

Ethical dilemmas and financial burdens faced by clinical dental students in a 'quota-driven' curriculum

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Unprofessional behaviour, cheating or falsifying of information by undergraduate dental students is a serious problem, and may be a predictor of future professional board disciplinary actions against practitioners. In quota-driven curricula students have to complete a minimum number of procedures, many of which require laboratory services. In order to achieve this some students at the University of Limpopo had begun bribing technicians to complete their work preferentially, or to do part of it for them. A final-year dental student carried out an independent investigation to establish the extent of the problem so that school authorities could be alerted and requested to curb this practice. Anonymous questionnaires were given to all the clinical-year dental students, who were asked to answer as honestly as possible. Results showed that almost half of the 4th-year students (47%) and double that of 5th-years (86%) had paid technicians for special favours and services. Payment methods and amounts ranged from gifts to actual monetary reimbursement. Ninety-three per cent of students reported additional financial burdens owing to their having paid for patient treatment, transport costs, telephone calls or food, or for the actual prosthesis.

Ethics courses are part of most dental curricula, but have no standard, universally accepted outline or structure. Bribery was investigated by a student who had experienced it as a problem himself, highlighting the point that students will be more engaged in ethics education when it addresses issues directly relevant to them. Faculties should therefore design dental ethics curricula that are practical and relevant to students' experiences, and ensure these courses begin early in the dental education and span its entire duration. Faculties should also support and encourage consistent professional conduct in undergraduate students which they will hopefully continue to practise in their future professional lives as dentists..

Student cheating or falsifying of information during examinations, in practical projects and in clinical situations is a serious problem, resulting in under-qualified graduates who pass without acquiring the knowledge or skills needed to provide consistently good patient care.¹ 'Students often see cheating as an only means to gain control over a situation that is slipping away from them.'¹ The behaviour is reinforced if it goes undetected or if the cheater gains any sort of reward from it. A precarious situation arises when certain forms of cheating are considered 'grave' while others are labelled 'not serious'. The latter may slowly progress into the former, yet the offences will still be considered minor by the offender him/herself. A further question arises of where to draw the line between the two.

Deceitfulness on the part of undergraduates should be of concern to educators. Studies have shown that unprofessional behaviour by students is a strong predictor of future professional board disciplinary actions against practitioners. It also stresses the importance of making professionalism a part of student development at an early stage in their careers.²

Bribery is another dishonest action, yet in a survey by Reid *et al.*³ 81.2% of dentists endorsed receiving gifts from patients,

while 59% were in favour of trading their dental services for other benefits provided by the patient. This behaviour could put the practitioner at risk of violating the dentist/patient relationship.³ Similarly, students who use bribery in order to gain favours from lecturers or technicians in order to meet their own personal needs are also overstepping the boundaries of ethical conduct.

Most dental curricula are based on a quota or clinical credits system in which students are expected to complete a set amount of restorative work in a limited time period. A common clinically related difficulty experienced by these students relates to the laboratory aspects of their work. They have to carry out a certain amount of laboratory work themselves before being allowed to send the rest out for completion by the dental technicians. Many students try to avoid doing their own work and attempt to bypass this requirement by bribing the technicians to do it for them. This places an additional workload on the already burdened laboratory staff, which impacts negatively on their performance. Other students are then inconvenienced by late delivery, incorrectly done work, mixed-up cases, and jobs being lost. This not only jeopardises them in terms of meeting their quotas but is also very inconvenient and frustrating to the patients, who may have taken time off work and paid

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expensive transport costs in order to come for treatment. Many patients become frustrated and refuse to return for completion of their work, resulting in a negative outcome for all concerned.

The University of Limpopo, a teaching hospital, relies heavily on internal laboratory staff to carry out most of the students' work. Technicians cited understaffing and heavy workloads as reasons for the reported problems and time delays. However, despite this it appeared that some students were not experiencing laboratory problems and that their work was always properly done and ready on time. This led to speculation by their peers that they may have been bribing laboratory technicians to complete their work preferentially. A number of students, especially those not practising bribery, became angry because they felt that they were already paying high fees for their education and should not have to spend additional amounts in order to have their laboratory requirements met. A final-year dental student elected to carry out an independent investigation into this matter, as he believed students would be more honest with a fellow learner than if a staff member was to conduct the survey.

Objectives

The study aimed to investigate whether undergraduate clinical-year dental students were bribing laboratory technicians to carry out their work preferentially; to alert students involved in bribery to the fact that their behaviour was unethical and that their actions had a negative impact on others; and to notify authorities in the school of dentistry of the problems and request them to find solutions that would benefit all parties involved.

Study design and subjects

All students in the clinical years of study (i.e. BDS 4 and 5) were asked to participate in this survey. It was explained to them that the purpose was to gain information that could be used to implement changes and improve the current situation. Anonymity was maintained and all students were assured that no form of bias or punitive action would be taken against them, regardless of the responses received. They were therefore requested to answer as honestly as possible, and were free to refuse to take part in the study or to withdraw from it at any time if they so chose. A structured questionnaire was given to the entire class at one time to avoid discussions among the participants. It included an open-ended question to allow respondents to add any other comments, suggestions or opinions that they wished to express. Responses from students in each academic year were analysed separately, as they had different levels of clinical and laboratory exposure and experience.

Results

A total of 58 out of a possible 69 students participated in the study (81% of BDS 4 and 88% of BDS 5 students), all of whom reported having received incorrectly performed laboratory work. More than 83% of BDS 4 and 96% of BDS 5 students had also experienced delays that had made it necessary for them to cancel their patients at the last minute. Over 70% had experienced less than 5 delays, ranging from a few hours to more than a week. However, there were instances where students and patients had been inconvenienced on more than 10 occasions, which is a staggering amount of time to have been wasted in their limited course (Figs 1 and 2).

To avoid these problems, 47% of 4th-year students, and almost double that (86%) of 5th-years, had begun to pay technicians to have their work completed on time (Fig. 3).

Reasons for payment included time constraints (35% and 75% for 4th- and 5th-years, respectively), laziness (10% and 25%) and lack of knowledge on how to do the work themselves (2% and 11%).

Payment methods and amounts varied from gifts such as chocolates to actual monetary reimbursement ranging from R10.00 to R380.00. This financial burden is added to by the fact that over 93% of the students reported that they not only paid the technicians but contributed towards their patient's actual treatment in one way or another. Over 80% had paid transport costs, approximately 60%

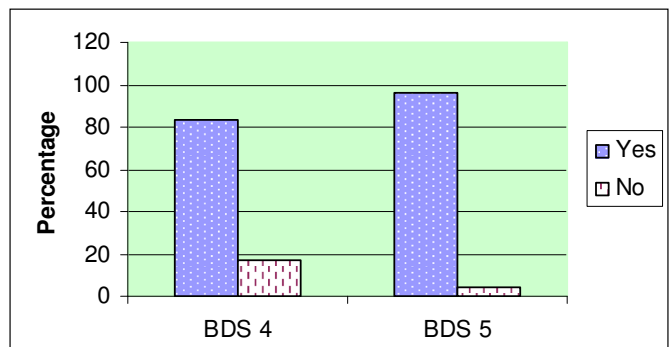


Fig. 1. Students who had experienced laboratory work delays.

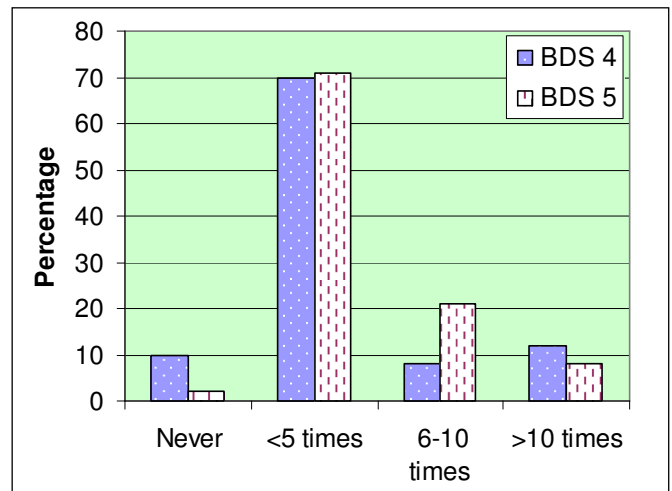


Fig. 2. Number of occasions when laboratory work was late.

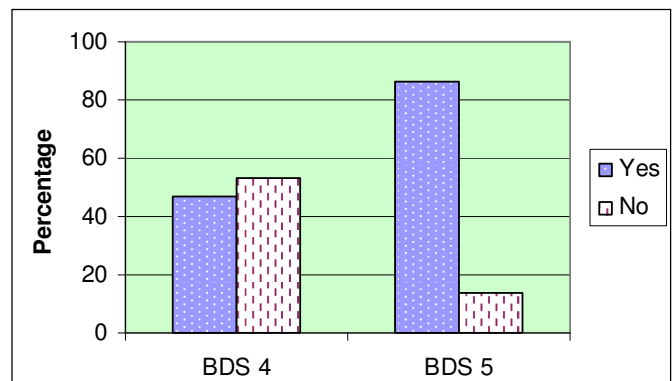


Fig. 3. Students paying to have laboratory work completed.

had paid for telephone calls to or from their patients, between 60% and 80% had purchased food for patients, and between 40% and 60% had paid for the actual treatment or prosthesis (Fig. 4).

More than 90% of students (93% in BDS 4 and 96% in BDS 5) admitted to instances where they had not done their own laboratory work for various reasons, but almost as an excuse for this reported that they did ask for help when they encountered difficulties, so as to be able to do it in the future. Over 75% said they would turn a blind eye to those who were paying to have their laboratory work completed preferentially, less than 5% would approach the offenders, and only 6% of the BDS 4 students said that they might consider reporting them. More disquieting were the responses from non-involved students who indicated that they were contemplating similar actions. Comments included: 'I don't think it is any of my business', 'I want to know how much they are paying so that I can join them', 'I will encourage others to keep on paying to avoid failing their quotas', 'I want to know the costs from others so I can compare the prices and get discounts', and 'I fully understand because there is lack of equipment and time, so it's easier to pay others to just do it for me'.

The open-ended question also elicited many interesting responses and suggestions that need to be brought to the attention of the school, especially to those involved in curriculum development.

Discussion

Ethical considerations

The researchers involved in this study met with numerous obstacles when trying to obtain an ethical clearance certificate. At the time of the study all protocols had to be presented to the faculty at an open forum where staff and students offered advice, criticised or suggested improvements before the protocol was submitted to the central research and ethics committee (REC) for a clearance number. If this route had been followed the participants would have been forewarned, which could have jeopardised their honesty and thereby the authenticity of the results. In addition, the dental students in their final year were already reluctant to take part in the survey. They feared that once the allegations and findings were aired, the authorities would call for an investigation and the technicians would no longer be able to carry out any illegal laboratory work. This could endanger their chances of meeting their final quota requirements. These concerns were taken to the dental REC as well as to the course co-ordinators for the final year of study. They allowed the protocol to be presented to a small in-

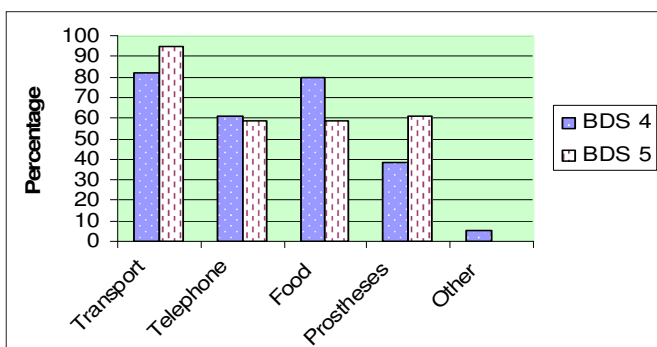


Fig. 4. Other forms of payment by students.

house committee where it was subsequently approved with the proviso that a formal protocol be sent to the central REC after the class had graduated.

This was done, but then a further problem was encountered. The University central REC never considers protocols submitted after the data have been collected, and rejected this one immediately – despite a covering letter of explanation from the researcher and the internal supervisor. The final report therefore had no official ethical clearance number.

Discussion of results

Initially students were reluctant to take part in the study and to fill in the questionnaires. They feared victimisation from staff, and that they would no longer get their laboratory work completed in time once the allegations of bribery were made public. In order to obtain their participation and to encourage honest feedback, they were assured that the results of the survey would only be made known after they had graduated. Following this assurance, almost all agreed and were eager to take part and to have their opinions heard.

Al-Dwair and Al-Waheidi¹ conducted a similar study in which 100% of the students completed the questionnaire. This reflects how importantly students viewed the issues of bribery and cheating, with many expressing deep concerns that the school was oblivious to the adverse conditions that had forced them to resort to these measures. While these concerns show that students do have some moral and ethical standards, they may still battle to distinguish between what constitutes cheating or unethical behaviour and what does not. One of our respondents answered that he didn't practise bribery, but he did give the technician chocolates for favours. This sort of dilemma is also described by Al-Dwair and Al-Waheidi,¹ who warned that cheaters are often able to hold two contradicting views at the same time – firstly that cheating is wrong, but on the other hand that since everyone else is doing it, they are actually not really doing anything bad if they do it as well. Unfortunately, those who hold this sort of philosophy may then carry it through to other areas of their lives as justification for their wrong-doings.

Ethics courses are part of most dental curricula, but no standard course structure or outline is universally accepted. The faculty usually selects a limited number of ethically related topics to teach, based on the discretion of the course co-ordinator.⁴ The aspect of bribery was investigated by a student who had experienced it as a problem himself, which highlights the point raised by Sharp *et al.*⁴ that students will be more engaged in ethics education when it addresses issues that are directly relevant to them. This may also help overcome the problem identified by Bertolami⁵ that students take ethics courses in order to pass examinations, but do not change their behaviour as a result of these courses.

Sharp *et al.*⁴ believe that students' ability to identify ethical issues and apply a reasoned decision-making approach to their dilemmas is an ideal goal of ethical instruction. They suggest that when students write assignments or present patient treatment portfolios, they should include a section on any ethically related issues. They conducted a survey to identify the most common ethical concerns experienced by students. These included their dilemmas when treating patients with limited resources (25%), conflict between professionals (19%), clinic policies and procedures (15%), and decision making by patients' surrogates (13%).

They suggest that faculty should use these areas as a foundation for designing a dental ethics curriculum in order to make it practical and relevant to the students' experiences.⁴ Furthermore, ethics courses should begin very early in the dental education, must span the entire dental curriculum as it applies to all clinical subjects, should aim to connect knowledge with action, and should be systematically taught and assessed. Mossey *et al.*⁶ also stress that the dental schools need to provide continued support to students to encourage and maintain professional conduct when they are treating patients and in their professional lives. They point out that students will also learn by the example set by and the conduct and attitude of both those teaching them and the institution as a whole.

Most ethics courses discuss aspects of the law, professional duties towards patients and colleagues, issues of vulnerable subjects, informed consent and general professionalism. There is very little on financial issues, which generally focus on perverse incentives, 'over'- and 'under'-servicing of patients, accepting of commission in exchange for purchase, sale or supply of goods, and payment of commission in exchange for referral of patients. Accepting bribes from patients or in turn bribing others to perform services for monetary compensation are seldom discussed, and do not even appear in the guidelines set out by the Health Professions Council of South Africa. It is therefore not surprising that so many students resort to bribery in order to meet their needs.⁷

It is encouraging that this study resulted in a number of constructive suggestions and recommendations from students themselves as to how the situation could be improved. Most believed that staff shortage and overwork was the biggest factor contributing to problems. They requested appointment of more internal laboratory technicians, who could then be close by and available to help at the time when patients were still in the dental chair. They could also do more of the work in-house, thus reducing the number of late deliveries from outside laboratories. The extra staff could also work flexi-time, enabling them to extend the laboratory hours and giving the students time to complete their own laboratory work after hours. Some also felt that the laboratory staff was inefficient and lazy, which added to the work overload. They suggested that this matter be investigated further in order to try to improve productivity and work ethics among the technicians.

Students also stated that their tuition fees place a heavy financial burden on them and that they did not feel that they were getting the quality education, training and supervision they were paying for. Complaints included lack of laboratory technicians, supervisor and staff shortages, lack of equipment and materials, and having to work on poorly serviced dental chairs which continually break down. They were adamant that they should not have to spend extra money paying their patients to attend, or for patients' transport, food and laboratory costs, and added that they should get full credit for any work/prostheses that were completed, regardless of whether the patient paid for them or returned to have them fitted. A major concern was that students who did not have the means to pay would be at a greater risk of failing than their more affluent

classmates. The students suggested that the faculty budgets for and pays for all laboratory work that is for quota purposes, so that patients' financial problems do not impact negatively on students' clinical requirements.

Another recommendation was that more clinicians be employed and that they should have a more 'hands-on' approach to teaching, which would ensure that the students have a clear idea of what they are expected to do, both clinically and in the laboratory. The students believed that if both the clinical and laboratory staff situations were improved they might be discouraged from resorting to bribery and would even be more inclined to report those who continued to utilise it.

A further ethical and legal issue to consider concerns the technicians themselves. They are undertaking work from unregistered students, which is against the regulations of their council. By participating in this behaviour they could be putting their own careers at risk. In addition they were utilising government materials and time to do this work, which is tantamount to theft, and could be charged for their actions.

Conclusions

This survey highlighted the need to assess and modify the teaching of ethics to include aspects that are pertinent and relevant to the practice of dentistry. It stresses the need to begin ethics courses in the first year of study, and ensure that they continue through the entire duration of dental training. A more difficult challenge will be to implement some form of monitoring and evaluation in order to establish the efficacy of ethics courses in modifying students' attitudes and behaviour.

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Conflict of interest: The authors declare that there are no conflicts of interest in this paper.

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