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Trends in targeted academic support for medical students before and during the Covid-19 pandemic

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University students experience various transitions throughout their studies and may benefit from academic support in several ways, including peer support (Gaughf & Foster, 2016), centralised university academic support, and course-specific support provided by those working in the academic language and learning space (Malkin & Chanock, 2018). Course-specific academic support has decreased in recent years with the move to more centralised university support resources, which is thought to be more cost-effective than course-specific support (Barber, 2020; Dunkel et al., 2014). The Faculty of Medicine, Nursing and Health Sciences (FMNHS) at Monash University has been proactive in retaining course-specific academic support for their students in the form of a dedicated unit of academic learning and language specialists. Within the medicine course, support is provided to students through both group workshops and individual appointments. This study examined the changes in support and educational programs provided to individual students during the Covid-19 pandemic versus pre-pandemic. In particular, these changes included the number and variety of students accessing individual appointments, and the nature and variation of topics discussed compared with pre-pandemic appointments.

To evaluate this, a retrospective review of appointments including the two academic years preceding the Covid-19 pandemic and the first two years of the pandemic was undertaken. Data analysis revealed that during the pandemic years, the number of students accessing individual support increased by 43%, and the number of appointments also increased by 35%. In addition, there was an increase in discussion topics related to personal issues, interpersonal communication and career advice during the pandemic years.

Key Words: Medical education, medical students, academic support, learning on clinical placement, individual appointments.

1. Introduction

In Australia, as in the rest of the world, the Covid-19 pandemic led to dramatic changes in the organisation of public and private life. Pandemic laws restricted people's freedom of movement for the better parts of 2020 and 2021, and those not performing essential work such as in emergency services, healthcare, food supply and supermarket sectors were required to work from home. Similarly, all of education moved fully online, with only a select few classrooms remaining open for the children of essential workers.

In Australian universities, Covid-19 related community lockdowns led to significant changes in teaching, learning and assessment practices. With the shift to online education during the pandemic, university students were unable to continue their campus-based studies. Both domestic and international students found themselves confined to their houses, apartments or dorm rooms. Many local students returned to live with family or friends, and many international students followed the advice of the Australian government or their universities and moved back overseas. As a result, most students studied alone without much social interaction with teachers and peers.

Research has shown that medical students before the pandemic experienced significant psychological stress and burden because of the high intensity of study in the workplace environment (see Aldekani et al., 2021). During the pandemic, university staff had to quickly transform education and assessment practices to suitable online formats. While the shift to purely online and distance teaching and learning created challenges for students and staff regardless of academic discipline or subject content, it can be argued that lecturers and students in extensive workplace-based learning arrangements, such as in the health sciences, experienced greater disruptions to their learning and assessment processes. To investigate the nature of the consequences of these disruptions, this paper explores the similarities and differences in the teaching and learning activities of the individual support program of an academic student support and learning unit in the medical faculty of Monash University between the pre-pandemic years of 2018 and 2019 and the pandemic years of 2020 and 2021.

The authors of this paper are lecturers in clinical communication and provide extracurricular teaching and support to medical students in the clinical years of the 4- or 5-year Doctor of Medicine degrees, with a mix of students entering the course either with a prior university degree or directly from secondary school. Most of the teaching focuses on the important transitional years when medical students move from pre-clinical campus-based study to full-time clinical placement-based learning in preparation for internship. This study explored whether the lecturers' one-on-one support programs in clinical communication and study advice for placement-based learning had changed in the pandemic years compared to the pre-pandemic years.

To provide context for the current study, the following literature review presents an overview of university academic support programs delivered in Australia for the past two decades, emphasising such support programs in medical education. The paper then outlines the types of clinical and academic study activities provided by the authors to Medicine students at Monash University before and during the pandemic.

2. Literature review

2.1. Learning and teaching in clinical contexts

In Australian universities, students experiencing transitions in their study have been shown to benefit from academic language and learning (ALL) or other academic support programs. Although changes to teaching and research activities were beginning to take shape in the 1980s and 1990s, the influential Bradley Review in 2008 led to more significant changes in this space. For example, academic language and learning lecturers championed a number of innovative teaching initiatives contributing to a whole of institution approach and the first-year experience (e.g. Baik, Naylor, & Arkoudis, 2015; Gale & Parker, 2013; Kift, 2009; Kift, Nelson, & Clarke, 2010), especially focusing on the widening participation of students with low socioeconomic status (SES) and with culturally and linguistically diverse (CALD) backgrounds (Lea & Street, 2006; Putnam & Gill, 2011; Thies, 2012). In addition, academic literacies as well as study and communication support were integrated into teaching specific disciplines (Macdonald et al., 2013; Philip et al., 2019; Purser, 2011; Woodward-Kron et al., 2008). However, many of these innovative and holistic teaching approaches, delivered in group and one-on-one teaching, have been scaled back in recent years with institutions favouring centralised and generic support resources (Malkin & Chanock, 2018), or even completely outsourced to third-party online services (Barber, 2020). For

a comprehensive overview of the highs and lows of academic language and learning support in response to frequent restructures at Australian universities, see Chanock (2011a, 2011b).

Despite these successful support programs for students across academic disciplines, comparatively little is known about the types of academic support provided to students completing health profession and health sciences degrees. A scoping study from 2013 revealed considerable ALL activity in the development of health science students' academic literacies, clinical communication and socio-cultural knowledge (Fenton Smith, 2013). According to that study, one-on-one support was the most common form of support, which is not surprising given the extracurricular and non-credit bearing nature of academic support programs in general. However, most of the activities surveyed focused on CALD nursing students.

To our knowledge, very little has been published about individualised academic support for medical students, particularly in the clinical years. There is however, a rich body of (pre-pandemic) literature by clinical educators on how medical students learn, including their challenges and learning strategies. For example, Dornan et al. (2007) describe "supported participation" (p. 85) as a key condition for medical students' learning in a clinical workplace. They found that for students to move from more passive forms of participation, such as observation, to more active stages when they can clerk patients and perform supervised procedures, they require constant and close interaction with doctors and nurses, as well as the feeling that they can contribute to a patient's care. In addition, students need to develop a certain "positive state of mind" (p. 85) which includes a sense of professional identity and reward, as well as confidence and motivation. Interestingly, in the Dornan et al. study, the students first entering the clinical environment experienced being taken to the bedside in a large group (such as on ward rounds, which constitutes a common and core teaching activity in current medical curricula) as neither active participation nor passive observation, but rather as invading a patient's privacy.

Another important feature impacting medical students' learning in the first clinical year (and beyond) is their emotional state. Evidence suggests that medical students are a vulnerable population with higher rates of depression, burnout, anxiety, and suicidal ideation than in the general population (cf. Aldekani et al., 2021; Molodynski et al., 2020; Schwenk et al., 2010). Stigmatisation around mental health in this group means that they are also less likely to seek support (cf. Aldekani et al., 2021; Molodynski et al., 2020; Schwenk et al., 2010). Attitudes towards students from doctors and nurses who are more focused on patients, combined with the struggle to adjust to the day-to-day pressures of in-hospital care, can get in the way of students feeling like active learners (Dornan et al., 2007). These accumulated levels of personal, academic and workplace-related stress have been found to contribute to poor academic performance, poor judgement of their progress and aptitude, and academic dishonesty (O'Reilly et al., 2014).

The development of medical students' communication and interactional competence also receives continued attention in scholarly literature by clinicians, medical educators, as well academics with a linguistics background. This focus arises because health professionals' ability to communicate in clear and coherent ways, both with patients and other health professionals, is clearly linked to increased patient safety and efficient health care (Kurtz et al., 2016; Silverman, 2009). Hamilton et al. (2014) explored how final year Malaysian medical students experienced the language used in doctor patient consultations and found that incongruent culture and language impacted clinical communication. An earlier explorative study by Paul and Gilbert (2011) demonstrated the multiple benefits of applied linguists and clinicians collaborating in the explicit teaching of communication skills. Not only did students transitioning to clinical placements gain confidence and increase their repertoire of communication strategies, the collaborative and discursive teaching approach also widened the clinicians' pedagogical and language knowledge.

A decade later, a systematic review of international research on the interventions for the development of medical students' interpersonal communication skills shows a lack of consistency in content, delivery and assessment approaches to how communication skills are taught and learned

(Gilligan et al., 2021). However, the review also found a strong link between direct teaching in communication, when paired with direct personalised educator feedback, and measurable short-term improvements of students' overall communication skills as well as their capacity for building rapport with and showing empathy towards patients (Gilligan et al., 2021).

All of the above-mentioned areas of medical student learning (transitioning into workplace-based learning, clinical communication, and the development of a professional identity) feature prominently in the everyday academic student support provided by us. Yet, none of the above cited studies makes explicit mention of existing extracurricular academic support programs assisting medical students in their development of these important professional skills. This literature review now explores the types of academic support medical students received during the pandemic.

2.2. Learning and teaching adjustments for the Covid-19 pandemic

While the Covid-19 pandemic is unprecedented on many levels, there have been other viral outbreaks in recent times (e.g. SARS, H5N, and H1N1 in 2002, 2003 and 2009 respectively), which have impacted the educational experience of medical students. During the 2002–2004 severe acute respiratory syndrome (SARS) outbreak in Singapore, medical students were also barred from attending hospitals, and educational activities had to be quickly adapted to simulation- and web-based delivery modes. Pedagogical innovations included e-learning modules, video vignettes, and virtual patients or mannequin simulators to teach clinical examination, procedural and diagnostic skills, and were found to be as effective as teaching with live simulated patients (Lim et al., 2009).

A systematic review by Ahmadi et al. (2021) found that during the Covid-19 pandemic, webinars, virtual classrooms, videoconferencing, and synchronous interactive small group sessions were the most commonly implemented technology-enhanced learning activities to teach problem-solving and critical thinking, as well as clinical skills. Simulation-based learning, on the other hand, was used to provide procedural skills training on virtual or mannequin patients. Despite the obvious challenges, studies emphasise the unintended gains these changes have made possible. For example, advances in online education and telehealth, and greater flexibility in medical schools' evaluation and assessment practices of medical students' progress have been achieved (Abraham et al., 2021; Ahmadi et al., 2021; Kadir et al., 2022). In terms of providing adequate communication skills training, simulation-based training delivered via Zoom was very effective in developing students' emotional, social and cognitive responses during simulated history taking and physical examination (Abraham et al., 2021). For teaching and learning to be effective, facilitators need to enable students' contextual understanding, offer multiple exposures, and foster respectful learner-teacher relationships. Abraham et al. noted, however, that shy students sometimes disappeared from the videoconference and that many students were uncomfortable with leaving their videos on for the duration of the session.

An Australian case study found that online self-accessed support during the pandemic needed to be relevant to the particular point in time and that educators were required to continuously reflect on the best ways of supporting students. Short video guides, flexible meeting times and creating avenues for connecting with other students seemed to be most helpful (Kelly et al., 2020). Other coping strategies observed in medical students during the pandemic were keeping communication channels open, offering regular online classes for students to socially interact, and doing weekly check-ins rather than sending too many separate emails about Covid guidelines (Chandratre, 2020).

In terms of alleviating stress and uncertainty during the pandemic, Kerr et al. (2022) noted that the disruptions to medical students' education were experienced as threatening not only because of constantly changing academic timetables and assessment guidelines, but also because of the uncertainty experienced by students about their future professional identities. Coping strategies reported by students included distraction, acceptance, planning, positive reframing and emotional

support. Similarly, Simok et al. (2021), reporting on challenges when e-mentoring medical students during the Covid-19 pandemic, found that the lack of interpersonal and interactional communication led to slower relationship building amongst medical students. Already in pre-pandemic years it was noted that the all-consuming nature of being a medical student in the clinical years severed many friendships formed in previous years (O'Reilly, 2014), thus impacting negatively on strategies to alleviate stress and uncertainty.

A study exploring the mental well-being of medical students across all year levels at a Western Australian university during the pandemic (Lyons et al., 2020) found that students were most concerned with the impact on their studies, the uncertainty about a return to normal, as well as concerns about family members testing Covid positive and being in self-isolation. Interestingly, third year students (in their first clinical year) expressed more concern about the uncertainty of when things would return to normal compared with students of other year levels.

This literature review has revealed a gap in reporting about academic support programs in medical education before and during the Covid-19 pandemic. The available literature on medical students' self-directed learning, emotional states, communication and clinical skills development emphasises the complexity of undergraduate medical education and a need for sustained and holistic teaching initiatives and pedagogical innovations, particularly in the first two clinical years. However, the diverse work that academic teaching and support experts currently do in this space is largely missing.

3. Background of the study

The Faculty of Medicine, Nursing and Health Sciences (FMNHS) at Monash University has been proactive in consolidating and extending course-specific academic and communication support for students in their courses in the form of a dedicated unit of academic learning and language specialists. Within the medical course, education programs are provided to students through both group workshops and individual appointments.

The medical course at Monash University comprises either one or two years of pre-clinical study, followed by three years exclusively on hospital and healthcare placements. It is delivered across metropolitan and rural campuses in Victoria, as well as on campuses in Malaysia. There are approximately 500 students at each year level, located across all campuses, including international students and students from culturally and linguistically diverse backgrounds. The authors support medical students mainly at the Victorian metropolitan clinical sites, with approximately 300-350 students per year level, or a total of about 1,000 students in each calendar year across clinical sites. In addition, a small number of students from a second university are supported while they complete clinical placements with one clinical school. Students in this course are graduate-entry and predominantly domestic, and complete two years of pre-clinical study followed by two years of clinical placement.

During the formative clinical years, medical students learn to integrate and apply their biomedical, clinical and professional knowledge and skills in day-to-day encounters with patients and other healthcare staff. During the pandemic, clinical and academic educators working in the medical course faced the mammoth task of substituting placement-based learning in the hospital (which is based on small group and individual teaching on the wards and at the bedside) with online teaching and learning activities. This ensured learners could adequately progress in their year levels and complete the learning and assessment requirements as specified in the course curriculum and comply with professional accreditation on graduation. Final year students were prioritised to ensure their preparation for entering the workforce and were not removed from placements, in general.

4. Methods

The authors have shared or dedicated office spaces with other clinical support staff at the metro clinical sites they support, and frequently travel between sites. During the Covid-19 pandemic, to limit spread of the virus, health services restricted hospital access to essential clinical workers only and we were required to work from home as non-essential workers. Our visibility shifted to exclusively online, which raised concerns that individual students might access support differently or not at all during the pandemic. In addition, it is common practice for us to receive referrals from staff for students who appear to be struggling and in need of support, and also receive a small number of referrals from other students concerned about their peers. As we were off-site, there was concern that clinical site staff and students might be less aware of the support we provide to students, which might lead to a change in referrals. We also anticipated students might have higher stress levels due to the change in the learning environment, leading to potentially different issues to address than previously. Consequently, we proposed two research questions to guide our research into what actually eventuated:

1. Did the number and demographics of students accessing individual support with us change during the pandemic?
2. Did the nature of discussions during our individual appointments change during the pandemic?

This study is a retrospective review and comparison of individual consultations with each lecturer conducted during the two years prior to the Covid-19 pandemic (2018 and 2019) and the first two years of the pandemic (2020 and 2021). We chose to review two years per time frame to minimise any anomalous spikes and provide sufficient data for analysis. Due to the need to maintain student confidentiality, each of the authors reviewed their own appointment notes. These appointment notes are private and confidential, and allow the lecturer to note details about the consultation to refer to when meeting students for follow up appointments. Data recorded for each student included the student's year level, domestic or international status, the number of appointments, and the topics discussed during each appointment. For this study, both authors first individually identified the topics discussed as specifically as possible. The data was then recorded for each year of the study in an Excel spreadsheet on a secure University drive. The data was reviewed and retallied three times in order to ensure accuracy. The two data sets were then combined and the discussion topics were grouped into themes. Cohort data aggregating the total number of students seen each year and percentages of each topic type discussed were tallied. Data related to offers of support following a referral which were accepted or declined (including those offers not responded to) were also tallied. Totals were reviewed and verified for each year's data, and then pre-pandemic and intra-pandemic years' data were aggregated together prior to calculations for comparison.

5. Findings

Presented below is the data compiled related to each research question. As mentioned, the total number of students placed at metropolitan clinical sites supported by our unit is approximately 300–350 students per year level per year, or about 1,000 students per year across clinical sites. Approximately 10–20% of these students are international, from a range of countries and linguistic backgrounds. There is a high proportion of local students from culturally and linguistically diverse backgrounds (CALD) as well. This was consistent for both pre- and intra-pandemic years. The majority of students attend our group workshops at their clinical site and access the extensive online materials (to be reported separately). However, most students do not seek individual support during their course. Some students may only access individual appointments support once or twice, and a few students consistently access one-on-one support across a clinical year or in successive years. The majority of individual appointments are one hour in length. Most appointments involve discussion of more than one issue or topic.

5.1. Research question 1: Did the number and demographics of students accessing individual support with us change during the pandemic?

As seen in Table 1, during the pandemic years there was a relative increase in both the number of students accessing individual support and the number of appointments/student contacts by those students. Although the average number of contacts per student remained constant at two contacts per student, some students accessed support only once, while others accessed support multiple times each year, with a maximum of 22 contacts.

Table 1. Number of students accessing individual support and the number of student contacts indicating significant increases in both during the pandemic.

Item of comparison	Pre-pandemic Years	Pandemic Years	Relative Change in Student Access and Contacts
Number of students	219 (~11% of total cohort) • 2018: 110 • 2019: 109	387 (~19% of total cohort) • 2020: 210 • 2021: 177	43% increase
Number of student contacts	464 • 2018: 240 • 2019: 224	715 • 2020: 341 • 2021: 374	35% increase
Average number of contacts per student	2	2	Unchanged

Figures 1 and 2 provide further demographic details regarding the students seen. Figure 1 shows the percentage of students seen who were enrolled as domestic or international students. The number of international students seen was consistently about a quarter of the total number of students seen until 2021, when there was a relative increase to 40% due to the return of international students from overseas who sought assistance with adjusting to placement. Figure 2 reveals that the majority of students accessing support were from the early clinical years. Pre-pandemic, the majority of students accessing support were in their second clinical year of study, which is perhaps the most stressful year in the course covering specialty areas of paediatrics, obstetrics and gynaecology, psychiatry, and general practice, with a significant assessment workload. During the pandemic, there was a relative increase in the percentage of students in their first clinical year accessing support, whose placements were most

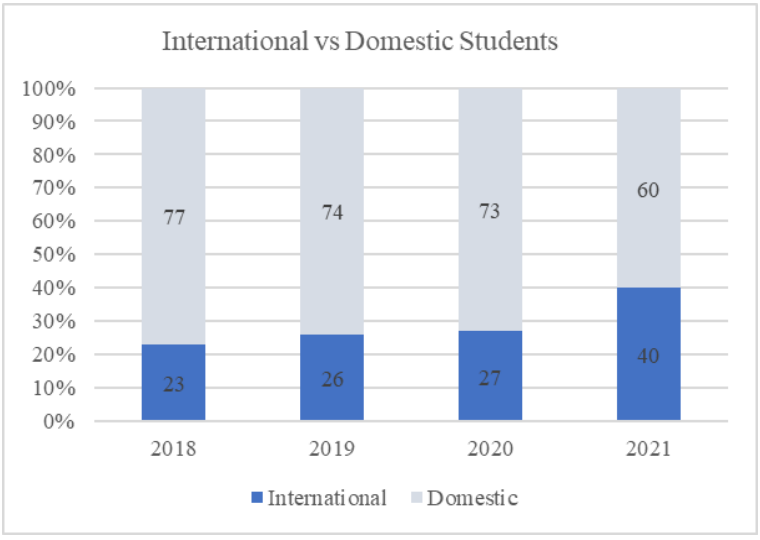

Figure 1. Percentage of international versus domestic students accessing individual support with us showed a substantial increase in international student uptake in the second year of the pandemic.

severely affected. The number of students accessing support from the second university only slightly increased throughout the period of study.

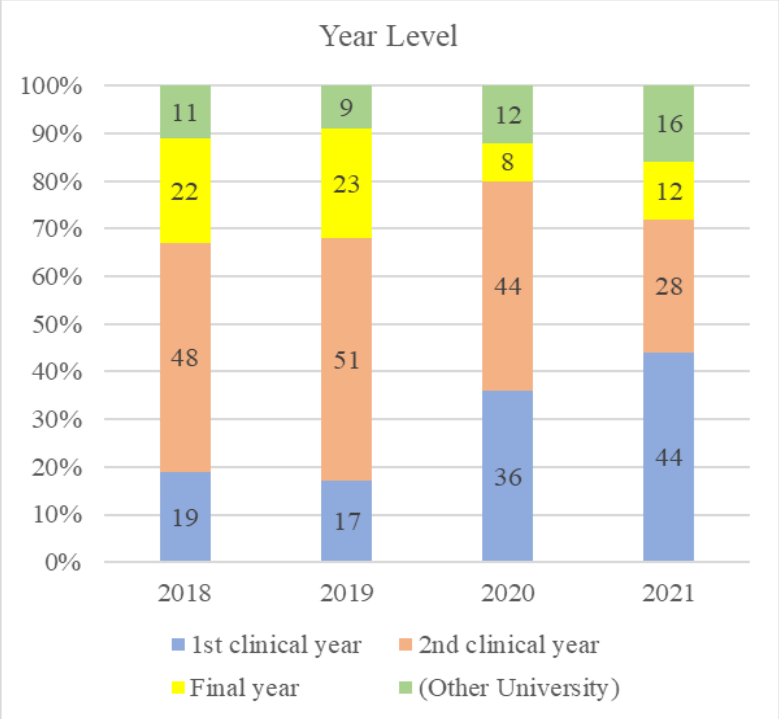

Figure 2. Percentage of students from different year levels accessing individual support with us.

Regarding the initiation of contact with us, it can be seen from Figure 3 that the majority of students coming to appointments were self-referred. Additionally, despite the pandemic and the lack of the authors' presence on site, there was no significant difference in the number of referrals from clinical staff and other students received during the pandemic. Approximately half of the offers of individualised support sent to students who were referred by others pre-pandemic were accepted (see Figure 4). During the pandemic, there was an increase in the percentage of students accepting their offer of support and a decrease in the number of students declining an offer or failing to respond.

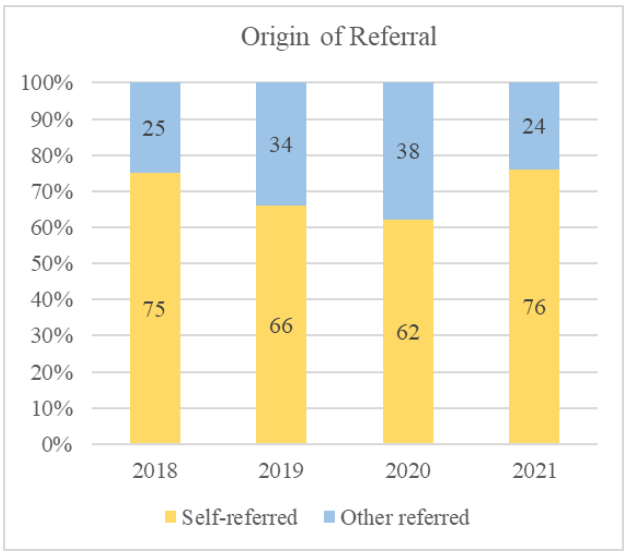

Figure 3. Percentage of students initially self-referring versus those referred by others to us for individual support.

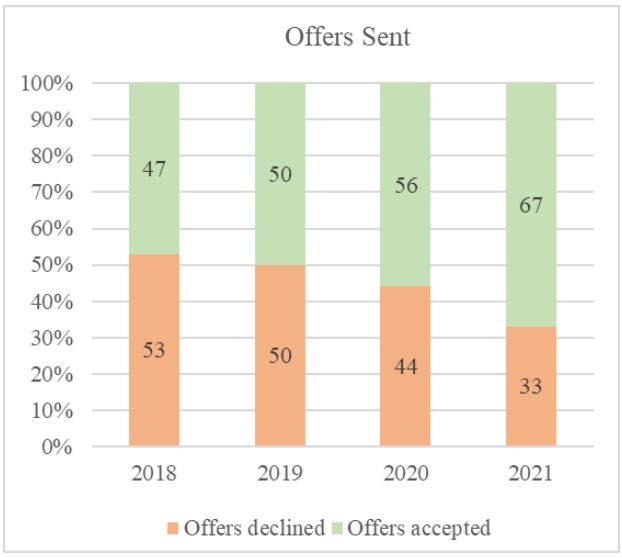

Figure 4. Percentage of students accepting or declining an offer of individual support by us (students not responding to an offer are included in the percentage of offers declined).

5.2. Research question 2: Did the nature of discussions during individual appointments with us change during the pandemic?

When students meet with one of us for individual support, there are often multiple topics discussed. Most appointments are one hour in length, with some requiring less or more time to address the student's concerns. A review of appointment notes by each author revealed an array of topics, with seven themes emerging. These themes are presented in Table 2, along with nuances in topics discussed within each theme. When tallying discussion topics, any time spent touching on a theme within an appointment was counted. The tally of discussion themes each year, as well as aggregated pre- and pandemic years, can be found in Table 3. Figure 5 visually expresses the aggregated percentage of each topic theme in pre-pandemic versus pandemic years. As shown, the themes of study strategies, communication skills, and assignments and assessments predominate in each data set, which are core academic skills. However, during the pandemic there was a relative increase in discussions related to career, interpersonal skills and personal issues.

Table 2. Themes and example topics of discussion during individual student appointments pre-pandemic and during the Covid-19 pandemic years.

Poor Academic Performance	Assessment or exam results Failed and repeating a year Academic progress conditions for continuing in the course
Study Strategies	Returning to study after intermission Study advice and organisation for work integrated learning (e.g. time management) Request for resources (e.g. published materials, referrals to other resources and services)
Clinical Communication Skills	Generic communication skills (e.g. styles, confidence) Genre-specific skills (e.g. case presentations) Socio-pragmatic / patient-centred skills (e.g. responding to patient cues, adapting language and style for the patient) Medical terminology and translation to plain language
Assignments & Assessments	Oral assessments or summative clinical tasks (e.g. Observed Structured Clinical Exams (OSCEs), history-taking) Written assessments (e.g. case reports, reflections and multiple-choice exams)
Career / Internship Advice	Internship applications Future career trajectory Unsure if medicine is right for them
Interpersonal Skills & Conflict	Staff relations (e.g. negotiating goals, feedback and disagreements with university or clinical staff) Peer relations (e.g. peer learning, personal conflict)
Personal Issues	A variety of private concerns (e.g. motivation, professionalism, mental health, personal circumstances)

Table 3. Number of discussion topics for all appointments in pre-pandemic and pandemic years.

Topic Theme	2018	2019	Pre-Pandemic Combined	2020	2021	Pandemic Combined
Poor Academic Performance	19	32	**51 (7%)**	35	18	**53 (3%)**
Study Strategies	87	113	**200 (26%)**	156	117	**273 (18%)**
Clinical Communication Skills	120	106	**226 (29%)**	191	252	**443 (29%)**
Assignments and Assessments	73	67	**140 (18%)**	191	119	**310 (20%)**
Career / Internship Advice	8	9	**17 (2%)**	37	47	**84 (6%)**
Interpersonal Skills and Conflict	16	15	**31 (4%)**	28	39	**67 (5%)**
Personal Issues	62	50	**112 (14%)**	142	145	**287 (19%)**
TOTALS	**385**	**392**	**777 (100%)**	**780**	**737**	**1,517 (100%)**

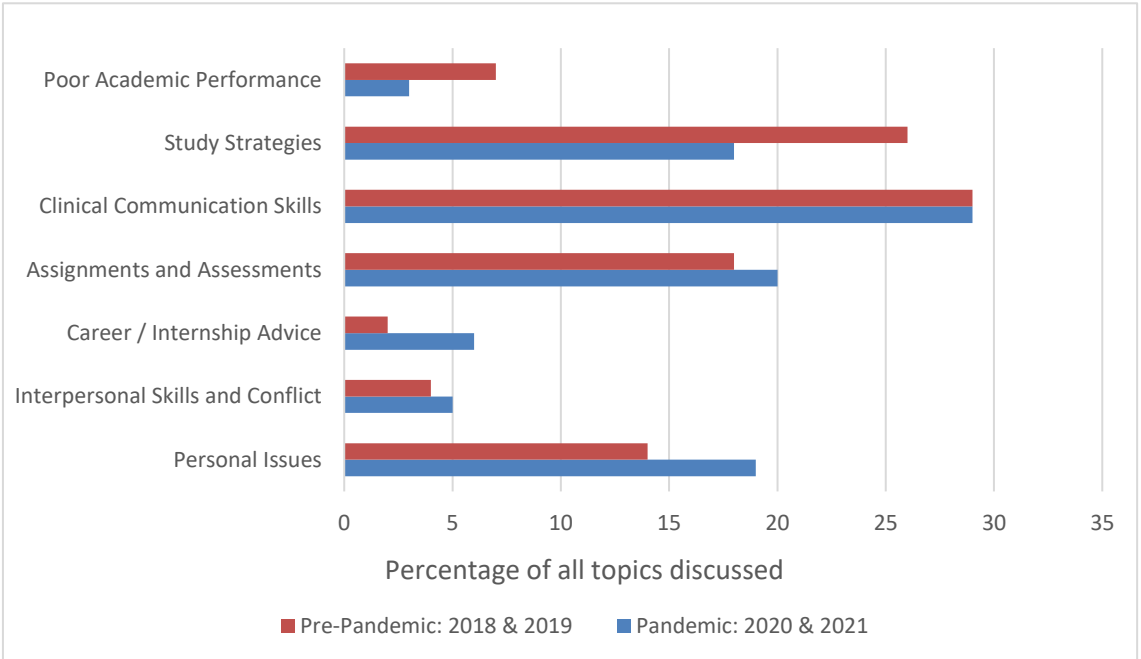

Figure 5. Frequency of discussion topics during individual student appointments expressed as percentages of all topics during the pre-pandemic and pandemic years.

6. Discussion

The authors began this research project to quantify and analyse differences noted in our one-on-one appointments with medical students in their clinical years as a result of the abrupt change in experience for both teachers and students due to the pandemic. A number of studies have shown that these changes have significantly affected the learning and wellbeing of students, and present challenges as well as opportunities for innovation (Abraham, 2021; Wanigasooriya et al., 2021). As seen from the literature review, students need support in the areas of applied learning, professional development, and emotional wellbeing (Dornan et al., 2007; O'Reilly, 2014; Weurlander, 2019). In the authors' experience, it appeared that during the pandemic the volume of requests for individual student support had shifted as well as the nature of discussions during student encounters, leading to the proposed research questions.

Regarding the first research question related to quantifying the number of students and appointments and their demographics before and during the pandemic, a few trends can be observed. Prior to the pandemic, approximately 11% of students from the total cohort on clinical placements supported by us accessed individual support each year. During the pandemic, this approached 20% of the total cohort each year, resulting in an increase in student numbers of approximately 43%. This increase during the pandemic is likely reflective of the abrupt change in the learning environment and disruption of student expectations (Kerr, 2022). As mentioned, during the pandemic, clinical placements were limited due to infection concerns. The scope of the limitations varied depending on the clinical site's capacity for teaching as well as infection control, with placements for final year students given priority in anticipation of workforce demands. Alternative clinical teaching methods were implemented to varying degrees to accommodate students off-site, with accessibility to learning on-site for students severely limited for some sites and rotations with high risk, such as aged care, obstetrics and paediatrics. With such limitations, students and clinical placement staff turned to the adjunct support provided by the authors for additional teaching, advice, and written resources.

Naturally, with more students accessing support, there was also an increase in the number of contacts with those students, with an increase of approximately 35%. The number of times an individual student accessed support in a year varied between one contact and a maximum of 22 contacts, although the average number of contacts per student was two, both before and during the pandemic. This reflects the fact that the majority of students accessing support do so at specific moments in their learning journey, with only a few requiring ongoing support during their course. The students accessing support more than twice were often students with multiple challenges putting their progression at risk (consistent with Carr et al., 2022).

The fact that there are individual circumstances or specific moments when students need academic support is also reflected in the finding that the majority of students were self-referred. There was an increase in the percentage of students accepting an offer of support following referral during the pandemic, from around half of offers sent to two thirds by the end of the study period. This was perhaps due to an increased awareness and recognition of the need for support (Chandratre, 2020) as there was also a corresponding decrease in the number of students not responding to their offer of support during the pandemic.

For students in the clinical years, the bonds they form for support with their peer and friendship groups in pre-clinical years may be affected or completely severed during the clinical years (O'Reilly, 2014). Students in their first clinical year attend the same clinical site for the entire year, allowing formation of new peer and friendship groups with strong experiential bonds. Traditionally, students in their second clinical year of study have made up the majority of students seen for support. As mentioned previously, this year is perhaps the most stressful of the clinical years in the course, due to both the dense specialty-specific curriculum, as well as a significant increase in the number of assessment tasks. The rotations in the second clinical year are also shorter, thus offering less bonding time between students. However, during the pandemic years,

there was a shift towards a greater number of students in their first clinical year seeking individual support. These students had their placement opportunities most severely disrupted, making it difficult for them to transition to clinical life and learn the art, as well as the science, of medicine through observation of clinicians and direct patient contact (see Dornan et al., 2007). This disruption also limited opportunities for them to bond with each other.

With the transition to online learning for most junior students, their professional identity development in the workplace may also have been significantly affected (Weurlander, 2019). Furthermore, many international students were given the opportunity to return home early on in the pandemic, but needed additional support returning to Australia and acclimatising to clinical placements and face-to-face interactions when restrictions were eased. The support offered by the authors included intensive simulation teaching before returning to the bedside and face-to-face interactions with patients, peers and staff.

The second area of our study analysed the nature and distribution of topics of discussion during a student encounter. With most sessions lasting about an hour, multiple discussion themes were touched upon. As with clinical visits, there may have been a primary reason for making contact, and often other issues of concern or questions related to other things would be discussed. The largest number of discussion topics both before and during the pandemic included traditional academic areas of study strategies, clinical communication skills, and assessments. During the pandemic with restricted contact with others, there was a slight increase in discussing interpersonal communication, perhaps due to the lack of practice and experience interacting with others during lockdowns (Chandatre, 2020) and also because of the increase in stress levels for clinical practitioners, educators and students which may have affected their way of communicating (Kelly et al., 2020). There was also an increase in discussions around career choices and internship, with some students questioning whether the profession was right for them in light of the pandemic stresses. Personal issues which affect a student's study are often discussed, even without a pandemic (Carr et al., 2022; Patel et al., 2015). During the pandemic there was even more care to check in with students about their wellbeing as some students had significant additional personal pressures.

There were, however, some limitations to the study. One of the authors was new to the support role in 2018, which may have limited the number of students accessing support at her sites in the first year of data collection. Another limitation to the study is the relative sample size, collected by only two staff members in the role. There was an attempt to increase confidence in the data by combining two years of data for each period of study, and there seems to be consistency in the comparison of numbers between the two years grouped together. There may also be personal biases in the way conversations have been coded which were unable to be checked due to confidentiality concerns, although steps were taken to minimise these biases through repeated discussions about the nature of topics coded. Finally, there may be other confounding factors affecting the data and/or student attitudes and engagement with our support which are difficult to discern and measure.

7. Summary and future research

Medical students navigating their journey to clinical life may encounter difficulties in shifting to self-directed learning in the workplace as well as in developing their professional identity and clinical skills while they progress through the course. There are a variety of supports available to students to assist with these difficulties, through the university and the community. In the literature, however, there appears to be a lack of research into discipline-specific academic support provided to these students. Although there have been multiple studies into medical students' learning and well-being both prior to and as a result of the pandemic in addition to learning and teaching method adaptations, most have been done from a clinical and/or applied linguistics perspective, with very few focusing on individualised academic support. This study attempted to

contribute to the knowledge of specific student academic support programs in the medicine course and analysed the nature of how students access and utilise support provided by academic language and learning programs, such as our specialised unit in the Faculty of Medicine, Nursing and Health Sciences at Monash University. The findings show that in times of stress, such as during a pandemic, more students will seek support and guidance from discipline-specific, adjunct academic support programs. During the Covid-19 pandemic, the nature of discussions in support appointments also tended to shift to include not only traditional academic topics of study skills, clinical communication, and assessment, but were also more likely to include more discussion of personal issues, interpersonal communication, and future career aspirations. This may also reflect more acceptance in the profession and the wider society that discussing such things is important and necessary for personal development. More research is still needed to investigate the methods of individual student support provided in the clinical years by academic language and learning experts and their effectiveness in assisting students to navigate their medical student journey towards successful outcomes.

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