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**Challenges of the Clinical Learning Environment of Dental Students  
at Addis Ababa University**

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**Challenges of clinical learning environment of Dental Students at Addis Ababa  
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## **Abstract**

**Background:** Clinical learning is one of the main teaching methods in health professions, including dental education, and it has many strengths. It is focused on real problems in the context of professional practice. Learners/students are motivated because they are involved directly and participate actively, but clinical learning can be challenging, unpredictable, stressful, and constantly changing environment.

**Objective:** To identify the challenges, of the clinical learning environment of dental students at Addis Ababa University Dental Department, Ethiopia.

**Material &Methods:** An institution based qualitative study was conducted from Dec. 2018 to Jan. 2019. The sample was obtained by purposive sampling of 4<sup>th</sup>, 5<sup>th</sup>year and final year dental students. Data were collected by focus group (FG). Three FG discussions were conducted. (Groups contained 4 students from each year) using a semi-structured questionnaire. One data collector was selected. The information was recorded separately and transcribed for thematic analysis. Ideas were grouped and analyzed depending on themes.

**Results:** Six themes were derived from the data analysis, which represented the students' clinical learning challenges. These six themes included shortage of resources and maintenance problem, non-approachable & uncooperative instructors, poor teacher-student relationship, evaluation and feedback, and non-organized administrative system

**Conclusion:** The results of this study clearly indicated presence of challenges and the most common challenges are shortages of resources (e.g. dental materials and equipment's), non-approachable and uncooperative clinical teachers and unsupportive clinical learning environment are the main challenges of clinical learning

**Keywords:** Challenges, clinical learning environment, dental students.

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## **Lists of Abbreviations**

**BDSc:** Bachelor of Dental Science

**CHS:** College of Health Sciences

**DDM:** Doctor of Dental Medicine

**EDPA:** Ethiopian Dental Professional Association

**MOH:** Ministry of Health

**MOE:** Ministry of Education

**Medu:** Medical education

**OMFS:** Oral and Maxillofacial Surgeon/Surgery

# **1. Introduction**

## **1.1. Background**

When one considers among the best teaching methods in health and medical education, clinical learning is the main one. It deals with real problems in the scope of professional practice. Through it, students can be actively engaged and develop skills such as history taking, oral examination, logical clinical reasoning, decision making, empathy, and professionalism (1).

Various theories argue that effective learning results from direct exposure to events, which forms and subsequently strengthens cognitive associations. This results in the individual recognizing and responding to a specific pattern and ultimately gaining the ability of applying what was learned to other situations. According to Rationalism Theory, individuals work out of their environment by reasoning, in trying to make sense of new experiences (2). Socio-culturalism believes that people learn according to the society in which they are placed. (3). This indicates that the practical setting has its own norms, values and rules to carry out patients' care and transfer knowledge and skill.

Teaching and learning in a clinical environment has many benefits and essential for the development of professional competency, but it can also be challenging because of the unpredictable, stressful, and constantly changing nature of the clinical settings. Clinical experiences and factors contributing to the learning of these practices can waste a great deal of time and energy, impose a heavy financial burden on educational systems, cause mental, familial and educational problems for students, and compromise the quality of patient care.(1).

Clinical practicum is considered essential to professional competence in most healthcare-related professions. Dental students training consists of clinical practice under supervision by qualified dentists. The learning environment of the clinic or hospital can be challenging for both mentor and learner because of the stresses involved in dealing with clinical cases which can be unpredictable for the inexperienced trainees (4).

It has been suggested (4) that most of the challenges of clinical learning are related to mentors, student and supportive staff. For example, coordination of the learning sessions, supervision skills, teacher-student relationships, the selection and structuring of learning objectives, can all affect learning outcomes (4).

The objective of this study is to identify the challenges, if any, that dental students face in the clinical environments of the Addis Ababa University Dental Department. The findings of this study will help to improve the quality of dental education.

## **1.2. Statement of the Problem and Rationale of the Study**

There is dissatisfaction in the clinical learning environment of dental education at AAU dental department and there was no study in this area in Ethiopia. Majority of the students in higher education are not assigned by their choice in Ethiopia. Negative perception of the field of study (dentistry) and professional hardship are contributing factors for the challenge of clinical learning (5).

Studies indicate that negative perceptions of the field and professional hardship are the contributing factors to the challenges of the clinical setting (5).

The justification to study this topic is from my observations of various complaints and problems which are mentioned by dental students frequently. Additionally there is shortage of dental professionals, currently there are about 1000 dental professionals in charge of providing dental services for a population of 100 million.(EDPA)

## **1.3. Significance of the study**

The application of theoretical knowledge in to practice in medical education is greatly depend on the clinical teaching. Missing opportunities for clinical exposure and feedback from instructors and supportive staff, stress associated in fulfilling expected procedure, interpersonal relationships between instructors and students are potential barriers to effective learning (5, 6).

Assessment of clinical practice challenges are a decisive factor in the planning of educational interventions for university teachers and clinical mentors. These factors can be both enabling and disabling in clinical teaching settings. Educators must design evidence-based teaching strategies to address all the dimensions of the problem in order to improve the quality of teaching in dental education and subsequently improve the oral health service for the population.

Finally, the findings of this study will be used as reference for those doing research in dental practice and contribute to the scarcity of literature on dental education in Ethiopia

## **2. Literature Review**

There is no an extensive literature on the assessment of dental student clinical practice. Medicine and nursing have developed a comprehensive literature on student learning in clinical practice. However, in dentistry the literature is almost non-existent. The studies that do exist principally focus on teaching practices and behaviors in the clinical setting (7, 8). The aim of this brief literature review is to identify and evaluate the research on the experiences and challenges of dental students when learning clinical practice in clinical settings.

Clinical learning is used widely in teaching and learning of undergraduate dental students (7). This teaching environment is effective in the process of teaching and has many advantages but it can be challenging. The clinical learning objectives are included for empowerment of dental students to develop clinical competencies and socialization in the dental profession. These events occur within a complex and dynamic learning environment (7).

The complexity of learning in the clinical environment has directed the researchers to investigate the existing factors, elements and conditions in this environment, such as the psychosocial atmosphere in clinical, perceived experience from the learning environment (positive or negative), interpersonal relationships and other factors. Studies have shown that most of the learning environments, despite having many benefits for dental students, do not provide a positive learning situation for them (9, 10). In cases of developing countries where resources are limited, dental schools lack the necessary infra-structure so as to provide the most commonly used dental materials (e.g. amalgam and composite resin) for the students to practice, in addition to the fact that vital equipment often needs repairing.

The clinical teacher can be seen as a role model, appraiser, and catalyst for the clinician students. Helpful supervision is characterized by cooperative participation in decision making and the establishment of a common vision (1). Positive effects of these interactions can be observed in improved patient outcomes and student recognition of their teacher's effectiveness. (11). The goal of dental education preferably includes the improvement of the education-care delivery relationships, comprehensive care experiences, and teaching and learning restructuring, as well as motivating reflective clinical practice (11).

Effective planning is the most important principle and activity in education (according to Ansary *et al.*, 2011) (4). Planning provides structure and context for teacher and students, as well as a framework for reflection and evaluation. Preparation is recognized by students as evidence of a good clinical teacher (1). Studies suggest that negative teaching evaluations reflect insufficient academic conceptual/theoretical and practical preparation, resulting in inadequate clinical supervision. Nursing students in Iran specified that most of their instructors, especially new graduate teachers, had no adequate clinical experience, theoretical and practical knowledge, and capabilities (5).

The usage of non-standard forms of evaluation and evaluation without creating learning situations for students were the important aspects which the students mentioned as barriers to clinical learning. In medical health practice specified that most of their instructors, especially newly graduated teachers, had no adequate clinical experience, theoretical and practical knowledge, and capabilities (1,5). Students recognized that prompt, informative, and some time critical feedback was necessary for development of their clinical skills. Effective feedback is timely, constructive and specific, leaving the student with a plan for what to do next to achieve the desired results (4)

A qualitative and quantitative study of dental teachers and students in Sydney, Australia showed that the majority of teachers agreed that identifying the core part of learning and providing clinical objectives for clinical sessions would support students' preparation for their independent practice of clinical dentistry. However, students neither agreed nor disagreed strongly with this idea. In the same study, teaching organization, like preclinical instruction, including clinical practice in the senior clinical year, and a clinical log book as a learning aid, were found to be necessary for students' clinical preparation. Additionally, assigning small groups and clinical demonstrations were considered good approaches for clinical learning (11).

Students also perceive that their involvement in policy-making and educational planning will improve their clinical learning practice by improving their decision-making ability. In addition, active participation in patient care and arrangement of cases in logical sequence, approaching patients in a respectful manner, and carrying out clinical assessments can build up student confidence in the clinic. Students' participation in various levels of educational planning should minimize learning challenges, including practical teaching (4,11).

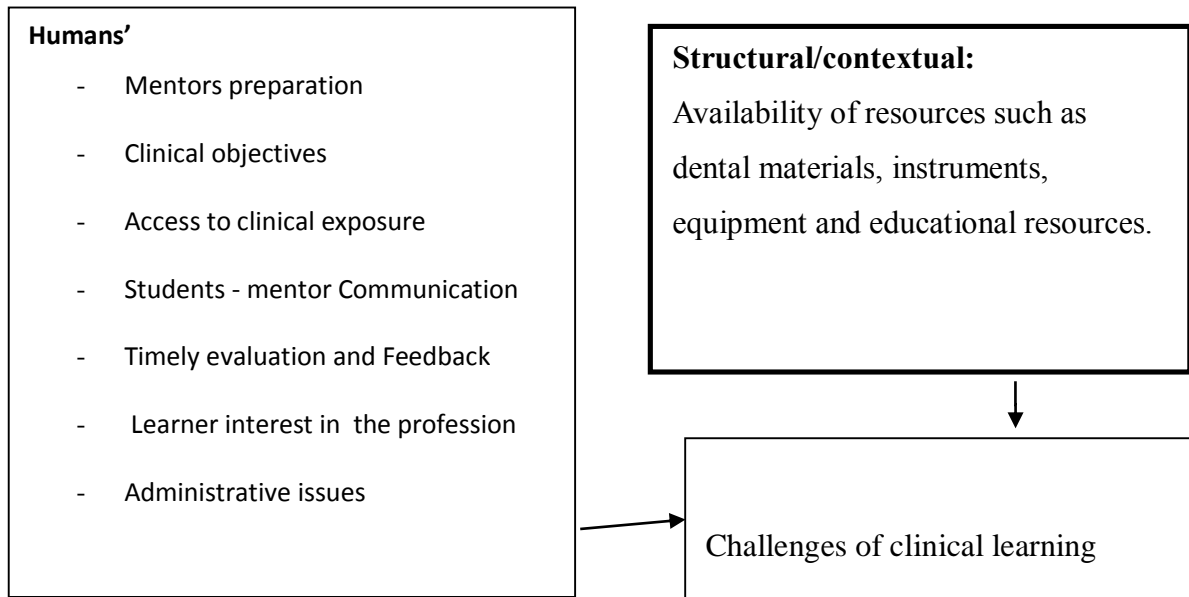
The relationship of teachers and students is an important part of clinical care. The balance between student self-confidence in providing patient care independently and teacher support in that care is crucial. This balance can represent a strong bond in dental clinical teaching and is also a motivator in the progression of clinical skill acquisition by the student (11). Students perceive that teachers should have practical skills and that they should provide feedback in order to enhance student learning outcomes (11). Students also emphasize that more time practicing would help to acquire more skills (11)

Chan showed that students are often faced with challenges during the course of clinical learning, which make them feel vulnerable (12). Rahmani *et. al.*, quoting Campbell *et al.*, have stated that the quality of clinical training provided by dental educators and the support received by the students from dentists are the most important influencing factors on dental students' clinical learning (13) studies have stated that incompetence of instructors, negative attitudes, and the weak support for students can cause harmful effects on learning (14, 15). On the other hand, students' occasional lack of interest in the profession is one of the challenges affecting their preparedness to attend clinics (5).

A perceived good clinical environment is important for better learning (4). It has been identified that non- supportive interpersonal communication, lack of access to direct clinical experience, traditionalism in clinical behavior, and a stressful psychosocial environment are often mentioned by health practitioners as challenging environmental factors (5)

Situational theories (Lave, 1988) acknowledge that learning results from direct exposure which forms and subsequently strengthens cognitive associations. Therefore, fear of malpractice and poor communication between trainee and mentor, and between student and patient, could further hinder students' clinical learning (2)

## Conceptual framework developed from a review of the relevant literature



### **3. Objectives of the Research**

#### 3.1. General objective

- To identify the challenges of the clinical learning environment and the factors that affect dental students in the Addis Ababa University Dental Department

#### 3.2. Specific objectives

- To identify the perception of clinical learning environment by dental students
- To identify the dental students' clinical learning challenges

#### **Research Question:**

What challenges do the 4<sup>th</sup>, 5<sup>th</sup> and interns/final year dental students perceive and experience in daily dental practice in the AAU clinical setting?

## **4. Methodology**

### **4.1. Study area and period**

#### **4.1.1. Study area**

The department of dentistry is located between 6 kilo and 5 kilo Universities adjacent to Yekatit 12 hospital Medical college and established in 1991 G.C. by the agreement that is signed between the Medicos Mundi Italy and MOH of Ethiopia to train (a two-year training program) mid-level dental health professionals. In 1999 G.C. the training centre was taken over by Addis Ababa University and trained dental therapy (one batch) then the program was discontinued. In 2004 G.C. a 3-year BDS degree program was launched. In 2010 G.C. the AAU upgraded it to a 6-year degree program to train Doctors of Dental Medicine (DDM). In 2016 G.C. an Oral and Maxillo – facial Surgery (OMFS) specialty program was started. Currently the department has a total number of 75 staff members (35 academic, 25 non-academics (3 DDM, 4 BDS and 18 Nurses) and 15 administrative). The total number of patients seen per day is 75–85 in 6 units (Surgery, Endo-Resto, Pediatric, Orthodontics, Prosthodontics and Periodontics).

#### **4.1.2. Study period**

The study was conducted at the AAU Dental Department from Feb 24 to March 10, 2019.

### **4.2. Study design**

An institution-based descriptive qualitative focus group discussion study was conducted.

### **4.3. Population**

#### **4.3.1. Source population:**

All under graduate dental students at the AAU Dental Department

#### **4.3.2. Study population:**

Dental students of 4<sup>th</sup>, 5<sup>th</sup> years and final year dental students at the AAU Dental Department

### **4.4. Inclusion and Exclusion Criteria**

#### **Inclusion Criteria**

All 4<sup>th</sup>, 5<sup>th</sup> and final/intern dental students those who had at least one year of clinical practice and were willing to participate in the study.

#### **Exclusion Criteria-**

All 4<sup>th</sup>, 5<sup>th</sup> and intern/final year dental students those who had less than one year of clinical practice and dropped out or discontinued their degree program and unwilling to participate in the study.

#### **4.5. Sampling method and sample size**

The sample was obtained by purposive sampling. Three homogenous focus groups were formed based on their class level. The grouping was made from 4<sup>th</sup>, 5<sup>th</sup> year and internship/final year dental students and 4 students in each group respectively. In this study a total of 12 dental students participated and half of them were females. Badge numbers were prepared for each group. GI= 1-4, GII =5-8 and GIII =9-12.

#### **4.6. Data collection**

Open - ended questions were developed for the focus group discussions of the students (see Appendices, section 13.2). The data collection tool (focus group discussions questions) was developed in English and translated into Amharic and back to English for its cross-cultural validation. One data collector was recruited and trained for half day by the investigator. Focused group discussion was conducted using semi-structured questioner to collect information. The discussion was conducted in a separate room of the department. The information was recorded by tape recorder. Copious notes were taken during the focus group discussions and transcribed for thematic analysis. Ideas were grouped and analyzed depending on themes that emerged from the data analyses. The duration for each focus group discussion was ninety minutes.

#### **4.7. Data management & analysis**

The information was audio recorded during focus group discussions, then the audio data were transcribed and thematic analysis was done; emergent themes were grouped and coded as data came in.

#### **4.8. Data quality control**

The comprehensiveness and adequacy of the data collection tool was checked by senior dental professionals in the department. After each focus group discussion the information was audio recorded, the recordings were listened and transcribed, and some modulating problems were addressed so as not to be repeated in the next focus groups.

#### **4.9. Operational definitions**

**Challenges of clinical learning:** clinical learning can be a difficult process for the transfer of skills and knowledge because it requires greater mental or psychological effort in order to be done effectively.

**Clinical learning environment:** the place where practical learning (teaching and learning) with physical, psychological and interpersonal interactions take place in the actual setting

**Dental students:** students who join the dental field and take all dentistry courses in dental institutions to become a dental professional.

#### **4.10. Ethical considerations**

This research was conducted after getting permission from the institutional review board (IRB) at AAU, written consent was obtained from all respondents/participants. They were given an oral explanation on how to go through the process of the discussion and the confidentiality of the responses of the respondents has been maintained.

#### **4.11. Dissemination of study findings**

A report of the study findings will be submitted to Addis Ababa University and copies of the findings will be distributed to MOH, MOE, dental department, college of health science and the Ethiopian dental professional association (EDPA). The results may be presented in workshops and conferences.

## 5. Results

In this study, the main challenges of clinical learning reported by AAU dental students were grouped into the following themes

**Table: Themes and sub-themes**

	<b>Theme</b>	<b>Sub-themes</b>
<b>Theme 1</b>	Shortage of resources & Maintenance problem	<ul style="list-style-type: none"><li>- Few donations</li><li>- Enough budget is not allocated</li><li>- No dental library and students' lockers</li><li>- Nonfunctional dental chairs and machines</li><li>- Inadequate maintenance</li></ul>
<b>Theme 2</b>	Non approachable and un cooperative clinical teachers	<ul style="list-style-type: none"><li>- Lack of experience</li><li>- No supervisor</li><li>- Absenteeism</li></ul>
<b>Theme 3</b>	Teacher student relationship	<ul style="list-style-type: none"><li>- Teachers do not promote mutual respect</li><li>- Verbal harassment</li></ul>
<b>Theme 4</b>	Evaluation and feedback	<ul style="list-style-type: none"><li>- In adequate teaching skills</li><li>- Unclear clinical protocol.</li></ul>
<b>Theme 5</b>	Assistant problems	<ul style="list-style-type: none"><li>- Uncooperative</li><li>- Failure to accomplish their duties</li></ul>
<b>Theme 6</b>	Non organized administrative system	<ul style="list-style-type: none"><li>- Poor resource allocation, no response to shortages</li><li>- Inadequate monitoring and control of the staff/ lack of adequate support</li></ul>

### **Theme 1: Shortage of resources and Maintenance problem**

Shortages of dental materials and instruments such as dental filling materials (both temporary, permanent, esthetic and non-esthetic), hand pieces (low speed and high speed), dental x ray machines with dental films, developers, burs (assorted types) greatly affect the clinical practice of students and there was also an improper use of the available material by the assistants reported by study participants. A separate or adequate clinical budget is not allocated by the university to the AAU dental department. Also there is no library in the department for reading during free time and also there are no lockers to keep student's property. The number of dental students are small with the large numbers of students in a clean clinical set up. This increases student's motivation

Most of the dental chairs, dental X-ray machines, compressor, electrical amalgam mixer and ultrasonic scalers are not functional.

For example, one participant stated that *“in endo-resto unit, only one dental chair is functional among the 8 dental chairs due to lack of maintenance problem and unavailability of accessories in the country.”* **(Student Focus Group #5&7)**

### **Theme 2: Non approachable and uncooperative clinical teachers**

Most of the instructors, especially new graduate had no adequate clinical experience, theoretical and practical skills.

*“Some instructors come in the morning then they go quickly. We have been abandoned for long times. In some units like endo resto even though the materials and maintenance problems are solved no one is volunteer to teach and supervise us.”* **(Student Focus Group #5&7)**

### **Theme 3: Teacher-student relationships**

Students complained about a non-supportive relationship between them and their instructors. In the discussion, the students mentioned verbal harassment by some instructors.

*“We were afraid of bad morality of the instructor in the clinics. He/she discouraged us in front of other students. So, we do not go towards him/her. We prefer not to ask any questions.”* **(Student Focus Group #9)**

### **Theme 4: Evaluation and feed back**

The evaluation format is not standardized and not uniform across the different units. This affects students' interest to learn.

*“The instructors evaluate the students according to their own perceptions.”*

**(Student Focus Group#10)**

### **Theme 5: Assistant problems**

Usually dental assistants do not set up the equipment, instruments and materials before procedures or do not take care of these matters after procedures. In addition, they do not replenish the appropriate instruments and materials. This causes unnecessary load and disorganization when the students do the clinical procedures. In addition, all respondents agreed with the statement

*“Sometimes they [dental assistants] insult us and are not interested to do their work.”* **(All respondents)**

**Theme 6: unorganized administrative system**

The non-organized administrative system do not take action and control the working activities (environment) such as staff/faculty members' absenteeism, punctuality's, and shortages of dental materials, instruments and equipment. These concerns were verbalized by all **participants/respondents**.

## 6. Discussion

In this study a total of 12 undergraduate dental students were participated. The aim of the study was to identify the main challenge of dental students in their clinical learning. The major findings of this study includes: shortage of resources, non-approachable and uncooperative clinical teachers, poor relationships between students and instructors and dental assistants, unclear clinical protocol, maintenance problem and unorganized administrative system, which were the main challenges in setting up a healthy clinical learning environment.

Our study indicates shortage of dental materials like filling materials (amalgam, composite) and instruments, hand pieces, assorted type of burs etc. which greatly affect clinical learning. Sometimes even simple procedures cannot be performed. Respondents stated that the majority of the dental materials have been donated and are “only made available when foreigners come. There is no allocated budget for consistent and continuous supplies of the materials when shortages arise and also there is no library and no student’s locker in the department. Additionally, non-functioning compressor, ultrasonic scalers, dental chairs and dental x-ray machines affect the students’ acquisition of skills in radiology, scaling and other related skills. Generally, these problems alter student expectations and interests as well. When materials are accessible, students can practice adequately and feel confident. As most of the literature agrees, practicing in an equipped clinical setup is vital for the transfer of theoretical concepts into practice. This finding is supported by a study conducted in Iran. (9, 10).

The focus group participants also reported that some of the instructors are not punctual, do not have time and/or interest to show clinical cases at the dental chairside because participants believed that these instructors give a higher priority to their private business. Additionally, participants indicated that some instructors do not consider teaching as their obligation and are not available based on their schedules, particularly those who are assigned to prosthodontics, orthodontics, and the screening room. As a result, students claimed they were abandoned for long periods of times in the clinical units. Spencer explains that a clinical teacher should be a good role model, appraiser, and catalyst for the student clinician which is characterized by cooperative participation in supervising clinical decision making and the establishment of a common vision in achieving clinical learning objectives (1). Clinical

experiences and expertise are among the most important components of practical teaching as mentioned by study participants in their discussions. This finding is similar to those in studies conducted in Ireland (2), Bangladesh (4) and Iran (5). Generally, students need to have competent instructors (both in theory and practice) and cooperative assistance.

Our study also indicates that students believe that a good relationship with teachers and staff members facilitates student learning and leads them to achieve their learning goals. But the actual circumstances do not show this; instead students reported that there is behavioral and verbal violence, harassment, and insults by some instructors and assistants. A similar finding was supported by a qualitative study conducted in Ireland. Positive interactions can improve patient outcomes and student recognition of teacher effectiveness. In light of this, a mission for dental education ideally includes the enhancement of the education care delivery relationship, comprehensive care experiences, and teaching and learning reform encouraging reflective clinical practice (11).

Our study, also shows that the evaluation system and feedback were not uniform in different units, i.e., there is no clear clinical evaluation protocol and continuous assessment and log books were not used. Instead, instructors predicted student performance ahead of time based on their perception of the student before the actual clinical assessment was made. On the other hand, surgery and perio units use well prepared evaluation formats with checklists and instructors give immediate feedback to the students about their work. Evaluation is a mental process, and it can be affected by many factors unless it is preplanned and implemented consistently. This finding is consistent with that found in a study conducted in Nigeria (6).

In this study, the focus group participants reported that the dental assistants were not punctual (*“came late after the physician and left early”*), interfered with patient management, did not clean the working area before and after procedures, and also did not assist the dental student. Instead, they simply *“sit and talk”*. This creates an unsupportive environment during clinical procedures. A similar challenge was identified by Sharman et al. (5).

This study revealed that AAU dental students believe that the department head and administrator should work harder to improve the academic atmosphere. Participants in the

Focus groups called for stricter control over working activities, such as staff absenteeism, punctuality of both students and instructors and those actions should be taken against those who are irresponsible in carrying out the duties of their job. Department heads and administrators, however, do struggle to convince the university administration to provide them with a departmental budget to purchase the necessary materials when there are shortages.

Unlike the other similar studies (5, 6), the number of dental students at the AAU dental department are small for the large number of patients. This gives students the opportunity to be exposed to different types of cases or patients in a clean and sterile clinical environment.

## **7. Limitations**

Generalizations of this study are questionable because of its subjectivity and the findings do not represent those of other dental departments across the country.

## **8. Conclusion**

According to dental students' perspectives, the results of this study clearly indicate that there are challenges. Most of the challenges are related with inadequacy of dental instruments and materials, poor teacher - student relationship, non-clear clinical protocol, Maintenance problem and unorganized administrative system. These challenge require great consideration in educational planning in the clinical setting and require great administrative support. On the other hand, it should be noted that this study investigated perceptions, and relying on subjective assessments and personal views and experiences. It may not confirm all the dimension of clinical challenge. Therefore, further studies should be done by using complementary approaches to strengthen this study findings.

## 9. Recommendations

- Pedagogical training should be given for newly graduated instructors
- Adequate budgets to purchase resources specific to clinical training
- Link with other universities
- Separate instruments and materials for demonstration classes
- Training should be given for dental assistants to improve the clinical setting
- Responsible leaders, managers and technicians should be assigned.
- Stakeholders' collaboration -all stakeholders (MOH, MOE, EDPA and AAU) should be strengthen their collaboration to improve the quality of the dental education at AAU.

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# 11. Appendices

## 11.1-Consent

Year of Study \_\_\_\_\_

Code \_\_\_\_\_

### Greeting

My name is ----- . I am an MSc student at Medu of Addis Ababa University, CHS department of dentistry. I am here to study the challenges dental students face in the clinical learning environment at the dental department of Addis Ababa University. If you feel that there are no challenges to your clinical learning, please let me know.

The purpose of this study was to generate information necessary for the planning of appropriate possible interventions to eliminate or reduce the challenges to students in clinical learning environments at the dental department of Addis Ababa University so as to improve dental education and ultimately the quality of patient care.

We would like to audio record the discussion so that we do not miss any valuable information you provide. The audio tape from the discussion will be typed out word for word and doubled checked to assure that the responses have been transcribed verbatim. Your identity will be coded and you will not be directly identified in any transcripts. The original audio recordings, as well as the master key that links the transcript to your identity, will be stored in a locked cabinet at Dr. Lakew Assefa's office at the AAU dental department.

You will not be identified in the analyses or in any report or publication resulting from this study. However, absolute confidentiality cannot be preserved as there is a possibility of voice recognition through the recorded sessions.

Are you willing to participate in this study? Yes----- No-----

If yes, please discuss the questions that I am going to read to you. Your honest response is highly appreciated.

### Participant's signature

1. \_\_\_\_\_ Date: \_\_\_\_\_

2. \_\_\_\_\_ Date: \_\_\_\_\_

3. \_\_\_\_\_ Date: \_\_\_\_\_

4. \_\_\_\_\_ Date: \_\_\_\_\_

Interviewee's signature \_\_\_\_\_ Date: \_\_\_\_\_

THANK YOU for taking the time to answer my questions!

## 11.2. Focus Group Questions

1. Tell me about your clinical learning experiences during your training at the AAU dental department?
2. What factors have **negatively** affected your learning?
3. What factors have **positively** affected your learning?
4. What other factors are affecting your learning at the chair side?
5. How do your colleagues (instructors, other students) affect your learning?
6. How effective are your practical evaluations and the feedback you receive during your attachments?
7. How do you contribute to your practical attachment?
  - a. How do you interact with your supervisor? With any other colleagues?
  - b. How prepared are you when you attend the practical teaching?
8. Would you like to make any changes to your clinical learning environment?
  - a. What changes would you recommend?
  - b. How could those changes be made?
  - c. Who would make these changes?
9. Is there anything left that you want to add?

**የፈቃደኝነት / የስምምነት መጠየቂያ ቅጽ**

**የጥናቱ ዘመን ----- መለያ ቁጥር -----**

**ጤና ይስጥልኝ**

ስሜ -----

በአዲስ አበባ ዩኒቨርሲቲ በጤና ሳይንስ ኮሌጅ በህክምና ት/ቤት የሁለተኛ ዲግሪ ተማሪ ስሆን በጥርስ ህክምና ትምህርት ክፍል ውስጥ የጥርስ ህክምና ተማሪዎች በተግባር ልምምድ ጊዜ የሚያጋጥሟቸውን ችግር ለማጥፋት፡፡ ችግር የለም የምትሉከሆነ እስኪገናኙ፡፡

የዚህ ጥናት ዓላማ የጥርስ ህክምና የተግባር ትምህርትን መሻሻል ለማቀድና ለማሳለጥ የሚረዱ ጠቃሚ መረጃዎችን ለማፍለቅና ለመሰብሰብ ነው፡፡ ተግዳሮቶቹንም ለመቀነስና ለማጥፋት/ለማሳገድና የጥርስ ህክምና ትምህርት አሰጣጥን ለማሻሻልና የጥርስ ህክምና ታካሚዎችን በጥራት ለማገልገል ነው፡፡

በዚህ ደብዳቤ የሚሰጡት ሀሳብ (መረጃ) እንዲታለፍ በቴፕ መቅጃ (ሪከርደር) ይቀዳለህ ተቀዳው ምህሳብ ቃለበቃ ልይጻፍ ልከዚያም በሁለት ሰዓት የተሰጠውን አስተያየት በትክክል ቃል በቃል ለመዘገብ ይረጋገጣል፡፡ በቅጂ ውድቅ ትመለያ ቁጥር ከመስጠት በጎሽ ገርሎ ለቀጥታ የሆነ አናንተን የሚገልፅ መረጃ አይዘገብም፡፡

ዋናውን ቅጅ ከመለያ ህጋዊ ያለውን ዘገባ ቁልፍ ባለው ሰዓት ውስጥ ተቆልፎ ይቀመጣል፡፡

በጥናቱ ማጠቃለያ ሪፖርትም ሆነ ሲታተም የናንተን የሚገልፅ መረጃ በዚህ ጥናት ውስጥ አይገለጥም፡፡

ይህ ሲባል መቶ በመቶ በጥናቱ ውስጥ ማንነታችሁ አይታወቅም ማለት አይደለም ሆኖም ግን በቴፕ በሚቀዳበት ጊዜ ድምጻችሁ በቅጂ ውድቅ ጥሊላይ (ሊታወቅ) ይችላል፡፡

በዚህ ጥናት ለመሳተፍ ፈቃደኛ ናችሁ አዎ ----- አይደለንም -----

መልስዎ አዎ ከሆነ አባካችሁ በማነብላችሁ ጥያቄ መሰረት ተዎያዩ

በታማኝነት ለምትሰጡት ሀሳብ ትልቅ አክብሮት አለኝ፡፡

- የተሳታፊዎች/የተጠያቂዎች ፊርማ:
- 1. \_\_\_\_\_ ቀን: \_\_\_\_\_
  - 2. \_\_\_\_\_ ቀን: \_\_\_\_\_
  - 3. \_\_\_\_\_ ቀን: \_\_\_\_\_
  - 4. \_\_\_\_\_ ቀን: \_\_\_\_\_

የጠያቂው ፊርማ: \_\_\_\_\_ ቀን: \_\_\_\_\_

ጊዜያችሁን ወስዳችሁ ያቀረብኩላችሁን ጥያቄዎች ስለመለሳችሁ ከልብ አመሰግናለሁ፡፡

**በቡድን ላይ ትኩረት ያደረገ መጠይቅ**

1. የጥርስ ህክምና ትምህርት በምትማሩ ብትጊዜ ስለተግባርልምምድ ያላችሁን እስኪንገሩኝ
2. ትምህርታችሁን በተቃራኒው (በአሉታዊ) ሊጎዱ የሚችሉ ነገሮች ምንድን ናቸው?
3. ትምህርታችሁን በአዎንታዊ ሊጎዱ የሚችሉ ነገሮች ምንድን ናቸው?
4. ከታካሚ ጎን/የወንበር አጠገብ ትምህርት ስትከታተሉ የመማር ሂደቱን ሊጎዱ (ሊያዉኩ) የሚችሉ ሌሎች ነገሮች ምንድን ናቸው?
5. ትምህርታችሁን ዳደኞቻችሁ አስተማሪዎቻችሁና እና ሌሎች ተመሪዎች) እንዴት ሊጎዱት (ሊያዉኩት) ይችላሉ?
6. በተግባርልምምድ ጊዜ/ወቅት ስላለው ግምገማና ስለሚሰጣችሁ አስተያየት ምን ያህል ውጤታማና ችሉ?
7. በተግባርልምምድ ጊዜ የናንተ አስተዋጽኦ ምንድነው?
  - ሀ. ከተቆጣጣሪዎችሁ (ከስተማሪዎችሁ) ጋር ያያላችሁ ግንኙነት እዴት ነው? ከሌሎች ዳደኞቻችሁስ?
  - ለ. የተግባር ትምህርቱን ለመከታተል ምን ያህል ዝግጁና ችሉ?
8. በተግባር ትምህርት አካባቢ ምን ለውጥ ማድረግ ትፈልጋላችሁ?
  - ሀ. ለውጥ እንዲመጣ የናንተ አስተያየት ምንድነው?
  - ለ. እንዴት ለውጥ ሊመጣ ይችላል?
  - ሐ. ለውጡን ሊያመጣ የሚችለው ማነው?
9. ቀረ የምትሉት/ መጨመር የምትፈልጉት ሀሳብ አለ?