated by the majority of students reporting positive experiences with regard to supervision. A minority of students answered the open-ended questions. Only 43 (24%) responded to the question on what they enjoyed most during clinical placements, but these were mainly related to learning practical skills and working as part of a team. These findings are similar to those in the literature where students enjoyed having excellent mentors who were experienced staff members and appreciated exposure to a variety of procedures and good team work.^{8,9,10} Students who receive support during their clinical placement experience a good learning environment where they are free to discuss their challenges with their supervisors and to ask questions to facilitate the delivery of clinical services and ensure adherence to standards of practice.

Challenges faced by students.

Although a third of students felt they were adequately supervised, the majority expressed many concerns about their supervision, which needs to be taken seriously in the coordination of these programs. Students being left alone with inadequate supervision was found in this research in common with other studies^{4,12} creating stress among students without much experience.⁶ When students receive improper and inadequate supervision it may affect the theory/practical interface of their professions leading to insecurity and poor professional skills in students.²²

A substantial group of students perceived that there was lack of support from the supervisors and that the

supervisors were not willing to assist them when, for example the supervisor did not answer their questions. Further research with supervisors to elucidate their perceptions of mentorship in these circumstances may help to ascertain the stresses they are under. Poor supervision deprives students time to learn the practical skills before they graduate to practise independently. Good supervisors were described as those who spend quality time with the students and pace their teaching to meet the students' needs.²³ Supervisors may not be aware of what mentorship/supervision entails, or the learning objectives of the clinical placements, through lack of experience or training or because they have not been orientated into the program. This lack of willingness by clinical supervisors to assist students was also mentioned in a South African study.¹³ Faculty development and training workshops on supervision are therefore necessary.

Some students complained that it did not seem appropriate to have health professionals supervising them who had lower level qualifications than they themselves would have on graduation, which caused some conflict between the students and these supervisors. It is important at the outset of training that students appreciate that the whole health service is a teaching system, that any health professional can transfer knowledge and skills from their area of expertise to another. Trained health personnel can teach students how to carry out procedures and then supervise them as they practise the same. Patients also contribute to the students' learning experience. This should be part of the learning contract with students so that they attend their clinical placements with a constructive attitude.

Students wanted faculty to follow-up them up and review the situation where students cover for staff shortages resulting from staff taking time off to do private work and earn extra money due to the economic situation. Many health workers have left for 'greener pastures' due the economic recession, leaving hospitals understaffed. Most challenges to do with staffing at the clinical centres could be dealt with at the local administration levels. It needs to be made clear to health facilities where clinical placements occur that the students are there to learn from properly structured training exercises, that consultations with patients must be carried out in a systematic manner, and that students are not there as part of the workforce to provide additional labour. Visiting faculty need to monitor that students are not exploited during their placements and that the conditions for their learning are respected.

Although the majority of the students reported that their supervisors encouraged them to think problems through critically and to develop self-directed learning skills, the majority of the students felt that their supervisors did not give them sufficient constructive feedback which boosts students' self-esteem and facilitates learning.

Coping strategies.

Methods used to cope with challenges were mainly positive rather than negative with only a few students reporting using alcohol, cannabis and sex as solutions among others. There may be some level of reporting bias in this result. Dubal *et al*²³ found that university students used active coping strategies such as religious coping, positive reframing, planning and acceptance as opposed to avoidant strategies such as denial, self-blame and alcohol and substance abuse. The avoidance of these strategies may indicate awareness among the health science about the harmful effects of these substances. Use of sex as a coping strategy can expose students to sexually transmitted diseases and HIV/AIDS resulting in premature deaths and posthumous graduations. There is need to commend students on the positive coping strategies they used.

Limitations in this study arose from the fact that information was retrospectively collected and may have been affected by recall bias. The results are also for the combined health disciplines such that the problems faced by students in some disciplines may not affect those in others, making it difficult to generalise. It is important to note that the results were grouped but different program students may have had different experiences. The key points arising from this research do however provide a basis from the clinical placement program can be improved to make them a more constructive learning experience for all health science students and for the facilities that host them.

Recommendations

It is recommended that UZ-CHS should hold workshops with clinical educators where discussions about clinical placement objectives and expectations as well as methods of mentorship and assessment can be carried out. Student issues can be highlighted and common solutions sought. The placements must have clearly defined learning objectives where the students are not treated as additional workers to substitute for the local workforce. Visiting faculty should monitor the work environment for the students especially where there is inadequate supervision and also discuss students' experiences after each placement. The students can be empowered through the strengthening their coping strategies and avoidance of the dangerous ones. Further studies can be done with clinical educators to determine their challenges with supervision and probably train them before they become supervisors.

Conclusion

The research set out to explore students' experiences during clinical placements, to describe the challenges faced and how students dealt with these. The findings when compared to literature showed that the experiences that students face during clinical placement are similar to those faced by students in

other countries. The students had varied experiences during clinical placement based on their positive and negative perceptions of the clinical supervision. Most of the challenges they faced had to do with the supervision and managing their workload during clinical placement. Male and female students applied different ways of dealing with challenges faced and it is hoped that students can apply these coping strategies to other areas of life and not just clinical placement challenges.

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Appendix

Proportionate sampling for sample selection (n=263):

Nursing sciences $35/648 * 263 = 14$

Pharmacy $113/648 * 263 = 45$

Radiology $45/648 * 263 = 18$

Laboratory sciences $28/648 * 263 = 11$

Health education and promotion $17/648 * 263 = 7$

Physiotherapy $30/648 * 263 = 12$

Occupational therapy $14/648 * 263 = 8$

Medicine $338/648 * 263 = 137$

Dentistry $28/648 * 263 = 11$

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