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Original Article

Frontlines and Crossroads: The Impact of COVID-19 on the Motivations of Medical Students from Selected Philippine Medical Schools in Pursuing Their Medical Studies

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Abstract

Background: Because the Coronavirus disease 2019 (COVID-19) pandemic forced Philippine medical education to shift online, the loss of practical skills and face-to-face clinical interactions affected many students to cope with lifestyle and learning changes. This study aimed to assess the strength and nature of motivations of medical students to pursue their studies during the pandemic, and to propose recommendations to support them through the pandemic and beyond. **Methods**: Inductive thematic analysis was done of semi-structured interviews with 17 medical students selected through purposive convenience, purposive and stratified sampling. Recruitment was carried out through the Association of Philippine Medical Colleges. Eligible respondents were pre-clinical and clinical medical students enrolled in School Year (SY) 2020-2021 who experienced the transition to an online setting. **Results:** The desire to serve motivated most pre-clinical medical students, while financial reward was a factor for clinical medical students. Despite the limitations of online education, lack of social interaction and skills training, medical students had strengthened motivations to continue as the pandemic highlighted the need for physicians, reinforcing their intrinsic desire to serve others despite mental health and financial issues. **Conclusions:** While most medical students felt more motivated in pursuing their studies during the pandemic, there was a desire and call for more support in their studies and training. Their personal stories suggested there is room for improvement in certain aspects of local medical education. Addressing concerns through financial and educational support, and bridging clinical skills with online learning would help create quality healthcare beyond the pandemic context.

Introduction

The declaration of COVID-19 pandemic by the World Health Organization in March 2020 resulted in government lockdowns throughout the Philippines, causing suspension of onsite work and classes lasting for several months.[1-4] The abrupt transition proved to be challenging for students and medical learning institutions, as modules had to be delivered online. Some did not have access to necessary gadgets and stable internet connectivity.[5]

Although there have been studies on coping mechanisms and motivations of pre-clinical and clinical medical students during the pandemic, it is still poorly understood and there is currently a gap in qualitative literature for third-world countries such as the Philippines with online learning as a variable of concern.[6-9] This qualitative study aimed to assess the strength and nature of motivations of pre-clinical and clinical medical students through a study questionnaire that delves into how the pandemic affected their learning, personal experiences, as well as baseline and current motivations to pursue medicine. Another objective was to determine the impact of online learning on these medical students in lieu of face-to-face classes.[10,11] It was hypothesized that the pandemic strengthened their motivations, negatively impacted their learning, and challenged their personal experiences and coping mechanisms in pursuing their studies.

Through an inductive thematic analysis of the personal stories and key experiences of selected medical students, the study aimed to assess their motivational changes and propose recommendations to improve instructional methods and provide morale, encouragement, and support during the pandemic and beyond.

Methods

Study Design

The study uses inductive thematic analysis of data from semi-structured interviews of pre-clinical and clinical medical students in answering a pre-tested study questionnaire as shown in ***Table 1.*** Using the Self-Determination Theory to assess motivation.

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Under the theory, extrinsic motivation is defined as engaging in behaviors or actions for the sake of an external cause (i.e. financial reward, social acceptance), while intrinsic motivation is the engagement in behaviors or actions for one's own sake - for an inherent personal reward (i.e. desire to serve, skill development).[15-17]

The study questionnaire was formed to compare students' baseline and current motivations to pursue medicine, to discover the impact of the pandemic on their learning and perceptions, and to get students' input on how they believe their medical education can be better supported. This methodology is similar to a Greek study that had local medical students answer a qualitative questionnaire based on the Self-Determination Theory adapted to their local context.[18] Informed consent was secured, and assurance of confidentiality was given to the respondents prior to the interviews.

As the COVID-19 pandemic and the shift to online medical education were novel phenomena, an inductive approach to thematic analysis was chosen to code interview data. This methodology structurally captures the narratives of respondents and increases validity as it is known to be exploratory and transparent in qualitative studies. Bias is reduced from prior preconceptions as the data itself determines the themes through several rounds of refinement and analysis of interview transcripts.[19,20] A study in the UK also used thematic analysis to assess medical student perceptions responding to the COVID-19 pandemic and created themes based on students' concerns, worries, and recommendations.[21]

Participants & Variables

Through a combination of convenience, purposive and stratified sampling , recruitment of participants was coursed through the social media platforms of the Association of Philippine Medical Colleges-Student Network (APMC-SN) – the largest body of medical students across the Philippines. Out of a total of 71 volunteers garnered from across the country, students were chosen to be interviewed based on a pre-determined demographic profile matrix with six personal background variables to maximize yield of the inductive thematic analysis: 1) public/private schools, 2) male/female, 3) financial aid scholars/non-scholars, 4) with/without doctor relatives, 5) different pre-medical degrees, and 6) living at home/dormitory ***(Table 2).***

Study Size

A total of 17 students (7 clinical and 10 pre-clinical) were chosen to be interviewed. Pre-clinical students are those in years 1 to 3 of their medical studies and are not yet exposed to hospital work, while clinical students are medical clerks and interns. Eligible respondents must have been enrolled during School Year (SY) 2020-2021 in a Philippine medical school. The sample size was deemed sufficient as other qualitative studies that measured student motivations in studying medicine had similar sample sizes based on pre-determined selection criteria.[22]

To approximate the geographic distribution of Philippine medical schools, the sample selection was stratified according to density per major geographic location/island group with 3 participants from the National Capital Region (NCR/Metro Manila) where most medical schools are located at, 3 from Luzon, 3 from Visayas, and 1 from Mindanao which has the least number of medical schools ***(Table 3).***

Inductive thematic analysis benefits from unique data sets, hence interviewees were chosen based on a combination of the student profile matrix and respective geographic distributions. Purely random sample selection would compromise quality due to the chance of recurring or omitted profiles.

Data Sources/Measurement

Interviews were conducted online through Google Meet, with each session lasting roughly 45 minutes from June to July 2021. Each participant was given the study questionnaire a day prior, and two researchers (1 male, 1 female) conducted each interview. The researchers were third year medical student co-authors from the Ateneo School of Medicine and Public Health (ASMPH) based in NCR. To minimize selection bias, researchers were randomly assigned to their respective interviewees. Interviews were then transcribed from July to September 2021, and inductive thematic analysis was conducted from October to December 2021 for finalization of manuscript.

The general outline/flow of the inductive thematic analysis process involves conducting interviews, transcribing the raw data, creating codes out of the data, theme generation, and several rounds of data analysis. Transcribed interviews were analyzed and ideas from important recurring patterns shared among respondents' answers were made in the form of codes and then themes. Codes are words/phrases derived from participants' interviews that are assigned to data fragments that share a common relationship within the transcript. Themes are a methodology to interpret and make sense of coded data, both unique and generalizable across student groups. The difference between codes and themes is that codes tend to be shorter and simpler, while themes are longer and involve higher-level analysis. An inductive approach means to analyze data without any initial assumptions, letting the codes and themes come out from the raw data.[19,20,23]

To ensure reliability of code generation, the researchers read through and generate codes from transcripts of interviews not conducted personally by them. These were tabulated and discussed by the researchers to check for misinterpretations. Similar codes were grouped together and tallied to find the most common recurring theme. Identifiable features from quotes were removed prior to minimize bias and themes were then validated through several rounds of refinement and analysis amongst the researchers.[23] Reporting of data involved going beyond organizing each narration, by making a coherent story across respondents through the creation of Thematic Analysis Maps. Since respondents discussed using a mix of English and the local

Table 1. Study Questionnaire for Interviews.

I. DETERMINING MOTIVATIONS FOR PURSUING A DEGREE IN MEDICINE	
1. What about being a doctor attracted you to the profession? 2. What are qualities you have that made you want to pursue becoming a physician? 3. What were your expectations of medical school and becoming a physician? 4. What were your personal goals for this journey (or for pursuing medicine)? 5. When you decided to pursue medicine, what kind of rewards did you look for? 6. How much did you value these rewards and goals?	
II. LOOKING AT THE IMPACT OF THE PANDEMIC	
A. Challenges in Online Learning	
Preclinical	**Clinical**
1. How did your school handle the shift to online learning? 2. Can you provide us with a brief description on how you are currently being assessed by your school? (e.g. grading, deliverables, platform, lectures, etc.) a. How are you guys graded? b. How do you have lectures? 3. Is there a difference in your performance from when school was face-to-face and now? Why or why not? 4. How do you feel about online learning? 5. What measures from online learning helped with the adjustment? What can be improved?	1. How did your hospital handle the training of clerks & interns? Was it online, limited face-to-face, etc.? 2. Can you provide us with a brief description on how you are being assessed by your current rotation? How about the assessments of the other rotations you've had so far? 3. Is there a difference in your performance from when duty was purely face-to-face and now? Why or why not? 4. How do you feel about online learning/training? 5. What measures from online learning helped with the adjustment? What can be improved?
B. Personal Factors	
1. How has the pandemic affected you personally? 2. Please describe to us your understanding of COVID-19, so, what are the safety measures you take? 3. How do you feel about the virus, do you fear COVID-19? How so? 4. What would you consider were the major challenges posed to you as a medical student by the pandemic? 5. Where do you live now? Are you in your home, or condo? 6. Who do you live with now? 7. How has the pandemic affected the relationships in your home (or within your place of residence)? 8. How has the pandemic affected the relationships outside your home or place of residence?	
C. Perceptions of Working in Healthcare	
1. Regarding our health workers/ 2. Given the plight of our healthcare workers in this pandemic, what do you think of their working situation? 3. What does this mean to you personally?	
III. COMPARING THE MOTIVATIONS OF PRE-CLINICAL AND CLINICAL STUDENTS BEFORE AND DURING THE PANDEMIC	
Preclinical	**Clinical**
1. Given the situation, did you ever consider taking time off of school? Why or why not? 2. If so, how did the thought cross your mind? What are the factors that made you consider taking time off of school? 3. Are you going to continue with your studies? 4. If so, what are the factors that made you decide to continue? 5. Where do you see yourself working in the future? What makes you say so? 6. [Compared to when you first started med school], do you have new expectations, goals, and/or rewards when it comes to becoming a doctor?	1. Given the situation, did you ever consider taking a leave or time off from duty? Why or why not? 2. If so, how did the thought cross your mind? What are the factors that made you consider taking a leave or time off from duty? 3. Are you going to continue with your clerkship/internship? 4. If so, what are the factors that made you decide to continue? 5. Where do you see yourself working in the future? What makes you say so? 6. [Compared to when you first started med school], do you have new expectations, goals, and/or rewards when it comes to becoming a doctor?
IV. PROPOSING RECOMMENDATIONS TO MOTIVATE STUDENTS	
1. Given the situation and your personal experiences as a medical student in this pandemic, how do you think you and other medical students could be motivated to continue with your studies?	1. Given the situation and your personal experiences as a clerk/intern in this pandemic, how do you think you and other clerks & interns could be motivated to continue with

Legend: This study questionnaire was used as the basis for the interviews, arranged according to discussing initial motivations for pursuing medicine, the impact of the pandemic on personal motivations, and proposed recommendations to help motivate other medical students.

Table 2. Student Profiles Needed for Inductive Thematic Analysis.

Student Profile Matrix
1) Student from a traditional/medicine-related undergraduate course (i.e. BS Biology, BS Medical Technology, BS Nursing, etc.)
2) Student from a non-traditional undergraduate course (i.e. BS Management, BS Architecture, BS Engineering, etc.)
3) Student from a family of doctors (either one or both parents are doctors)
4) Student who is a first doctor in the family (none of first-degree relatives are doctors)
5) Financial aid scholar (or someone whose family income was affected by pandemic)
6) Student who is part of the country's regionalization program or is required to render compulsory return service after graduating from medical school
7) Foreign student studying in a Philippine medical school or a student living away from family/residing in a dorm or condo unit
8) Student who considers it difficult to cope with the demands of med school
9) Someone who worked before going to med school (i.e. someone who worked in corporate, government, or practiced in their field after graduation)
10) Student who went on Leave of Absence (LOA)
11) Student who contracted COVID-19 or whose family member contracted COVID-19

Legend: Interviewees needed to fulfill at least one of the criteria shown above.

language (Filipino), statistical software was not used to avoid any possible errors in translation.

Results

Out of 71 students across the country who signed up to be a part of the study population, 17 were chosen to be interviewed based on their demographic and personal profiles. Out of the 17 medical students (7 clinical, 10 pre-clinical) who fit the profile matrix *(Table 2)* and were chosen for one-on-one interviews, 6 came from NCR (3 pre-clinical, 3 clinical), 5 from Luzon (3 pre-clinical, 2 clinical), 4 from Visayas (3 pre-clinical, 1 clinical), and 2 from Mindanao (1 pre-clinical, 1 clinical) *(Table 3)*, which allowed for representatives from medical schools within each major island group in the Philippines.

Table 4 shows the demographics of the 17 chosen students whose individual profiles served to diversify and maximize the potential yield of thematic analysis from different contextual, cultural and socioeconomic backgrounds in the pandemic setting.

Codes were made for each student based on his/her individual transcripts and six themes were generated via Inductive thematic analysis. *Tables 5 and 6* show the process of creating codes and themes from the raw transcripts, using the direct quotations from the respondents as data for analysis.

Table 3. Tally of Interviewed Respondents from Across the Philippines.

Groups of Interest	Major Geographic Locations of Medical Schools in the Philippines							
	National Capital Region		Luzon	Visayas		Mindanao		
	Needed	Signed Up	Needed	Signed Up	Needed	Signed Up	Needed	Signed Up
Pre-Clinical 1st-3rd year	3	3	3	3	3	3	3	1
Clinical 4th-5th year	3	3	3	2	3	1	1	1
Total		6		5		4		2

The following themes were established: 1) how the pandemic highlighted the differences in outlook between pre-clinical and clinical medical students, 2) the challenges of online learning, 3) desiring a lived experience, 4) the loss of boundary between the home and the school environment, 5) processing grit driven by a desire to serve, and 6) the fallacy of sunk cost.

Thematic Analysis Maps *(Figures 1* and *Figure 2)* were made based on codes from the interplay of the six recurring themes and different motivational factors found from the interview transcripts. Major patterns found within each student group are highlighted in gray boxes while supporting codes are coded in white boxes. Codes were arranged in the diagrams based on whether they were intrinsic or extrinsic in nature, and arrows were placed in-between showing the dynamics between codes – how some factors lead to certain changes in motivation.

Table 4. Profiles of Interviewed Respondents.

Pre-clinical Students	Clinical Students
National Capital Region	
Private, female, non-scholar A doctor in the family BS Public Health Staying at home	Private, female, non-scholar No doctor in the family BS Psychology Staying at home
Public, female, non-scholar No doctor in the family BS Biology Staying at home	Public, female, non-scholar A doctor in the family BA Speech Communication Staying at home
Private, female, scholar No doctor in the family Bachelor in Medical Laboratory Science Staying at home	Private, male, non-scholar A doctor in the family BS Physical Therapy Staying at home
Luzon	
Private, female, scholar No doctor in the family Bachelor in Medical Laboratory Science Staying at home	Private, female, scholar No doctor in the family Bachelor in Medical Laboratory Science Staying in an apartment
Public, male, scholar A doctor in the family Bachelor in Medical Laboratory Science Staying at home	Private, male, non-scholar A doctor in the family BS Biology Staying in a condo
Private, female, non-scholar A doctor in the family BS Physical Therapy Staying at home	
Visayas	
Public, male, scholar No doctor in the family Bachelor in Medical Laboratory Science Staying at home	Private, male, non-scholar A doctor in the family BS Medical Technology Staying at home
Private, female, non-scholar A doctor in the family Bachelor in Medical Laboratory Science Staying in an apartment	
Public, male, scholar No doctor in the family BS Medical Technology Staying at home	
Mindanao	
Private, male, non-scholar A doctor in the family BS Health Science Staying at home	Private, male, non-scholar A doctor in the family BS Pharmacy Staying at home

Legend: Demographics of interviewees based on the student profile matrix, stratified per major geographic location.

Table 5. Sample Code and Theme Generation from Direct Quotes.

Clinical Medical Students			
Question	**Geographic ID**	**Individual Quotes & Codes**	**Clinical Themes**
1. Given the situation and your personal experiences as a medical student in this pandemic, how do you think you and other medical students could be motivated to continue with your studies?	National Capital Region Student #1	Codes: Internal motivation; Service to others; Faith Quotes: "awareness of the current situation in the public hospitals and healthcare challenges makes me more motivated" "I still have doubts but the realization that doctors are needed now/importance of doctors realization of being on the right track" "the amount of patients that are waiting for you once you finished med school, that should serve as a motivation for us" "adjusting is still a personal choice and effort making the most of the situation as students - finding study style that works best "	Need to be internally motivated/understand goals Recognizing the need for doctors/the needs of the future patients "There is no medical student who isn't motivated because they have to remember they chose this life path" The schools/institutions need to take care of their students at this time
	National Capital Region Student #2	Codes: Internal motivation; Faith; Continuous Learning Quotes: "Country and world needs doctors" "Pursue learning any chance you can get even if it is online Unsure situation in the future so may as well learn now" "Importance of mental health Value of family" "Divine intervention (God) as a reason for motivation to pursue medicine"	

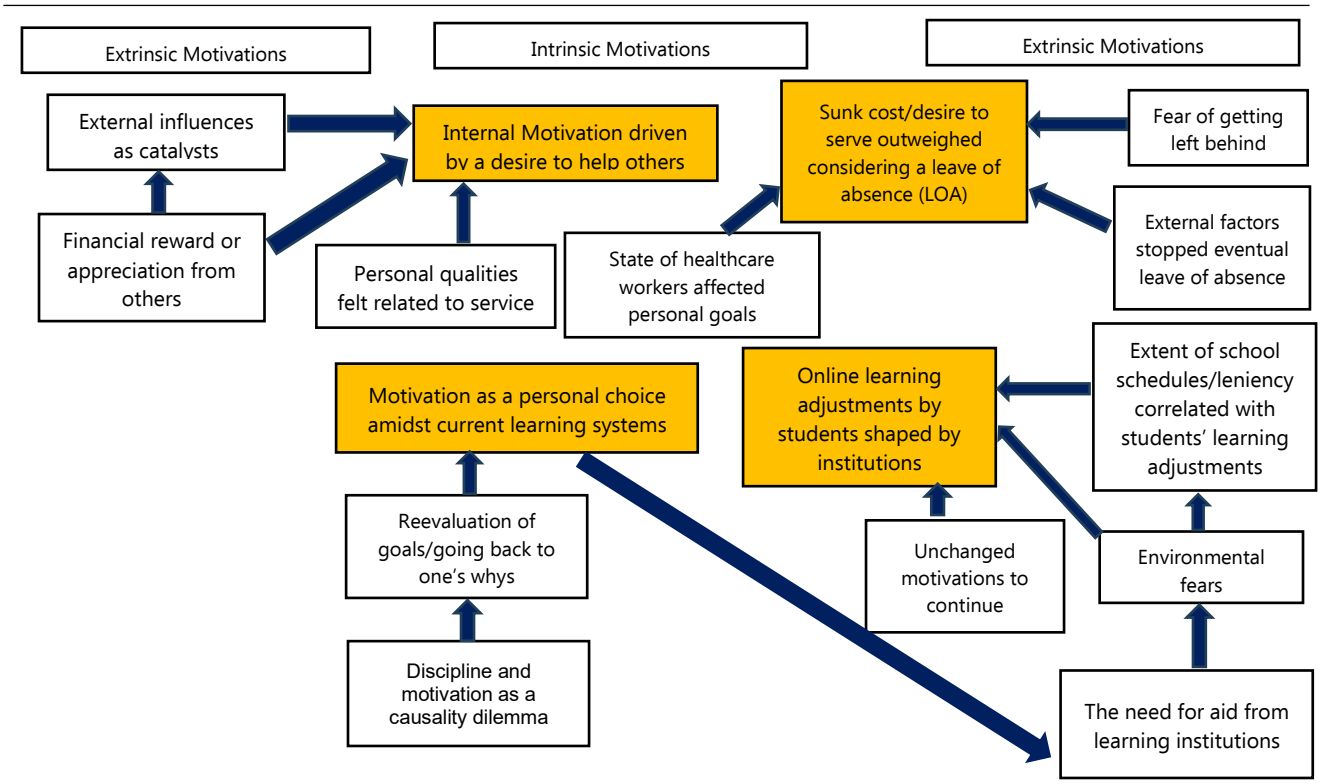
Legend: Individual quotes were tallied and initial codes and themes were created, summarizing key ideas from interviewees.

Table 6. Six Over-Arching Themes Generated from Inductive Thematic Analysis.

Theme	**Codes**
How the pandemic highlighted the differences in outlook between pre-clinical and clinical medical students	Pre-clinical: • Serving a higher purpose through medicine • Committing to the practice will increase motivation • Increased passion to serve at the plight of healthcare workers Clinical: • Opportunity to have authority • Desire to finish on time to move forward in life stages • Financial motivations—lessen burden on parents, earn money as a doctor • No other viable alternatives • Disheartened by plight of healthcare workers
The challenges of online learning	• Autonomy of learning • Increased accessibility of study materials • Laziness • Lack of interaction with peers • Loss of interest in the content without real application • Unsustainability of online learning in the global south • Need to maintain a sense of routine
The desire for a lived experience	• Desire real cadaver dissection • Desire to go back to the hospital • Inadequate clinical skills practice at home
The loss of boundary between the home and the school and the school environment	• Problems at home affect ability to learn • Need for work-life balance • Intense workload leaves no time for family despite being at home
Grit driven by a desire to serve	• Desire to make changes in the Philippine health care system • To serve the people not oneself • Accept the uncertainties of working in medicine
The fallacy of sunk cost	• Desire to finish on time • Parents' investment going to waste • Not wanting to be left behind

Legend: Final over-arching themes were created from salient codes that recurred across interviewees.

Figure 1. Thematic Analysis Map of Pre-Clinical Students.



Legend: In the analysis of the pre-clinical group, being driven by a desire to help others and the belief in motivation as a personal choice amidst current learning systems were the major intrinsic motivations. Multiple external factors such as the fear of getting left behind by peers and dynamics in relation to learning institutions, lead to students having to adjust to online learning despite their respective personal backgrounds. Financial reward and external influences however were only secondary to each students' own reevaluation of personal goals to help the healthcare system.

Discussion

Motivations

Medical education and training in the Philippines is costly for the average Filipino with tuition fees being the highest among post-graduate programs. Medical programs are also considered full-time for the entirety of the four or five years, requiring great time and commitment to complete.

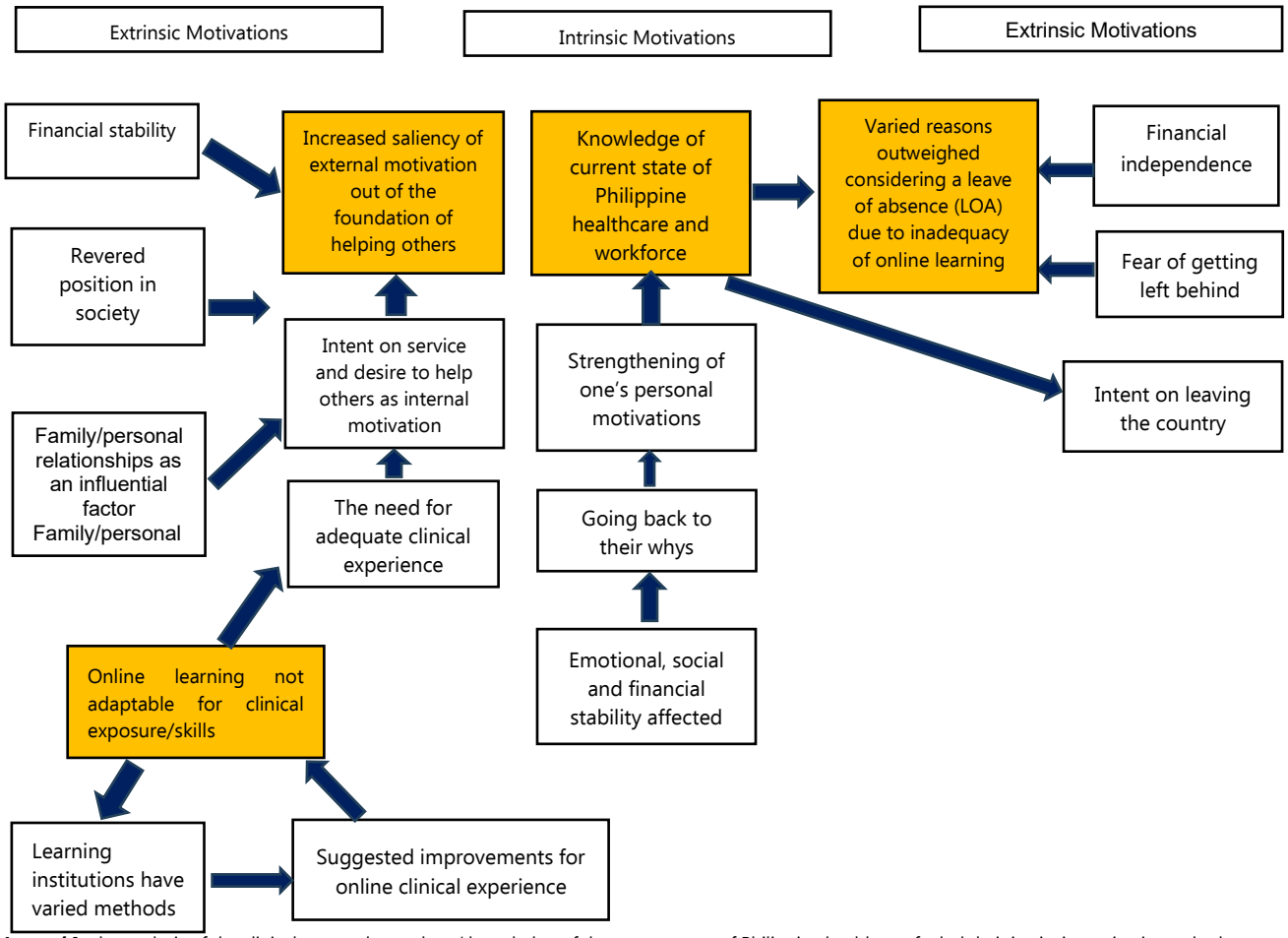
The goal of finishing medical school (Expectancy) comes with hard work, and the rewards (Instrumentality) and perceived value (Valence) as explained by Vroom's Expectancy Theory, may flux throughout each medical student's journey.[24] Students learn how to overcome trials through grit, defined as the perseverance, passion, and sustained commitment to completing specific long-term goals despite setbacks.[25] Personal qualities such as empathy, disliking helplessness, and intellectual curiosity contributed to students pursuing medicine. Recognition and the financial benefits that come with the profession were also of great influence despite possible financial setbacks.

There were differences in outlook between pre-clinical and clinical medical students, as the COVID-19 pandemic became a major point of decision-making for both groups. Clinical students leaned more towards pragmatism, financial independence, and recognition as physicians. Pre-clinical students shared the same desire but with emphasis on contributing to pandemic efforts. "It must be a rewarding feeling to graduate already, because I can finally be of help to people." according to a student from the Visayas region.

Challenges

It was found that online learning increased medical students' autonomy in their engagement with the material but compromised the application of skills and knowledge in cases. This decreased the motivations of some students as they believed they were not receiving education in line with what is expected from a full-fledged physician.[26] A similar study conducted on medical students from Romania revealed that students enjoyed online learning due to convenience and flexibility of tasks, but noted the disadvantage of lack of direct communication and human interaction with the teachers.[27] It is important to note however that in the Philippines, material inequalities heightened in the pandemic and not all students had access to stable internet and optimal working conditions at home. A local Philippine research on medical students revealed that only 41% of their respondents felt mentally and physically capable to engage in online learning due to difficulty in adjusting learning styles, performing responsibilities at home, and poor communication.[28] The difficulty in adjusting to online medical education for both teachers and students had also been observed in other developing countries.[29]

Figure 2. Thematic Analysis Map of Clinical Students.



Legend: In the analysis of the clinical group, the students' knowledge of the current state of Philippine healthcare fueled their intrinsic motivations whether or not to continue their medical studies. As they were already in their clinical years but not stationed physically in the hospitals, majority felt that online learning was not adaptable for clinical exposure/skills. Despite this, several students wanted to finish as soon as possible to finance themselves and their families.

The perception of being left behind contributed to decreased motivation through an increased sense of resignation that one may not be able to cope with the demands of online learning. The Triangular Feedback Loop of Motivation explains that this phenomenon coupled with home environment stressors may lead to poor academic performance and subsequent stress, as they had to balance obligations of student and family life.[30]

As one intern explained, "There is a big difference in having virtual duty because I find myself becoming so lazy and just wanting the virtual conferences to end. But when I was exposed to the hospital, I was so excited to study what was happening to the patient or what management was done by the doctors." When lockdown protocols in the country were momentarily lifted, pre-clinical students found the limited interactions with peers difficult but still appreciated the increasing availability of study materials at home. Questions of sustainability in were raised as well by students, quoting "But I'm not sure if it will be sustainable, because you know, not everyone is privileged enough to have laptops and internet connection that's stable. So for me, this shouldn't happen until the end of med school, so I don't really recommend to continue this online learning."

These challenges brought about a greater desire for lived experience. This was particularly true for clinical medical students who had to do their clinical rotations online, which translated to a lack of skills and less opportunity to practice confidence and empathy in patient care. Pre-clinical medical students shared a similar desire but for a return to onsite classes, which they felt improved their learning through application of theoretical knowledge with the guidance of their teachers. Some shared that online learning made it difficult to perform given that concepts could not directly be translated. In both cases, their self-efficacy was affected by these limitations and the perceived inability to meet expectations of actual medical practice.

A unique challenge to motivation is mental health, as conditions such as ADHD, depression, and anxiety make it difficult to perform student tasks. As one student explained, "It gives a hindrance to my being a doctor. Depression. It's like you're dragging yourself anywhere, the lack of motivation for things." This is in direct conflict with the notions of intrinsic motivation as

a poor mental health may hinder an interest in the subject matter, a desire to serve others, and the self-aware capacity to learn. Mental health concerns contribute to attrition and decreased academic performance which increases a student's sense of self-doubt in one's ability to be a doctor.[30] Some schools attempted to have mentors connect with students and perform routine check-ups, but some students still expressed that there was a lack of empathy towards them citing increased workload, increased screentime, and a lack of exam result confidentiality. This lead to comparison and feelings of inadequacy.

There is a causality dilemma between students' discipline and motivation in attempting to maximize learning throughout the COVID-19 pandemic, given their respective emotional, social and financial contexts. Despite varying levels of self-doubt, students were ultimately fueled by their personal reasons for pursuing medicine. These intrinsic motivational reasons complemented by extrinsic motivational factors such as the fear of getting left behind by their peers and the desire for financial independence were what stopped them from filing a leave of absence and made them carry on with their medical education.

Limitations

The study aimed to provide a narrative of medical education in the Philippines throughout the COVID-19 pandemic through select students and their personal stories based on a profile matrix that aimed to get unique viewpoints from different contexts and socioeconomic backgrounds.

Due to the lockdowns in the country and the lack of internet access of some students, it was not possible to get a larger sample size at the time of data gathering. An ideal target sample size would have been 20, with 10 interviewees each for pre-clinical and clinical groups. To improve sample selection, the researchers made sure to select students from different key geographic locations in the country where most medical schools are located in to simulate geographic distribution.

It is important to note that as this is a qualitative study, the results cannot be generalized to the entire population of medical students in the Philippines. Potential selection bias from profiles are reduced through multiple rounds of internal discussion and code/theme analysis.

Recommendations

Different individuals have different stories and thus a larger sample size may be recommended for future researches to gain more input from other geographic locations. The use of surveys with the addition of Likert scales may also supplement the data from interviews and add a quantitative aspect to the study. As for potential research questions, future research can delve into the current state of medical students' motivations post-COVID-19 pandemic. Students may also be asked about their preferences on the use of online and onsite forms of learning medicine.

The interviews gave different perspectives on the changing personal motivations of medical students throughout the COVID-19 pandemic. It was made clear that the motivational foundation of the majority was the desire to serve given the state of Philippine healthcare at the time. Extrinsic factors of financial stability, social recognition, and not wanting to be left behind by peers, were other personal motivators. While not perfect, online learning platforms were a pragmatic means to this end goal.

Motivation came in both intrinsic and extrinsic forms, with both students' personal goals respondents suggesting that faculty maintain constant communication to ensure the effectiveness of the workload and online learning as a whole. Reevaluation of the curriculum rollout and considerations for face-to-face classes or other means of providing skills training and patient interaction may also be discussed between the student body and learning institutions. The hope is to refine online learning methods such that it remains a viable option in the future of medical education and to strike a balance between online learning and sufficient skills training.

These stories have the potential to bring about positive change in local medical education methods applicable to other developing countries if provided with enough data quantifying the experiences of medical students during the pandemic. The insights gathered from the experiences of the students in the study can hopefully start discussions among local school administrators that seek to answer questions such as "How can we help the students cope with online learning given the situation?", "How do we support the students psychologically given that they remain committed to finishing medical school?", "How can we adjust the workload or innovate learning methods so as to make the most out of a difficult situation?" etc.

Similar to previous research conducted on medical students in first world countries, most medical students in the study felt more motivated to continue with their education but desired for more support. Suggested recommendations from them include student wellness programs, increased scholarships withless tuition burden, dedicated faculty to maintain constant communication with students, active discussion between student bodies and learning institutions, and considerations for other means of skills training and patient interaction.

Conclusion

The study provides valuable insights into the motivations of medical students of select students in the Philippines during the COVID-19 pandemic and supplements existing literature on online learning during this period. Despite poor communication infrastructure and having to adjust learning styles, pre-clinical and clinical medical students from selected medical schools in the Philippines found ways to persevere. The state of healthcare in the country strengthened their motivations to pursue their studies despite a shift to online learning and changes in socioeconomic contexts. The motivation to serve their country as doctors helped overcome their own personal challenges.

The study serves as a springboard to raise awareness on the need to improve medical education both locally and internationally to

better support medical students. Discussions on how to address their concerns are encouraged among school administrators and faculty to help this next generation of healthcare workers. The hope is to refine online learning methods such that it remains a viable option in the future of medical education, and to find ways to strike a balance between online learning and sufficient skills training for quality healthcare even during states of calamity such as the COVID-19 pandemic and beyond.

Summary – Accelerating Translation

Frontlines and Crossroads: The Impact of COVID-19 on the Motivations of Medical Students from Selected Philippine Medical Schools in Pursuing Their Medical Studies sought to assess the motivations of medical students to pursue their studies during the COVID-19 pandemic, and to propose recommendations to support them. This was a qualitative study involving semi-structured interviews and inductive thematic analysis of select medical students from across the Philippines. We found that despite the limitations of online education, lack of social interaction and skills training, more students were motivated to continue as the pandemic highlighted the need for physicians. The desire to serve motivated most pre-clinical medical students while financial reward was a factor for clinical medical students. Their personal stories suggest room for improvement in medical education. Addressing their concerns through financial and educational support, and bridging clinical skills with online learning would thus help create quality healthcare beyond the pandemic context.

References

1. World Health Organization. Coronavirus disease (COVID-19): Situation Report 1 Philippines. 2020. https://www.who.int/docs/default-source/wpro---documents/countries/philippines/emergencies/covid-19/who-phl-sitrep-1-covid-19-9mar2020.pdf?sfvrsn=2553985a_2
2. Amit A, Pepito V, Dayrit M. Early response to COVID-19 in the Philippines. 2021. 12(1): 56- 60. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8143926/#:~:text=1b%20shows%20all%20interventions%2C%20including,declared%20COVID%2D19%20a%20pandemic.
3. CNN Philippines Staff. Octa sees early sign Metro Manila Nearing covid-19 peak as positivity rate goes over 50%. https://cnnphilippines.com/news/2022/1/10/Metro-Manila-COVID-19-peak-Omicron-OCTA.html
4. Department of Health. COVID-19 Case Tracker: December 20, 2021. Department of Health, Republic of the Philippines. https://doh.gov.ph/covid-19/case-tracker
5. Gonzales C. SWS: 31% of families with distance learners have weak internet connection. 2021. https://newsinfo.inquirer.net/1403566/sws-31-of-families-with-distance-learners-have-weak-internet-connection#ixzz8NWfTyjoz
6. Deshetler L, Gangadhar M, Battepati D, Koffman E, Mukherjee R, Menon B. Learning on Lockdown: A Study on Medical Student Wellness, Coping Mechanisms and Motivation during the COVID-19 Pandemic. 2021.https://www.researchgate.net/deref/https%3A%2F%2Fdoi.org%2F10.15694%2Fmep.2021.000050.1?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19.
7. Istadi Y, Raharjo TJ, Azam M, Mulyono SE. Academic Performance in Medical Education During the COVID-19 Pandemic: A Scoping Review. 2022 (13):1423—1438. https://www.dovepress.com/academic-performance-in-medical-education-during-the-covid-19-pandemic-peer-reviewed-fulltext-article-AMEP
8. Adaramola O, Idowu O, Toriola O, Olu-Festus D, Oyebanji T, Uche-Orji C, et al. Coping strategies of Nigerian medical students during the COVID-19 pandemic. 2022 Mar; 56(1): 15–22. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9334952/
9. Ferrel, M. N. and Ryan, J. J. (2020) 'The Impact of COVID-19 on Medical Education', Cureus, 12(3), p. e7492.
10. ION Professional eLearning Program. (n.d.). Strengths and Weaknesses of Online Learning. University of Illinois Springfield. ION Resources. https://www.uis.edu/ion/resources/tutorials/overview/strengths-weaknesses
11. Farber O. Medical students can help combat Covid-19. Don't send them home. 2020. https://www.statnews.com/2020/03/14/medical-students-can-help-combat-covid-19/.
12. Jones S. Interpreting themes from qualitative data: thematic analysis. 2024. https://www.evalacademy.com/articles/interpreting-themes-from-qualitative-data-thematic-analysis
13. Turner D. What's the difference between codes and themes in qualitative analysis? 2022. https://www.quirkos.com/blog/post/whats-the-difference-between-codes-and-themes-in-qualitative-analysis/
14. Maguire M, Delahunt B. Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. Dundalk Institute of Technology. All Ireland Journal of Higher Education. https://ojs.aishe.org/index.php/aishe-j/article/download/335/553/1557
15. Ryan R, Deci E. Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. Contemporary Educational Psychology. 2020.
16. Beckmann J., & Heckhausen H. Motivation as a function of expectancy and incentive. In Heckhausen J., & Heckhausen H. (Eds.), Motivation and Action. Cambridge: Cambridge University Press.; 2018. p. 99–13). 10.1017/cbo9780511499821.006
17. Morris L, Grehl M, Rutter S, Mehta M, Westwater L. On what motivates us: a detailed review of intrinsic v. extrinsic motivation. 2022 Jul; 52(10): 1801–1816.
18. Nikou S, Economides A. A model for Mobile-based Assessment adoption based on Self-Determination Theory of Motivation. 2014 International Conference on Interactive Mobile Communication Technologies and Learning (IMCL2014).
19. Jnanathapaswi S. Thematic Analysis & Coding: An Overview of the Qualitative Paradigm. An Introduction to Social Science Research (pp.98-105) APH Publishing Corporation, New Delhi. 2021. https://www.researchgate.net/publication/356924218_Thematic_Analysis_Coding_An_Overview_of_the_Qualitative_Paradigm
20. Crosley J. What (Exactly) Is Thematic Analysis? Plain-Language Explanation & Definition (With Examples). 2021. https://gradcoach.com/what-is-thematic-analysis/#:~:text=When%20undertaking%20thematic%20analysis%2C%20you,such%20as%20an%20interview%20transcript
21. Patel J, Robbins T, Randeva H, et al. Rising to the challenge: Qualitative assessment of medical student perceptions responding to the COVID-19 pandemic. Clinical Medicine, 2020-11-01, Volume 20, Issue 6, Pages e244-e247
22. Filiana A, Rini M, Prabawati A. Mood Tracking Apps from the Perspectives of Indonesian Students: A Qualitative Analysis. 2023 9th International HCI and UX Conference in Indonesia (CHIuXiD).
23. Saldana, J. M. (2015). The coding manual for qualitative researchers (3rd ed.).SAGE Publications. https://uk.sagepub.com/en-gb/eur/the-coding-manual-for-qualitative-researchers/book273583
24. Schweiki E., Martin N., Beekley A., Jenoff J., Koenig G., Kaulback K. et al. Applying Expectancy Theory to residency training: proposing opportunities to understand resident motivation and enhance residency training. PubMed Central. 2015: 6: 339–346.

25. Stoffel J. and Cain J. Review of Grit and Resilience Literature within Health Professions Education. American Journal of Pharmaceutical Education. 2018: 82(2), 6150.
26. Sansone C., Fraughton T., Zachary J., Butner J., Heiner C. Self-regulation of motivation when learning online: the importance of who, why and how. Education Technology Research and Development. 2011; 59: 199-212. https://link.springer.com/article/10.1007/s11423-011-9193-6
27. Dascalu CG, Zegan G, Antohe M. Correlations between the Motivational Persistence Scale and the Efficacy on Online Medical Learning. IEEE. 2022.
28. Baticulon R, Sy J, Alberto N, Baron C, Mabulay R, Rizada L, et al. Barriers to Online Learning in the Time of COVID-19: A National Survey of Medical Students in the Philippines. Medical Science Educator. 2021;31: 615–626.
29. Tempski P, Danila A, Arantes-Costa F, Marina A,Torsani M, Martins M. The COVID-19 pandemic: time for medical teachers and students to overcome grief
30. Park J, Chung S, An H., Park S., Lee C., Kim S. et al. A Structural Model of Stress, Motivation, and Academic Performance in Medical Students. Psychiatry Investigation. 2012;9(2): 143-149.

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