Abstract

Introduction
Wellbeing issues are increasing among dental students. Social relationships can be an important for student support during their studies. The aim of the study was to explore dental students’ feelings towards studying dentistry, social networks and chosen support during this journey.

Materials and Methods:
An anonymous electronic cross-sectional survey was carried out. All dental students in a single dental school were invited to participate. Participation and answering questions was voluntary. Descriptive analyses were used for categorical data and qualitative data were analysed thematically.

Results
In total 109 students responded. One third reported having a family member from a healthcare profession but most were not related to dental professionals. The majority of students 83% liked the course, 14% said they felt “neutral, and 5% said they did not like it. Three themes explained this: 1) demands of the course, 2) being suited to dentistry (e.g. patient care) 3) passion for dentistry as a career (or lack of). Most felt their peers were friendly (92%) and supportive (78%) but also competitive (64%). Irrespective of stress, 70% of participants sought help from family and two thirds sought help from student peers.

Discussion
Most students enjoy studying dentistry despite the demands of the course. Support, workload, feeling suited to the course and a passion for dentistry as a career can affect the experience.

Conclusions:
Family and friends are an important source of support in this process. Further work is needed to explore mechanisms to help family and friends support students.
Introduction

Student surveys indicate that university students report lower levels of wellbeing than the UK population and student wellbeing has continually declined over a number of years. The reasons for these trends appear to be complex and multifactorial involving experiences beyond individual learning. Dentistry is often described as being particularly stressful. One of the reasons for this is the workload involved in the course. Medicine and dentistry have some of the highest undergraduate workloads with students reporting an average of 35 hours (19 hours contact time and 26 hours independent/outside course) study time per week. Other reasons for wellbeing issues may relate to the learning environment and the type of students attracted to and selected for dental courses. Dental school can be a very competitive environment with high standards and students can find it difficult to balance their social and academic activities. Many students are perfectionists and the constant challenge of keeping up with high expectations may negatively impact on wellbeing for some undergraduates.

Social networks and support have long been recognised within the wider health literature as having a positive influence on health and wellbeing. Family, personal networks of support and group belonging are associated with academic achievement. These social networks can also have a positive influence on student experiences of stress and wellbeing and it has been suggested that friendships and family can help to protect students from the impact of stressful situations.

Interactions with fellow students appear to be important for learning and student experience. National surveys have found that 70% of students report “learning a lot” whilst at University, however, this reduces to 61% amongst those living in their family home. Despite a perceived lack of learning for those students living at home, this may be beneficial for their wellbeing. Humphris et al. (2002) found that living in the parental home was associated with lower levels of psychological distress amongst dental students. This appears to suggest that students who live at home can feel they learn less at university but may have better psychological wellbeing. However, the literature in this area is limited so results should be interpreted with caution.

While stress is a commonly reported issue for undergraduate dental students, the nature of the relationships between dental students their social networks, support and their wellbeing has received relatively little attention in the literature. The aim of this study was to explore a group of dental students’ thoughts and feelings about studying dentistry and their social networks and choice of support during this journey. It is hoped that the results will be of interest to students studying dentistry and individuals and organisations who provide support for them during their time at university.
Materials and Methods

An online cross-sectional survey was used for the study. Cardiff Dental School Research Ethics Committee granted ethical approval. (Reference: 16/04a). An interpretative paradigm, underpinned the study design. The approach taken used a relativist stance and a subjectivist epistemology in which experiences are individual, subjective and are constructed through interactions with the real world. The study used an online questionnaire for data collection with quantitative and qualitative data. This was designed by staff and students to be relevant to students and the cohort whilst enabling students to share their thoughts and feelings anonymously. It included a total of twenty-seven items, with some original questions developed for the purpose of the study and some questions that were informed by previous studies. The latter included items about financial worries and social/recreational, stress and “Personal Life Issues”.\textsuperscript{11,12} Participation was voluntary and participants were able to decline to answer any question. The questionnaire was piloted with non-dental university students (n=5) and was refined to ensure acceptability before distribution. A variety of question types were used, including open-ended questions and categorical responses.

All students registered on the BDS programme at Cardiff University School of Dentistry, Cardiff in 2016 during the data collection period were invited to take part. Participants were recruited via year group email, online notices and lecture announcements over a 3-month period and no incentives offered. Participant information and the survey link was sent (Bristol Online Survey) electronically via email and announcement notifications.

Data were exported for analysis. SPSS and Excel were used for descriptive statistics including frequency distributions to explore data relationships. Due to its flexibility, appropriateness for the data and suitability for relativist studies, a thematic approach was used for qualitative data analysis. Analysis was conducted by one researcher, and verified by a second researcher, both had experience and training in qualitative methods. All queries were resolved through agreement.
Results

Participants
A total of 109 students completed the questionnaire, (28% response rate). Nearly two thirds (72%) of respondents were female, most were aged 18-25. The majority of were from years 2 (n=34, 31%) 3, (n=23, 21%) 3 and 4 (n=34, 31%). Nearly all were from the UK (n=104, 95%).

Dental and Health care background and preparedness for dentistry
Most respondents were studying dentistry as a first degree and the majority were living in shared accommodation with fellow dental students during term time (Table 1). Just under 16% (n=17) of students were related to dentists or dental professionals, 18% (n=20) were related to a member of the medical profession, and one third (n=34) of students had a family member who was a healthcare professional from a different specialty.

Half (n=55, 50%) of all respondents reported that they were well prepared for studying dentistry when they started the course. However, only 20% (n=22) agreed that they “knew a lot about dentistry before starting the course”. Those with family members who were dentists or dental professionals reported that they were no better prepared for dentistry than those without.

Table 1: Baseline Background Characteristics of Study Participants

<table>
<thead>
<tr>
<th>Participant Background</th>
<th>n=</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accommodation living</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With dental student peers</td>
<td>91</td>
<td>83</td>
</tr>
<tr>
<td>With non-dental student peers and friends</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>With family and or relatives</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Partner</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Alone</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Relatives with healthcare background</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentist</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Dental professional</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Doctor</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Other Healthcare Professional</td>
<td>34</td>
<td>31</td>
</tr>
</tbody>
</table>

Choosing dentistry

Students were asked, if they were to go back in time and choose again, would they still choose dentistry. The majority (n=98/109) said that they would but eleven said that they would not. Of those ten of the 11, had experienced stress in the previous 12 months, four
did not find their peers supportive, all except one had sought support from others and only one was related to a healthcare professional (a dentist).

When asked to indicate their feelings about the course, most said that they liked it (47%, n=52/109), or that they were very enthusiastic about it (34%, n=38/109). A small number (12%, n=14/109), said that their feelings were neutral, four said that they did not like it and one said that they hated it. The qualitative responses from students who indicated that they did not like the course were examined and three main themes were identified: 1) the demands of the course, 2) being suited to dentistry (this included the experiences of seeing patients) 3) passion (or lack of) for dentistry as a future career.

The demands of the course

Many comments eluded to the demands of the dental course, with some students appreciating and indicating that they rose to the challenges and found it rewarding.

**Theme: - I like dentistry, yes, I would choose this again:**
“seeing patients, etc. is so rewarding that it makes the hard work worthwhile.”

**Theme: - I like dentistry, yes, I would choose this again**
“Although there are times where I’m under a lot of pressure it is made worthwhile by the outcome”

Students who indicated that they were less enthusiastic about the course often cited the demands of the course as an issue.

**Theme: - Neutral about the course, no, would not choose again**
“I sometimes wish I had chosen a less demanding course so that I would have more time in order to enjoy my course.”

Being suited to dentistry

A number of students indicated that they felt “suited” or “unsuited” to dentistry; those who did not like the course often indicated that they felt unsuited to the course.

**Theme: - I like dentistry, yes, I would choose this again**
“I would still choose this course as I feel it is suited to me.”

**Theme: - I hate it, no, I would not choose this again**
“It’s too hard and I’m not good at it”
Career

A number of students indicated that their decisions about dentistry were related to dentistry as a career. Students often discussed the demands of the course relative to their future career.

**Theme: - I am really enthusiastic about the course, yes, would choose again**

“Dentistry is my passion and my dream career. Despite its difficulties it is not enough to make me lose my interest in something I've cared about for so long.”

**Theme: - I am really enthusiastic about the course, yes, would choose again:**

I would still choose to do it because it's all I want to do and it's all I will ever want to do, but I wish I'd been more informed of the challenges of dental school.

While most were enthusiastic about dentistry as a career, a number of the students who said that thinking back, they would now not choose dentistry as they felt that the future did not look as good as they had initially hoped.

**Theme: - Neutral about the course, no, would not choose again**

“I find dentists who have graduated seem unenthusiastic about their career which doesn't make me feel confident about doing it as a lifelong career”

**Theme: - I like the course, no, would not choose again**

“However, I feel that increasing protocols/ potential lawsuits and the reduction in salary I feel has made the job potentially less enjoyable and for a smaller reward.”

Relationships with student peers

Most respondents described their peers as friendly (n=100, 92% agreed/ strongly agreed with statements) and supportive (n=85, 78% agreed/ strongly agreed). Almost two thirds described their peers as competitive (n=70, 64% agreed/ strongly agreed) and 16% (n=17) agreed/ strongly agreed with the statements saying that their peers made them feel alienated.

Stress and Support Seeking

Students commonly reported having experienced stress with n=69 reporting having been stressed in the previous 12 months. Most said that they had shared personal problems with others (Table 2). Only eight reported that they had not shared their problems with others and of those, six reported having felt stressed in the previous 12 months. The majority (72%, n=50/69) of those who reported feeling stressed in the previous 12 months had spoken with
their family about their problems and 70% (n=76/109) of all participants (stressed and non-stressed) reported that they had sought help from family. Students appeared to prefer seeking support from their peers ahead of their wider group of friends with nearly two thirds of student reporting that they had sought support from other students on their course.

Table 2: Stress in the previous 12 months and help seeking

<table>
<thead>
<tr>
<th></th>
<th>Students reporting stress in past 12 months who sought help n= (%)</th>
<th>Students seeking help not affected by stress in the past 12 months n= (%)</th>
<th>Total number Seeking help n= (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal tutor</td>
<td>15 (14)</td>
<td>6 (6)</td>
<td>21 (19)</td>
</tr>
<tr>
<td>Student Affairs tutor</td>
<td>2 (2)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Other dental school staff member</td>
<td>15 (14)</td>
<td>3 (3)</td>
<td>18 (17)</td>
</tr>
<tr>
<td>Partner</td>
<td>27 (25)</td>
<td>13 (12)</td>
<td>40 (37)</td>
</tr>
<tr>
<td>Other students on the course</td>
<td>44 (40)</td>
<td>23 (21)</td>
<td>67 (61)</td>
</tr>
<tr>
<td>Other students NOT on the course</td>
<td>28 (26)</td>
<td>17 (16)</td>
<td>45 (41)</td>
</tr>
<tr>
<td>Family member</td>
<td>50 (46)</td>
<td>26 (24)</td>
<td>76 (70)</td>
</tr>
<tr>
<td>Friend</td>
<td>30 (28)</td>
<td>22 (20)</td>
<td>52 (48)</td>
</tr>
<tr>
<td>Doctor</td>
<td>10 (9)</td>
<td>2 (2)</td>
<td>12 (11)</td>
</tr>
<tr>
<td>Counsellor</td>
<td>11 (10)</td>
<td>2 (2)</td>
<td>13 (12)</td>
</tr>
<tr>
<td>I have not shared my thoughts/problems</td>
<td>6 (6)</td>
<td>2 (2)</td>
<td>8 (7)</td>
</tr>
</tbody>
</table>

Students rarely sought help from University or professional services. When they did, most sought help from a tutor (n=21/109) or other member of staff in the school (n=18/109). Less than 10% (n=12/109) of all participants reported seeking help from counselling services or doctors (n=10/109).

Contingency tables showed that responses were not influenced by gender and there was no relationship between awareness of the course prior to commencement, relationships with peers or help seeking preferences.
Discussion

This study gathered data about dental students’ thoughts and feelings about being a dental student, support networks and relationships in relation to stress and their student journey. It found that most students (whether feeling stress or not) sought support from more than one source to deal with problems during their studies. While most students enjoyed their course, some did not, and a small number felt unsuited to their course and some regretted choosing dentistry. Family background, who they lived with and perceptions of their peers were not associated with being better prepared for studying or for reducing stress.

Stress was common and many, described the course as demanding; for most, the demands of the course were worth the rewards. As small number felt unsuited to the course and a number of students indicated concerns about dentistry as a career (a lot of work for an uncertain future). The majority of students did seek help from others during their studies and family and friends were particularly important, as the source most frequently used for help.

Relatively few students indicated that they were related to doctors or dentists. While the present study did not find any advantages arising from being related to a medical or dental professional, it did not examine how relationships influenced decisions about a career in dentistry or wider influences for example, socioeconomic class. It remains possible that students from less affluent and non-dental backgrounds were less well prepared for dentistry than peers with dental family backgrounds and affluent family connections.

Research into the influence of student accommodation has produced different results, for example, a previous study, found that students living with family members reported greater levels of stress. The findings of the present survey contradict that conclusion, and are in closer agreement with a wider study that looked at psychological stress in undergraduate students from seven European dental schools. However, it is difficult to use the results of the present study to indicate a greater level of support overall for students who live at home very few (n=6) lived in the family home. This study did indicate the importance of family bonds and the role that family have in supporting students. Most in the present study maintained a strong relationship with their family, even whilst living away and family were most often the first port of call for help.

Most students in the study reported feeling supported by their peers, who were the second most commonly selected port of call for help. Establishing good relationships with peer groups is key to being able to discuss feelings and share problems with them. However, in the present study these types of relationships were not always positive. Some students did
Students who reported that they were not stressed described seeking similar levels of support when compared to those who reported stress. This suggests that all felt the need to access some level of support, despite being adult learners demonstrating the importance of these networks.

Family and friends were the main port of call for help when students had problems and 29% (n=32) sought professional support from personal tutors or other staff members. Very few consulted a doctor or the university counselling service, a finding that resonates with other studies. The reasons why students fail to engage with professional services are complex but may relate to the perceived stigma identified in studies of medical professionals attached to admitting to feelings of not being able to cope. However, this study did not measure the severity of issues. It is possible that some of the students who sought professional support, had the most significant problems, but there is currently no mechanism for collating this data. It is also possible that some students sought support to meet specific needs at particular times, University wellbeing services work to highlight their services particularly during the examination periods. Furthermore, professional student services can offer specialised expertise, for example to address money concerns and health issues. In contrast, informal networks of family and friends may, for some, provide a ‘place to talk about the day’ outside of the University setting.

These findings suggest that both professional and informal sources of support have a place. However, the former often has limited resources and can require a formal referral and a wait for an appointment to be seen. These restrictions do not necessarily apply to friends and family, with students developing their networks, increasing accessibility. However, while sharing problems and social intercourse can be valuable for individuals who are experiencing stress and there may also be an effect on those providing the support. Without the tools, student peers may find it hard to know what to say when a friend is struggling, particularly when the problem is recurrent and there is no obvious course of resolution. They may find themselves fulfilling a role for which they will almost certainly have had no training.

This study has demonstrated the importance of the informal support provided by family and peers. It also highlights the work that needs to be done to ensure that those providing help
are themselves supported. Students and family may need to be advised about the best ways to offer support, listen reflectively and to encourage that person to seek advice from a tutor or student support service.

The discovery that there were a very small number of students who reported being stressed but had not sought or received help from anyone is of great concern. Such individuals can often find it difficult to seek help, with their true feelings hidden from all around them until they reach crisis point. Further work needs to be done to explore why some students end up seemingly isolated in an environment full of people their own age. Most information for student support is directed at the students themselves but there is also a need to develop the skills of both staff and students to recognise the signs when learners are struggling and start the conversation.

It is appreciated that the results of this study should be treated with caution as it is a snapshot of time, with self-reported data from small sample in a single dental school. Nevertheless, it has demonstrated the importance that good interpersonal relationships can have in supporting students and the positive effect on their ‘university experience’. As a result, multiple stakeholders are better informed which may assist with the development of stress-reducing interventions for learners at multiple levels.

Conclusion
Dentistry is a demanding course and this study has demonstrated the importance of family and peer networks and their role in providing informal support for dental undergraduates. This study has highlighted the need for measures to support students who fail to seek help from any source despite feeling stressed. It also highlights the work needed to explore the dynamics of informal support networks to inform multiple stakeholders and ensure that family and peers are supported in their roles as supporters of students.