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An Ethnographic and Appreciative Inquiry into Periodontal Chairside Teaching

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ABSTRACT

Purpose: There is no standardization of a teaching system that ensures producing the finest, autonomous dentists to provide the best care to patients. The main aim of this study is to identify good chairside teaching practice from a point of view of the dental staff and the students by means of an appreciative inquiry.

Methods: A qualitative data analysis was done using the Atlas. Ti version 8 software. The data gathered through clinical observations and semi structured interviews was transcribed into text and coded through the software using grounded theory approach. Appreciative inquiry was considered as an intervention in this study where asking a question prompted appreciation of what gives life to the community.

Results: The results were derived by making use of the four stages of Appreciative inquiry of visualizing, assessing, innovating and implementing, in a manner as; it initiated a description of periodontal chairside teaching and learning that is pristine in the institute by inquiring into patterns of excellence within this education system. Several factors are related to the prosperity of an educational environment in which the governing organizational body plays an important role. The influence of emotional attachment was also identified as a dominant factor effecting motivation and self-reflection.

Conclusion: The strength of this qualitative study using an ethnographic approach is that the researcher has insight into the topic of discussion by participating as a student and identifying factors involved in teaching and learning that might be disguised or hidden under the busy schedules and academic routines. A wider range of interpretation may have been possible in a larger study with multiple coders and multiple interviews. These evaluations can be embedded within the course to give continual leverage towards what is appreciated most.

Keywords: Periodontal Chairside, Teaching system, best care to patients

INTRODUCTION

In the late 1960's an Inter-regional seminar was conducted by the World Health Organization (The Work of WHO 1967, 1968) broadly concluded the problems pointing out that just as there is an array of variation in training of dental tutors and dental auxiliaries the same variation and differences exist in the adequate utilization of these personnel to provide teaching and care services in private or public health sectors. Furthermore, they raised the issue of the department of Medical health being prioritized over dental health in both man power and services apparently because dentistry was not placed in a position of responsibility. The dental profession has to make its path through the medical profession. Thus, a synergistic approach where the triangle of Medical health, Dental health and Government aid working hand in hand in order to achieve overall public health was coined.

Rationale for Chairside Teaching

Clinical education at chairside carries an utmost importance as it is not confined to teaching new techniques, rather, involves situated learning (Bloch, Lave and Wenger, 1994) which derives the experience from a wide array of educational theories and practices to produce skilled, competent and autonomous dentists. Chairside teaching is termed as the universal continuous need for clinical supervision, teaching and training of dental students while they are practicing on patients. (Wilson, Sweet et al. 2015)

A series of studies was conducted by (Sweet, Pugsley et al. 2008) to recognize the perception of stakeholders of one clinical setup and followed this study UK wide. These three case studies included a consensus workshop of wide over UK dental schools, dental tutors, dental staff and dental students and assessed their perceptions towards teaching at chair side. They pointed out that qualified dental auxiliaries with adequate training skills and trained dental tutors are necessity for the provision of pristine education. Moreover, the students were to challenge the usual status quo, and be explicit on their ideas of expectation of study quality. The students were recommended to work cooperatively with the dental nurses and the tutors to achieve self-assessment skills and to improve in competency. The main consensus from these studies gave an overview that, although, the teaching was similar in methods of delivery, all the educational trainers identified lack of student centered approach of teaching.

Inquiry as an Intervention

Appreciative inquiry (AI) is an intervention in itself. This method pertains to inquiring what's best already in practice and how to improve it further. In literal terms (AI) is the contemporaneous search for what is best in people, their organizations and world around them (Whitney and Cooperrider, 1998). It involves a set of dialogue that refers to excellence in a particular discipline and how it can be brought to improve and enlighten other aspects of the discipline that do not excel as yet. It teaches us that reality, though multi-layered, is an invention of language as change begins with the questions one asks.

Teaching in Periodontology

Traditionally competency in periodontics was assessed by means of making use of the Blooms taxonomy (Blyth, Bloom and Krathwohl 1966), which set the level of skills to high and low. Lower level skills include recall, comprehension and application while the high level skills include analysis, synthesis and evaluation. Although the interventions to allow maximum benefit to be gained by the students in periodontology is not new for example the use of models to allow efficient skill developments and the use of animals e.g. pigs head for development of tissue handling and to teach advanced periodontal surgeries including beveled flaps (Moore, Stacy et al. 1965), Clinical education in periodontology has long focused on the low level skills as proven by a competency assessment study (Albino, Young et al. 2008).

There is no standardization of a teaching system that ensures producing the finest, autonomous dentists to provide the best care to patients which leads to my research question:

How chairside teaching can best be improved in periodontology?

The main aim of this study is to identify good chairside teaching practice from a point of view of the dental staff and the students by means of an appreciative inquiry. The objectives for this study are derived from the four stages of Appreciative inquiry of visualizing, assessing, innovating and implementing (Reed, 2007), in a manner as;

- To initiate a description of periodontal chairside teaching and learning
- To inquire into patterns of excellence within this education system
- To imagine how models of excellence can be incorporated into future teaching and learning
- To implement the ideas into practice

METHODOLOGY

The method of analysis to be used for this ethnographic study is qualitative. Ethnography stems from 3 basic sources, namely, anthropology, urban sociology and community studies (Atkinson et al., 2001). Ethnography itself is not a means of analyses rather it is an overview or exploration of social processes or a social setting. The term does not imply the processing of neither collection of data nor the analyses of data. As the methodology is an ethnographic qualitative analyses, keeping in line with the research protocol, it aims to enlighten the otherwise hidden variables of the process of development of reflective thinking in a student or a tutor. This exploratory method has been known to be beneficial in analyzing patterns of human behavior (Creswell, 2007). Bearing in light the afore mentioned research strategy a specific research hypothesis is not generated before the actual study as to see what emerges from the exploratory nature of this pilot study. The detailed methodology is followed.

Participants

Ten postgraduate dental students from the department of Periodontology in BPP University Birmingham, UK, two dental nurses and two dental tutors teaching at this institute was form the sample for this study. This sample was convenient for the study in this particular setting. The participants was be divided in the ways of collection of data. These students though differ in levels but are all representative of the age, gender and credibility of the overall population of dentists in the UK.

Data Collection

The collection of data was done in two ways, by observing and by informal interviewing.

Participant observation was conducted in this study (Maanen and Spradley, 1980). As the term signifies, this means that the researcher was explore the subject with direct engagement. Observations was conducted during the scheduled days for clinical activity in BPP University. This was done two days every week as allotted by the institute. There is no optimum length of field work but a general idea is to carry on with the study until the researcher has gained adequate knowledge and understanding of the social setting. In this study, the time period of almost 1 month of field study using an approach of theoretical sampling (Denzin and Lincoln, 2005) for the allocation of time to observing sites. The observed data was transcribed into text as form of field notes. No consent form was required for this observatory data collection method. As these hours of clinical activity are allotted by the institute itself, no ethical approval for access was needed. Patient confidentiality was maintained and protected throughout the study and no information of the patient would be disclosed. Observations would include instances where the tutor interacts with a patient, discusses the proposed treatment or carries it out. Questions asked by the student or the tutor was also be noted to provide themes for analysis.

Informal semi structured interviews were conducted separately. The dental tutors was be individually interviewed by the researcher whereas the dental students and the dental nurses was be divided into two focus groups (Morgan and Scannell, 2003). The focus groups were consisting of five dental students and one dental nurse each. The idea behind inculcating focus group methodology is to include reliable and valid consensus of opinions where the interviews was more of a give and take informal reflective conversation. These interviews are to be tape recorded for the purpose of data collection. Invitational email was sent to the participants informing them about the subject of the interviews. Ethical approval from the School of Health Research Ethics Committee (SOH REC) was required for the conduction of interviews. A consent form was made prior to the conduction of interviews for audio recording and sent in the invitational emails. The anonymity of the opinions was also be maintained and informed to the participants. An allocated setting in the institute was chosen to conduct these interviews. The questions to be asked during the interviews were not pre formed as a result to exclude instances of giving biased impression about a subject. Questions are usually not posed before and in this type of study (Atkinson and Pugsley, 2005). The questions were

posed keeping in light a particular instance and having to inquire through appreciation of that particular instance.

Data Analyses

The interviews were transcribed into text and together with the field notes, they were transformed into data systematically using ATLAS.TI software for thematic coding of the data transcribed (Miller, 2000). These codes were generating a consensus of opinions on aspects of teaching and learning. This data was be used to identify teaching scenarios and techniques by inquiring about what is best or what gives life to the particular setting. The illuminative approach was guide the study to acquire a hypothesis. The software was be made accessible for use of data analysis. The data gathered during the course of this study was drive the generation of a hypothesis.

The proposed timeline for this study is portrayed via Gantt chart in Figure 4.3.1. This timeline is suitable for the study to be carried out efficiently. Exact dates of field study and data gathering can't be pre-defined.

Cost Analysis

This study does not have any hidden expenses as the materials required for this study are readily available. However, small expenses in cases of unavailability of literature and for the use of an audio recorder are expected. Overall estimation of the cost for this pilot study is around GBP 200.

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RESULTS

The observation was done during the month of April- May 2019. These observations were noted down on a paper by the researcher. The gathering of observational data was done during the clinical activity slot scheduled for the students. It did not require a permission to entrance as the researcher is a student himself. This data was then coded on the Atlas.Ti Version 8 software. The interview was then carried out during the months of September for the students and October for the tutor, respectively by the researcher alone. The identities of all the participants of the study have been disclosed and only available to the researcher and his supervisor. The identities of the students have been denoted by "S" followed by the number of the respective student e.g. S-1. The interviewer is denoted by "I". Out of the 10 students invited only 5 appeared for the research interview. The students who could not participate in the research gave their own professional dissertation projects as a reason for not being able to participate. The Dental nurse is denoted "N". Out of the two dental nurses invited, one could not participate on personal reasons. The dental nurse was inculcated in the interview with students and was referred to many times during the interview to authorize the different opinions that were coming forward from the students. She also provided her own experience and opinions related to the field of Dentistry. The interview was done in a room allocated by the university and it was recorded for a length of around 2 hours. The audio recorded was later transcribed into text by the researcher and coded using the Atlas.Ti V 8 software. The transcription was done manually by the researcher as no software was able to pick the different accents in which the participants spoke.

The tutor interviewed and observed during this study was the Head of department of Periodontology. The identity has been disclosed and denoted by "T". The dental tutor was interviewed in the last step of data gathering so that the researcher had the chance to include opinions of the students and the dental nurse as well. The interview was recorded for a length of about 1 hour and 30 minutes. The audio was then manually transcribed into text coded by the researcher as no software was able to pick up the accent correctly. The coding of the data resulted in a total of 42 codes from 3 documents. The audio was not used to code the data. The codes were generated by marking quotations in the transcribed data. All three document quotations and their respective codes have been attached in the Appendicle 10.6-10.8. The quotations are marked with numbers following their respective document number e.g. 5:13 represents the 13th quotation from the document number 5.

Semantic linkages were then formed between the Codes and quotations in the form of Networks. These networks provided the result of this Ethnographic and Appreciative inquiry which shed light to patterns of learning and educating which have a high influence on the overall wellness of all the members of an institute. The main aim of this study was inquire into chairside teaching and how best to improve the way students can learn from it. Instead, the results of this study showed learning through observing and listening alone does not guarantee reflective practice unless certain elements are already in place. Moreover, this study also authorized certain opinions held in the past regarding teaching by humiliation that it only renders the student incapable to reflect. The results are mainly focused on the communication level between the students and the staff that it provides a healthy environment for the student to indulge and critically reflect on the scheduled academic activities. However, this communication gap if not filled can also lead to experiences of de-motivation for both tutors and students. If this gap is not filled in time it may lead to a vicious cycle of continuous de-motivation and a very unhealthy environment which has been proven to be a complete barrier in the way of reflective thinking. This study also focuses on the impact of student centered education which basically relates to a tailored education system based on the students' needs to allow future competency. The idea of teaching through encouraging, interacting and motivating a student in a friendly behavior not only helps the student to indulge more but has also shown to improve his/her knowledge of its application. This can be sighted as reflective practice where the environment motivated the student to spend more time and indulge more in academic activities, which eventually increased the student's interest in the topic and allowed the students to reflect on how to improve and excel in the particular fields. This in turn motivated the tutor to be even more active to dispense knowledge or tips wherever applicable and helped form a bond of trust and respect with other students as well. Furthermore, this study also showed that ample time management of the scheduled routines and its work division is necessary for both the students and the tutors to prepare for the following activity. This showed to be of importance from the students' point of view as it would allow the time to critically reflect on the activity

carried out and possibly have the chance to discuss with their colleagues or seniors. Work division and not having more personnel was seen as a de-motivating factor for the tutor as it had the tutor busy at times when the student wanted to interact with the tutor during non-scheduled timings. All the findings of this study are represented separately with their respective quotations and code networks as follows.

The appreciative approach used in the interviews helped identify the factors that helped the students to be able to relate to their disciplines and appreciate what they already know is best. Figure 1 shows the network of semantic linkage between the codes. It was discovered that student centered education was amongst the most motivational factor all the students. One of the students, when asked on how it was to experience rules and regulations in a different Country, the student said,

“S-1: Ok, um, I think our institution is put in a way that it gives us experience in real life clinical settings which is important for us being from Asia and from different back grounds. UK functions very differently from everywhere else, so we're here when we actually get to see the actual patient come in and the procedures that go along with it and how to handle things, how to record things, how to keep everything, how to save yourself from medico-legal backgrounds, everything is practically done in front of you instead of reading it in a book.”

These instances were coded as indirect learning pattern induced in the students where they were shown of how things are carried out in a different country. This also builds respect between the students and the staff members where they understand the different cultural backgrounds and how those experiences can be improved.

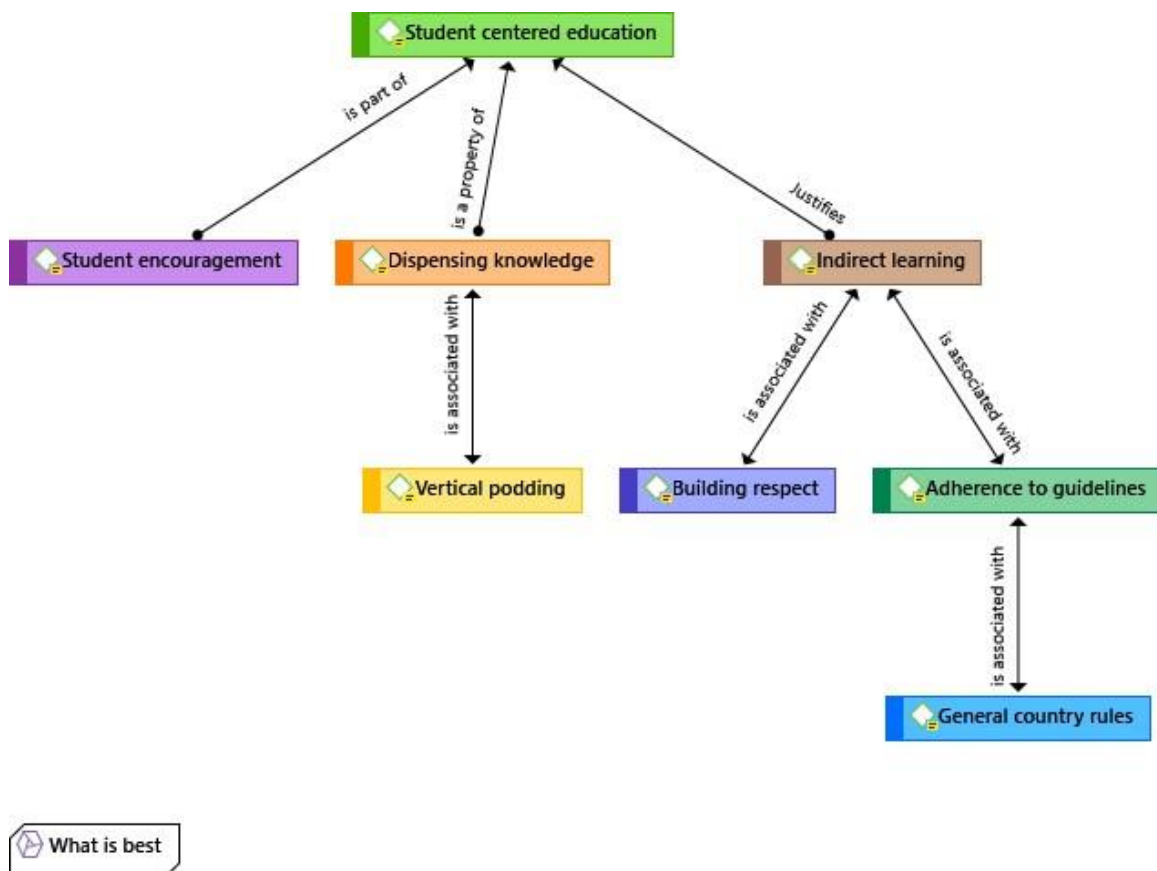


Figure 1 - The Network and relation of semantic linkages between codes generated through Atlas.Ti V.8 showing what works best in this institute. This Figure shows what effects student centered education. The codes are colored.

This statement was approved by almost all the students as each student that was participating was from a different Country than the UK. The students inculcated were part of a 3-year post graduation programme in the institute majority of which were belonging to Asian backgrounds. Another student agreed by saying, “S-5: Yea, I agree to that because we have been following few guidelines, especially (Name Disclosed-Dental nurse [N]) has been helping us with that like PPE's and the guidelines, these are not the things which we learned back there and this is something new here that we learnt.”

These aspects were coded as being the general Country rules in place in an institute. The interview leads to the students being asked to share how their experience of a clinical setting was before they arrived to a new country. A student was reported to say,

“S-3: Yea i think, a very different and very orthodox and very innovative approach in terms of learning in this institution. There was no ideology back in our country to do evidence based dentistry so we are blessed with this skill and we look forward to deliver this skill in the near future as well. In terms of clinical aspect, yes it's really different to be in a very organized environment where you are getting quite of an exposure in regards to how personal equipment and how protecting yourself and even documentation of the cases and taking pictures. So i think overall it was a very unique and very different experience in terms of learning in both clinical aspect as well as academic aspect.”

He further said,

“S-3: I think the first thing to start off was the flexibility of this programme. It was more of a very student based learning which is actually a very marvelous prospective because the back ground which i come from at least it was more of very teacher centered education which i would say a flipped class approach in which the teacher would just give you information and you have to follow but over here the situation is vice versa or i would say different, where the students themselves have the opportunity to develop the ideas and develop the curriculum and then go to their tutors so, it's hand to hand learning with a lot of clinical interaction as well.”

The aspects although a part of student centred education also lead to the motivation and encouragement of the students to be a part of something new which eventually excites them and develops their interest. This motivation and thirst to achieve more was the major factor behind any academic activity being a success. May those be lectures or clinical activities, the interest if maintained by an overall healthy environment allowed the students to programme themselves to reflect and self assess. Moreover, the students were motivated to be self authors of their lives as a professional and experience personality shifts which in turn increased their competitiveness.

These opinions shared by the students alone made sense when linked to what the Tutor had to say,

“I: Sir during, when you are working on a patient and the students are standing next to you. Do you like to question them? Do u like to ask them questions?”

T: Yes. Rather than ask questions, because it's not nice to put people in a condition of being shy to answer. We have different; this is the first thing that comes into the education teaching. So, if you put students in a way that that they are basically taking like an exam in front of the other mates, other pairs or the patient, will bring on the student a big pressure that is not what we want. The big pressure is not favorable for any learning, it's not favorable for a good atmosphere, it's not favorable to basically to make the student committed to study more. You give hints to the students not questions and then you can discuss later.”

The tutor has had an experience of teaching of 25 years. The tutor belongs to European background and was working in the UK. The tutor when asked on his role in teaching had to say,

“I: So what makes you work for the students?”

T: because, because we cannot exist if the students are not there. So the teaching role is because the students are there. If the students will not be there, we are not supposed to stay anymore.”

The tutor understood the barriers of belonging to a different culture and was very keen on maintaining a healthy relationship with the students which breaks that barrier of culture and allows the freedom for students to experience the bargain of knowledge on an individual level. This allows each student to fabricate his or her own views of reflection, which basically relates to a student being a self author of their own ideas.

These instances of building respect and student encouragement were also noted during the observatory data analysis. The tutor often would come up to the students, if they were appointed in different pods, to inquire their views on the outcome of an alginate impression of a random patient. This got all the students involved in the treatment process. There were instances where the tutor would ask the student to chart the basic Periodontal Exam (BPE) for a random patient. If any student unfortunately fails to correctly chart each segment, the tutor was observed to politely ask the students to go through the Guidelines of BPE charting and discuss it with him for any misconceptions rather than scolding the student. This particular behaviour allowed the students to freely participate in activities without the embarrassment of being humiliated in front of their colleagues. The senior and junior, full-time or part-time students were all grouped together in their clinical activities regardless of their respective year i.e. vertically podded. This helped the students to discuss amongst themselves and reflect on the particular treatments carried out. One of the students was reported saying,

“ S-5: Yes, the faculty is working and we can't ask them because we're there with the patients so we discussed amongst ourselves that why do you think what is he doing and then we come up with our own point of view that he is doing this because of this, he is doing this because of this and if we're not sure then we ask them. But sometimes we just discussed within ourselves and we find the answer, we do that.

I: There are some point that actually arise at the same point and moment S-5: Yea so we just speak to each other

I: But, how many times, has it happened that you have sat down with your colleagues, different students after the patient has been done, have you talked about it?

S-5: After each patient? or after the entire day?

I: After the Patient, after each patient. More of a debriefing for own yourselves, if for example there was no personnel or no supervisor to support you, did you take the responsibility on yourself?

S-3: Yes, i did take one of the part-times and i discussed the cases I: Okay

S-3: I got the chance to be with part-time student, whose name i'll keep disclosed I: That's fine

S-3: But once the session was over, I and she were sitting and we discussed all the cases throughout and what she did in the treatment.

I: Anyone else with the experience?

S-5: Yea, yea we do discuss the cases. Because during the patient we don't have time and as I said they have patients coming back to back so it's not possible to have briefing of each patient but yeah we do discuss it especially at the, at the end of the clinical observation we have time and we write notes and at that time actually, we can focus on each and every point because we are helping them with the clinical notes.”

The dental Nurse involved in the study had an experience of teaching of 13 years and was a local in the UK. The presence of the nurse in the interview lead to sieved opinions coming from students in a way that no opinion was far from reality and deliberatly constructed. The dental Nurse was asked,

“I: How would you think of the statements and what would you add because of course of the experience that you had in different institutes

N: I think I completely agree; I think we do have a very wonderful facility. I think that we were very lucky that, as you say, if something needs to be ordered, it's pretty much ordered, it's rarely gets a no about anything. That goes on for the clinic as well, if we need stuff for patients or anything, we do have that. Whereas if you went into to an NHS sort of say, Birmingham Dental Hospital, then you can only order so much stuff and everything is monitored while we're much more flexible with that.”

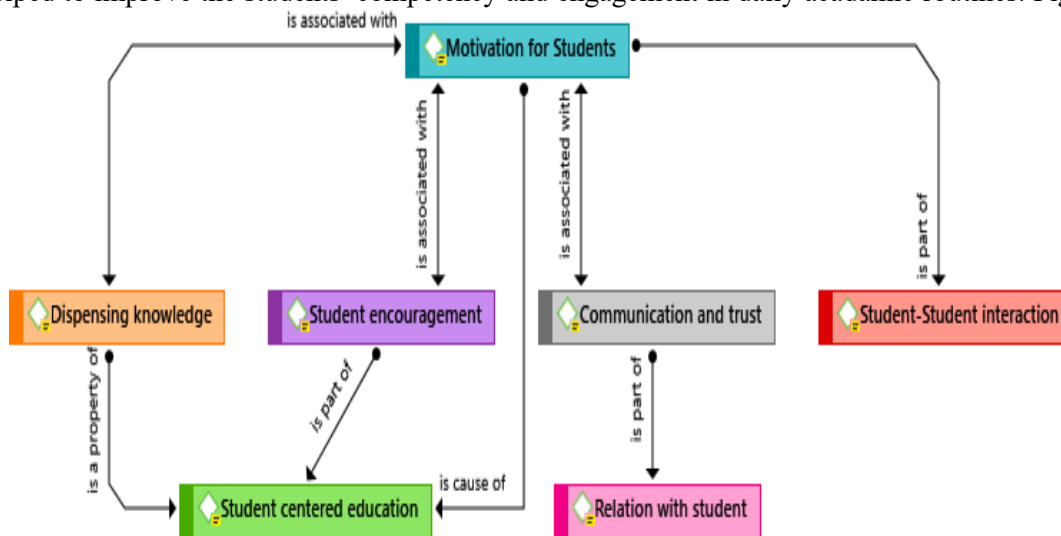
She was reported to further say,

” N: Oh, I think I agree with what everyone said and I think that it's, it's a really good experience for you guys because you are having all aspects of everything, so you are having your lectures, you're having phantom heads and you're also on clinics so I think it's really good for you. I mean, obviously what you do back home and stuff I've got no idea about but I can see. How, just listening to briefly, how what we do here in the UK is so different to maybe what you do there are so maybe it's a good insight of what we do here that you can take back and use when you're back home.”

This discovery of what is working best helped the researcher to assess of what was giving life to this community and how the indication of these modifying factors can directly affect the overall experience of students and tutors.

Influence Of Emotion

The difference in cultural backgrounds of the staff members and the students' resulted in the discovery of a sight that can be held as a basis to move forward. Although bridging the gap of communication gets difficult when different backgrounds having native tongues are involved. Although the standard and National language is British English, the accents and dialects seemed to vary person to person depending on their backgrounds. This happens to be a social phenomena where although the language is the same, the dialects vary region to region in a country. The researcher has been a part of the insitute involved in this study for 3 years as a student and kept this experience of belonging to a small community to carry out an ethnographic approach. This approach helped identify factors that motivate the students to increase their adaptability of an environment and also helped the tutor to evaluate a student. The motivating factors also helped to improve the students' competency and engagement in daily acadamic routines. Figure 2. shows



the codes related to the motivation of students. As shown by the figure, these motivational factors are directly linked with what was found to be the best practice. The motivational factors themselves were dependant upon other factors such as the relation of the students with their tutors and the relation of the staff members amongst themselves. Moreover, it was identified that communication may it be a simple Yes or a No was appreciated way more as preferred to no communication at all. This communication helped build an environment of trust and respect where even at times when the staff is restricted by the organizational guidelines, the students showed to understand the guidelines and adapt to it rather than complain.

Figure 2- The factors involved in the motivation of students and their semantic linkage with the discovery of what is best. The linkages are generated through Atlas.Ti V.8. The codes are colored and their relations shown.

This communication is a two way concept as identified in this study. Which basically means one way talk coming from the tutor alone only helped the students to learn from the tutor but a complete acceptance of what was being taught and no mirroring lead to be identified as a demotivational factor for the tutor, where the tutor was quoted to say,

” That is bad because I need to have even the bad feedbacks from the student whenever they, the teaching is not good because otherwise I will always think that everything is going smoothly while it is not and at the same time I don’t have the tools to bang my hands on the table because there is no claim or there is no..

I: So sir you could say communication could be one thing that if we improve communication, learning can be improved

T: Well it is not communication I would say, feed-backing huh? Let’s put it this way. Let’s use this term.

I: Positive feedback?

T: Yea. Constructive feedback.”

Figure 2. shows the linkage of constructive feedback as a code having a thematic link with what works best in the institute. The tutor was reported to further say regarding constructive feedback,

“ Because I think that without that even my job is difficult because I cannot improve I don’t know where are the areas I can basically work out the improvement and I cannot give the people over there the chance to understand what are the, the problems which are the problems and I am not able to provide any evidence.”

The tutor identified that because the students belong to a country where the way of educating is different , the students tend to accept all that has been taught. He emphasized on the fact that challenging a teacher is not only important for them but also for the tutor. The challenge of questioning the ways of teaching help create a sense of reflection in the tutor where the tutor is forced to critically reflect on his ways of teaching. Teaching can be divided into two components. The content of what is being taught and the way it has been taught and represented to the students.

Although, these motivating factors clearly encouraged the student to participate in the scheduled activities and increase their competency skills as based upon the tutors judgment, communication was identified as one factor which is left un attended can lead

to demotivation on a holistic level. The influence of having a bad experience is directly linked with human psychology where on one hand the student experiences dissatisfaction and disinterest to a point where the student no longer feels motivated to reflect on the academic routines. On the other hand, because of no communication the tutor feels that the student is not interested in either the way of his teaching or what he is teaching. The discovery of these instances were not a

Figure 2. - The semantic linkage of how constructive feedback is linked with communication, which in turn is a motivating factor involved in what works best at the institute. The linkage is generated through Atlas.Ti V.8.

result of direct miscommunication between the students and tutors but majorly because of

a gap left unfilled between the communication of the ancillaries with the students or the ancillaries themselves. These emotions coming from a bad experience were a major cause behind barring the students potential to efficiently learn and making it even harder for the tutor to evaluate and improve the student. Many of the students had a consensus opinion where they were reported to say,

“ S-2: There is lack of communication S-5: Yes

S-1: Yes

S-2: between the administration themselves S-1: And the clinicians

S-2: So one person said something that I told that person, that person says but I told that person. There is no teamwork, there is no communication eventually between it. It's eventually an us and a them. We want a we, like keep us in the loop, communicate with one another and inform. We just want to be kept in the loop. What is happening? Why did you do this? Is it happening? Is it organized? Not happening?

Not like oh, it didn't happen. So, we just prefer to be, you know prefer it to be more, more communication between the staff, between the students, between themselves. That is key

S-1: And promises should be met I: Promises, as in?

S-1: As in like, what's meant to be done this year should be done this year S-3: Academic commitments i think

S-1: Commitments

S-3: Commitments that have been made

S-2: Objectives that were laid out that this is what we will be doing, S-5: Should have been done

S-2: Should have been done. Not that a year passes by, and now you have cramped it all in one year.”

These opinions were presented to the tutor to which he was reported to say,

“The big problem is that there are 2 main compartments in this place. There is the academic side which is mostly, I would say admin and there is the clinical side that works out as a clinical practice in the, in the area. A private one.

I: So there is...

T: So there is no relationship between them. So there is no commitment from the people involved in the clinical side in proper teaching.”

This was further observed as a case of what was seen to be missing as the dental nurse was quoted to say,

” N: No, no, no i was sad to agree with all your points and it comes across frustrating being part of the team when you're trying to get things organized and maybe one person is not keeping you in the loop. So we felt frustration from our side and you feeling from your side. I think things are being put in place to make it much more structured and more organized because we've only been here for a few years years, things have been moving over and things have been changing and we have new members of staff starting. And people like to do things differently etc. etc. It's not fully established in that respect.”

Thus these opinions prove how emotions have a major role to play in efficient learning as well as teaching. Emotions and feelings bridge the gap of passion and contribution towards the passion. Emotions are the criteria to which the students and tutors relate to an experience being bad or good. These experiences are crucial as seen by the semantic linkage that they drive the learning experience of the student in its own way. The student develops his own idea of the subject which in turn creates authenticity. This leads to an increased relation and interest in the subject thus guaranteeing critical reflection from students. The basic aim is to have the students realize their real possibilities and become responsible members of a wider social community towards which they feel committed or responsible.

The Organization as A Factor

The stake holders perception was deliberately not considered in this pilot study. Although the organization rules and guidelines of the particular institute under study were found to be of importance in regards to their relation with efficient management of daily routines and appropriate work division. The factors identified amongst organizational settings as a code were also coded to develop their relation. This led to the discovery of a connection between the academic personnel and the work load. The institute under study was a fairly new organization that had come into existence a few years ago. The Tutor involved in this study was managing both the academic routines and clinical activities of the students

all while simultaneously attending to a private clinic which is attached with the Private institute. Due to this reason, the work load was above average for the members of the teaching staff. This was identified as a having a major impact on creating the environment for reflective practice. Figure 3. shows the relation of inefficient work division amongst the staff members which in turn leads to be a demotivational factor for the tutor and the students. Amongst the factors of demotivation were time management of the activities to be carried out and not having enough academic personnel to facilitate efficient scheduling of the daily academic routines.

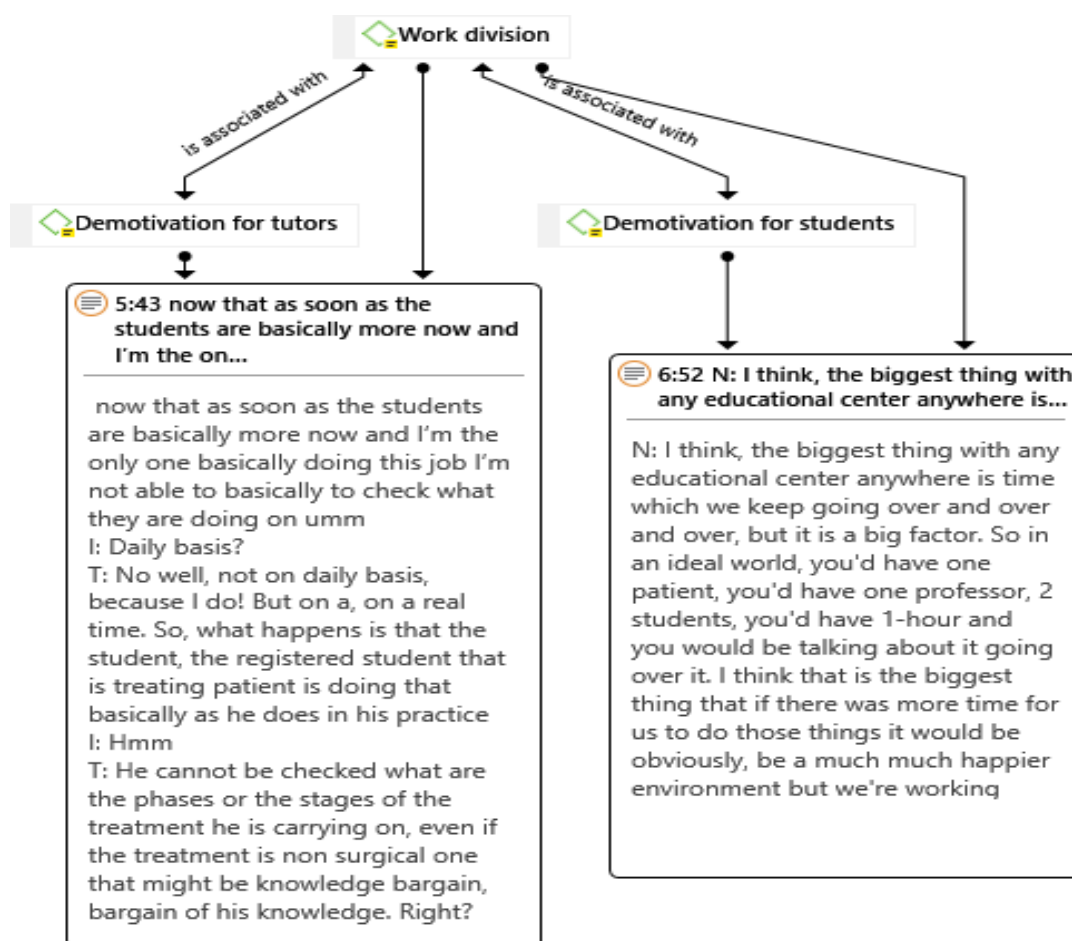


Figure 3 -The network of semantic linkage generated through Atlas.Ti V.8 showing the direct link between work division and de-motivation of both the students and the tutor with their respective quotations from the data gathered during the interviews.

The students were asked to explain how time management can help achieve a better environment to which they said,

"I: So, do you think organizing the timing would make it better? As you said there is one supervisor and 6 students, do you think separating the students and organizing different timings and different slots for students would help that?

S-5: Yes of course.

S-2: Yea, keep it on 2, for example, 2 different days, half the students do something else while there is observation and next day they swap over. You know, to make it even not too hectic for the supervisor." The schedule put in place which guides the daily routines also has in impact of allowing ample time for the students to critically think on particular instances of interest. This can be explained by the statement that,

" S-5: That's true but the appointment should be more spaced out I guess because you know, the next patient is waiting so we can't keep them waiting so i guess, after every patient we should have at least 10 minutes' discussion with the students of briefing of what we did, why we did and then the next patient should come

N: Yea

S-5: If they come immediately then even we don't have the opportunity N: I think this is another thing where time is

S-5: Time

N: Time. And i think unfortunately because we don't have a lot of Clinical time you have to you now".

The influence of scheduling prior to any activity can be justified by the tutor reporting to say that, “ So, are there any specificities that you would think that are really crucial for when a student is observing his supervisor or her supervisor? What is the most crucial thing for a student at that point?”

T: The student needs to know what is the procedure. So basically you cannot go in the operating room without having any idea of what they are doing

I: Briefing and de briefing?

T: Exactly and this again is something that I always promoted. When we are doing a particular procedure you need to know the case you need to know what is the benefit of the procedure and how the procedure is done because at that point you might comment in a positive or in a negative way what you observed. You can do your reflections and you can basically appreciate more what are the main obstacles and problems that this procedure is bringing.”

Figure 2 and figure 3 show the linkage of time management, schedule and academic personnel on demotivation of students and tutors respectively. Moreover, the figures show how these factors are interwoven with what was identified as a crucial factor to appreciate what is best and build upon. Demotivation has a direct impact upon experiencing a situation as observed. Growing through good experiences allows the students to not only be a reflective self author of their ideas but also allows the students to appreciate the efforts and feelings of their peers and colleagues.

Figure 2- The network of semantic linkage showing factors involved in de-motivation of a student and how it is linked with work division. The network is generated through Atlas.Ti V.8.

Figure 3 - The network of semantic linkage showing factors involved in de-motivation of a tutor and how it is linked with work division. The linkage is generated through Atlas.Ti V.8.

Unwrapping the idea of briefing and debriefing before and after clinical activities lead to the identification that ample academic personnel allowed the time to carry out the discussions which was also authorized by the Dental nurse present in the interview,

“I: Past students have gone to the Nurse for briefing and debriefing. Perio students, have you ever had the chance of going to a dental nurse to ask?”

S-5: Earlier we used to, now the patient flow is increased a lot so even you are busy, everyone is busy

S-1: I think there is more of you guys

S-2: There are more students and they are less, like i said S-5: More students and less teachers

S-2: Yes, teachers. That's what they are lacking

S-5: Yea. so it's not our fault, it's not your fault, it's not anyone's fault it just lets people.

N: I think i do agree with you actually, when I do think back to before, we had more time with the patient and the discussion and stuff as well but as as the patients increased and we had more part-time students working on the clinic. So everything just has got a bit of busy so that time is gone. So, yea i think we need to work together in some way to actually incorporate that back into the clinical environment.”

Dreaming For the Future

Discovering the things that were giving life to this small community, the appreciative approach demands to dream about how to best build upon these factors and identify what is missing.

The interviewer asked for the students opinions on how to bring about a positive change in what seemed to be functioning inefficiently. The same questions were asked to the tutor aswell as it had been identified that work division, schedule and academic personnel are amongst the factors that require improvement. Figure 4. shows the linkage of a possible design for future considerations whre time can be managed more efficiently in a way that it allows time for the students to be critical in their analysis of the clinical activities.

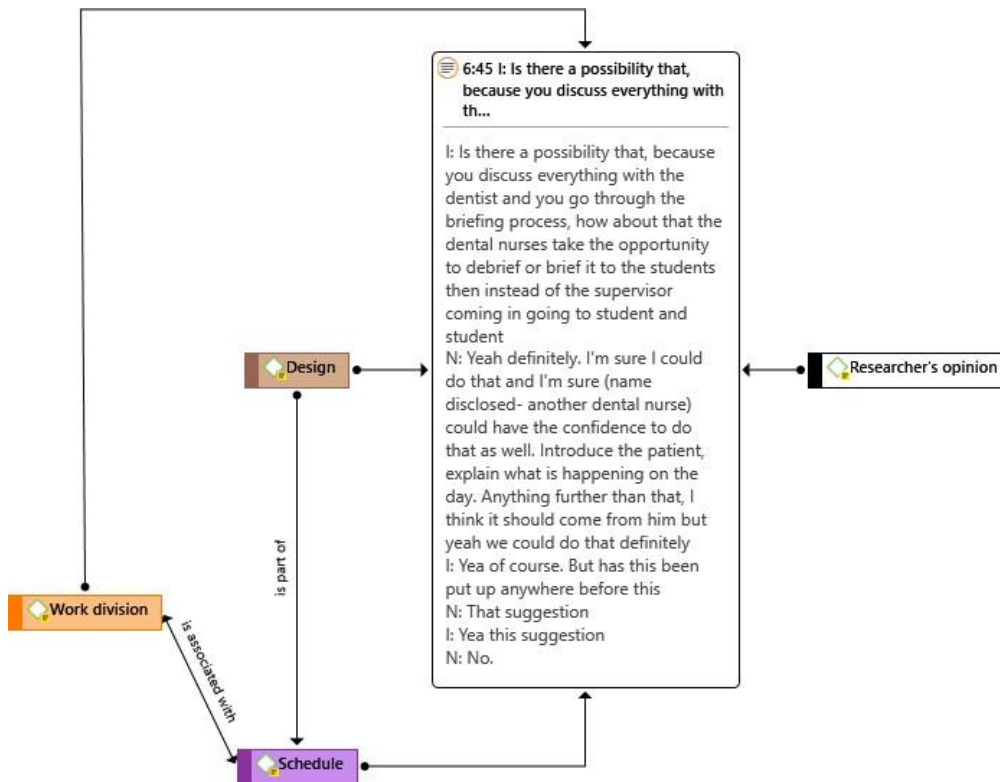


Figure 4 - The network of semantic linkage of a possible future design with its respective quotation and its linkage with the identified codes. This network is generated through Atlas.Ti V.8.

The tutor when asked on these aspects had to share his own personal experience in teaching in a different country. Although that institute which he mentions is a government institute but it provided with a possible design that can be kept in mind to ease the process of teaching and learning. The tutor was reported to say, “Having said that umm, they were having, we were having especially in, in the department three or four appointments each pod.

I: Okay

T: There was running only in the morning so we are not talking about the full day I: Yes

T: Was just only one session. Four cases okay? That depends if they were simple otherwise there would be two cases or three cases

I: Yes

T: One supervisor each pod or one supervisor for two pods I: Okay

T: And then there was basically this kind of protocol, before the patient was going in the students were supposed basically to give a brief overview of the case what was the case planned for, what was the, the surgical armamentarium we should put in place because he was organizing the table not the nurse

I: Yea the unit

T: Right. Then what was the incision outline and everything was commented about the story of the periodontal disease and it was treated which were the aims and objective, which were, all the case description, the surgical treatment itself and the post-operative instruction and the follow up. The supervisor was having the chance to, basically to say to the students I’m happy with this you will carry on I’m not happy with this u might not carry on and I will do it

I: Yea

T: If this was basically able to carry on the student was getting the patient in and doing exactly what was debriefed before

I: Yea

T: After that it was asked to every student to, to appraise and comment what was, how was the surgery. Like in a personal way

I: Hmm

T: I was good in this I was bad in that and then it was matched with the same comment done by the educator

I: Okay

T: And this was made a comparison, if there were fitting and matching that was a key that was basically perfect.

I: Yes

T: If they were not matching there was a third person coming in and checking why there was no matching, there was like a lie from the students' side or it was lie from the teachers' side."

This not only gave an idea of what could be designed for the future but also authorized the fact of Peer reviewed teaching where the teacher is able to improve as well as taking into consideration the benefit of students. The tutor had the experience of teaching in this manner already and was reported to be happy to create the same environment again provided that the organizational factors are dealt with. The experience of having a multi cultered group showed to have an impact on the confidence of the staff members where the dental nurse was reported to say,

"N: Yea i think, you just have to learn how to work with different people and sort of see what their strengths and weaknesses are and then maybe on the strengths leave them but the weakness you can bring up to the level that they can be quick and make it a strength again. I worked with so many different people I think it's naturally just, I don't know, i can just work and do things and work with people in a very good way, I think it comes in time

I: Yea

N: With students I don't know I think, again I can see when I'm looking at you guys, who is getting it who was not getting it, yeah I do. I can just naturally just see what's going on with people, people aren't focusing very much, I don't know, is just

I: Yea because of experiences. N: Yea."

A lot of the factors identified were merely there because of the majority of opinion although some of the opinions had to authorized by the organization as well. One instance is where the students came up with the idea of having non permanent staff members who are recruited on a monthly contract to basically just help in addressing and filling these spots that are left unfilled. The tutor, when asked to speak on this topic showed that this idea was not something unheard of as he had experienced it back in his home country. He was reported to say,

" even if you think that in Italy the, the staff members of the universities are not permanent staff members. So, they are most of the times we have umm, the teaching run by trainees, trainee's right? Or done by umm, like a not permanent staff member

I: Part-time, part-time?

T: Well I would say non-permanent because you might be part-time or full-time I: okay!

T: but you are not, you are not a permanent member of the staff."

Technology was seen as the instrument to aid both learning and teaching. Although the fascility had the cameras installed, it was identified that lack of acadedmic personnel was a factor still impeaching in this domain as well. Figure 4 explains the link of technology with academic personnel and how in turn it leads to affect the motivation of a student or a tutor. The students also showed interest when speaking about media equipment but lack of personnel to adequately manage the equipment was a demotivating factor. The availability of personnel and fascilities was directly linked to the organizational rules in the institute and thus need an authorization to move forward on.

The students have already had the experince of using media equipment and provided a plan to make it's use most beneficial which was also authorized by the Dental nurse present in the interview,

"S-1: Like the professor has to teach us something so he will teach us on one camera that focuses on just the one

S-2: A few of the students stand around him and the others can see from the camera N: Yea

S-2: That is very good because then not all the students are just around this one patient. There can be two in the surgery and two can be in the room and then they can just swap over when the next patient comes in

N: Yea

S-2: I like when he's speaking you can look at the camera whatever S-3: That was really helpful

N: We tried it before but because of the camera position, it just didn't, didn't work out very well but we had (name disclosed=T) open to stuff and we had a good experience but the camera was not positioned properly but we are working on that".

Considering the impact of communication, a future design can only be imagined and worked on gradually in time. The tutor shared his opinion by saying,

" So sir, as we said that the relationship between the staff the dental tutor and the organization is very less communicative. Sir, what is the possibility for improving this relationship?

T: I told you there is a big, big job that needs to be done and it needs to be done from the person who is leading, first.

I: Hmm

T: And then from this example going onto the others, the thing is that the communication issue needs to be, first of all starting from the idea that everyone is absolutely on the same picture to understand that this place is for the students then having said that, there are a lot of potential work out that can be organized for. First of all, we need to be on the same, on the same picture willing to go ahead for the benefit for the students. If this is not the first point of our commitments there is no chance to work out anything, number one. Number two; there are a lot of changes that need to be done in terms even of mentality

I: Mentality?

T: For the ancillaries you mean I: Okay

T: The mentality means that you need to think what is beneficial for the student, not beneficial for the clinic for the, for the earnings or for you see what I mean. This place will change from dark to light if you would be able to have the temporary registration and if the staff members would be um, persuaded to work out for the benefit of the students. If these two things will happen, this place will be the best in the country. Not because I'm here.

I: Yes

T: Would bring the money would bring the chance to enroll and hire new people. You see how many things can happen?

I: Yes, yes. Automatically the whole

T: We would be able to bring the programme to a different level because we would be able to ask for, maybe for recognition from the European Federation of Periodontology(EFP) and whatever"

Thus these factors discovered during this ethnographic and appreciative inquiry have a major influence in maintaining a very healthy environment which in turn automatically promoted reflective practice in the student allowing the student to gain more knowledge and to always end up asking for more. These factors can be used to build an even better environment for the future.

DISCUSSION

The resulting opinions and views shared by the participants of this study were majorly in accordance with the findings of the previous work done in the field of periodontal education. As seen that when the communication level between the staff members amongst themselves or with the students is not strained upon, the students become demotivated to participate in activities. This not only decrease their interest in the subject but also leads to inadequate reflection of the subject. This prevents the student to develop skills needed to excel as a competent health professional as suggested by (Albino, Young et al. 2008). For an efficient flow to be maintained which delivers pristine education (Lawton 1976) suggested the availability of adequate ancillaries and qualified chairside assistance. This was also one of the findings of this study where the tutor shared his opinion that the quantity of staff will only help the institute in certain ways but to bring about an overall improvement, qualified staff is an utmost necessity. According to the results of this study, qualified staff can have a major impact on influencing the students

to be more interested in academic activities and in turn motivate the tutor to be more competent in dispensing knowledge.

Another factor which helped the students to reflect individually was a factor called as vertical podding. (Gilmore 1973) and (Bellanti, Wiggs et al. 1973) mentioned this phenomenon where students are grouped together to allow sharing of different perspectives and ideas. This method was inculcated in the routines of the students involved in this study and showed to improve on how they reflect on the particular clinical activities even when they cannot speak to the tutor directly. The results of this study are in accordance with the Adelaide study (Greenwood et al. 1999). This institute allowed the students to challenge the status quo and ask explicit questions which triggered critical thinking in students. The tutor was open to any type of question and was reported to say that, "No question asked is right or wrong". The idea behind asking questions to stimulate interest in students where the student becomes an individual learner rather than a dependent learner. The observation data gathered in this study was in accordance with the data gathered in the study (Behar-Horenstein, Dolan et al. 2000). The tutor was often seen to be communicating with the students during the clinical activities. These questions were not simple questions leading to a right or wrong answer but required to student to reflect upon his understanding of the issue being discussed. There are certain instances where the tutor was seen to ask the students to provide the correct brushing technique to be used by a random patient. In cases with complex medical history, students were asked random questions on their knowledge of the medical condition for example a patient came to the clinic who was suffering from osteoporosis. A random student was asked about the roles of bisphosphonates. These questions helped the tutor evaluate the student and also encouraged the student to think of the clinical situations in a different aspect so as to appreciate and reflect on the best practice. In other cases, the tutor was freely looking to dispense his knowledge and experience in teaching where during some procedures that dentist would give some tips and tricks to the students for example while giving infiltration local anaesthesia in lower anterior region in the labial vestibule to a patient the dentist held the lip of the patient with his two fingers, index and thumb, and starting jerking the lip politely. The dentist then asked the student as to what he did. Upon realising that no student could answer, the dentist told that this is a trick that he learnt during his years in practice where, if the lip is moved while giving the anaesthesia the patient does not feel the pain while the needle penetrates. These helped promote indirect learning instances in the student. The results of this study were also found to be similar to the results of the workshop by (Wilson, Sweet et al. 2015). The instance of teaching without humiliation provided a healthy environment for the student reflect freely without the barriers of facing social embarrassment. Student centered approach of teaching was seen as the best method of teaching provided that the ancillaries in the institute are efficiently qualified. This approach allowed flexibility for the students to guide their own understanding of a particular topic or the overall field of periodontology. This environment helped create a bond of trust and communication between the students and the tutor. The role of the patient was also considered in this study as being the third major pillar in the triangle of providing health care. The tutor was reported to say that although this is a private university the patients come first. And if not second, then at the same place comes the student.

Although grouping of students from different academic years was a factor in practice, adequate use of this phenomenon could have helped increase the efficiency as stated by the study (Shiloah, Scarbecz et al. 2017). The students did not practice self-assessment and thus evaluating experiences of students from the tutor's point of view was difficult. Evaluating self-experience was not possible as well by the students because in this study there was not enough interaction amongst the students which could help generate self-evaluation of students amongst themselves as proposed by (Deeb, Carrico et al. 2019). The results of this study show that some factors of education are still being implemented and worked upon while some factors which have been developed are being emphasized upon to make them even better. The reason that some things are still in the developing domain is because the institute under study is a new private institute.

CONCLUSION

The nature of this study is such that the data gathered during the observations and semi structured interviews guided the way forward for the researcher. Upon asking a question of appreciating what is best, the views lead to discovering the emotional dynamics involved in the process of teaching and learning. Moreover, the schedule put in place by the institute and the academic personnel carrying out the duties directly correlates to the thriving of a social community. Having more personnel with unidentified duties was also a factor which further focuses on how more number of personnel alone is not enough to ensure a positive environment for teaching and learning. The results of this pilot study are directly linked with the work of (Kreber, 2013). Authentic teaching stimulates authentic learning. Which iterates to the fact that a tutor authentically engages in teaching avoiding compliance, having a willingness to challenge oneself, inviting students to authentic conversations about the subject, placing individual reflective goals as evaluated by the students behaviors, doing what is most important for the interest of the students (student centered education) and fostering in the students the dispositions which motivate them to contribute towards their passion which in turn is a contribution towards society.

This study is based on the results gathered from a data collection of 1 year. The data analyzed has given rise to further explore the dynamics involved behind the way of teaching instead of the didactic methods and thus requires a realist ethnographic approach. The findings of this study can be used as a basis to validate the instances as such that the same semi-structured questionnaire can be used to evaluate perspective of students all over the UK or if not, then a wider community. Furthermore, the factors identified through this grounded theory approach can be embedded within the course programme to give continual leverage towards what is appreciated most. A wider range of interpretation of this study with multiple observations and interviews conducted again with the same participants would ensure further reliability of the arising data. Another factor that may help improve reliability is the presence of another coder in the research. The coding of two researchers could then be compared and analyzed.

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