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Subliminal voices: barriers to healthcare and proposed interventions by international students and their families at a large research university in the Midwest

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Despite the vast numbers of international students in the U.S. as well as their contribution to the economy, their voices are rarely heard within the discursive spaces of the American academe. This study takes a step toward filling that gap and seeks to open up a platform where married, international graduate students at a large Midwestern university could communicate, in particular, the barriers they faced while accessing healthcare facilities for their families. Using a culture-centered approach to health communication, through focus groups and in-depth interviews, this study provides a discursive space where 22 international students and spouses articulate vivid narratives of the problems they encountered while negotiating the American healthcare system, revealing a basic issue of unaffordability of students' spousal health insurance, accompanied by a dire need for better communication between international students and the university, with there being a need for the latter to better explain to international students a healthcare system that is new to them, as well as communicating with them, with better clarity, the available healthcare options for them and their spouses. The participants also proposed interventions to redress the problems, including the need for better dissemination of information regarding healthcare.

KEYWORDS

culture-centered approach, health interventions, international students (foreign students), health communication, in-depth interview, focus groups

Introduction

According to the 2020 Open Doors report published by the Institute of International Education, more than 1 million international students were enrolled in U.S. universities in the 2019–2020 academic year ("Open Doors 2020"). A number of them—especially graduate students since they are older in age than undergraduates—were probably accompanied by family; a decade ago Chittooran and Sankar-Gomes (2007) estimated that a third of international students bring their families with them. Despite their high numbers, Lee and Rice (2007) discovered it isn't uncommon for international students and their families "to report being treated like uninvited guests" (p. 386). Underlying factors for such experiences could include international students being "perceived as threats to U.S. economic self-sufficiency" (Rhoades and Smart, 1996 cited in Lee and Rice, 2007; p. 384), or being viewed as mere sources of revenue which then discounts their cross cultural experiences, or even "neo-racism"—which Spears (1999, cited in Lee and Rice, 2007) defines

as "the subordination of people of color on the basis of culture" (p. 389)—which could create "barriers to forming interpersonal relationships in the host society" (Lee and Rice, 2007; p. 390).

International students' spouses, whom De Verthelyi (1995) called "invisible sojourners," are worse off: In addition to having no work opportunities in the U.S. due to visa regulations, they are "generally ignored by university authorities who do not see their wellbeing as falling within the university's realm of responsibility" (Martens and Grant, 2008; p. 57). Thus, these individuals "are *in* [sic] the community, they are not *of* [sic] it" (Schwartz and Kahne, 1993; p. 454).

This negligence on part of university administrators continue despite research revealing that accompanying spouses "are a potentially key source of social support" (Martens and Grant, 2008; p. 57) for international students, and play a crucial role in their academic success and acculturation (Lin, 2018). Incidentally, international students contributed more than \$38 billion to the U.S. economy during the 2019–2020 academic year (New NAFSA, 2020). Besides their dollars, they also bring their skill and knowledge often in the areas of science, technology and engineering (Lee and Rice, 2007).

The researcher of this paper was an international student at a large Midwestern university. In addition to the issues mentioned above, he noticed his married peers struggling to afford and access adequate healthcare for their accompanying spouses and families. At the time when this study was conducted, there was no communication platform where international students could clarify their queries or voice their struggles regarding healthcare affordability although such a communication channel could well serve as the first step to addressing their needs. To, therefore, give these individuals a place to communicate their opinions, the researcher did a graduate school-funded white paper that forms the basis of this paper. Spouses of international students are an underresearched population (we will discuss this at greater lengths in the literature review). The purpose of this paper then is to give these individuals—as well as their enrolled partners—a discursive space to communicate their struggles in accessing something as basic as adequate healthcare.

The research question that this paper will address is the following:

RQ: What are the barriers that married, international graduate students face at University X in the Midwest while trying to get adequate health insurance and/or healthcare for their families?

- What strategies do they employ to procure medical help in spite of the barriers?
- What possible interventions did they suggest to improve the healthcare facilities available to families and spouses of married, international graduate students at University X?

Literature review

Problems of graduate students with families

Even before one begins to discuss the problems that married graduate students—a specific subset of the graduate student population—face, it is important to analyze the position of graduate students per se within the context of higher educational institutes. Santiago et al. (2017), in their study of Brown female teaching assistants, called graduate students "low-level wage earners" (p. 49) in a corporate enterprise where universities, over the past few decades, have turned themselves into transnational institutes of knowledge production, change, distribution and consumption. In this financially-disadvantaged position, graduate students often "experience exploitative practices at the institutional level" (Santiago et al., 2017; p. 49), with their voices silenced that further de-powers them. With that in mind, it is scarcely surprising that research has revealed the struggles graduate students with families go through juggling myriad roles-those of a student, parent, partner, employee-in addition to dealing with financial insecurity and career uncertainty as well as managing their relationship with their academic adviser (Dolson and Deemer, 2022). Rahman (2015), in his qualitative study on graduate students with families at a university in California, found his interviewees mentioning balancing between school, work and parenting to be a particular challenge, and also expressing guilt at spending inadequate time with their families. His respondents also voiced their dissatisfaction with the student services available to them, revealing needs for counseling, training in time-management and more targeted communication between departments and graduate students (Rahman, 2015). Oswalt and Riddock (2007) in their survey of graduate students--14% of whom had children-at a large southeastern university found that while their survey respondents reported "high levels of stress with school work, finances, assistantships and jobs" (p. 39) and wanted to access healthy coping strategies through the university, they were nevertheless unware of some of the services already available to them on campus (Oswalt and Riddock, 2007). This is similar to what Brown and Nichols (2012) found in their research regarding pregnant and parenting students-a lack of awareness about available on-campus resources. They also found "a large gap between what is being provided and what is actually needed" (Brown and Nichols, 2012; p. 524). In fact, Brown and Nichols (2012), based on interviews with their research subjects, called for policy changes that could lead to, for instance, mentoring of faculty to cater to the needs of pregnant or parenting students, or the need for a drop-off daycare facility on-campus. They advocated for the creation of administrative policy at the university level that would change the organizational culture and help universities create programs and policies that would help pregnant and parenting students.

The (little-known) needs of international students and their spouses

Some of the key studies amid the very limited literature on international students' spouses include Vogel (1986) study of Japanese wives of Harvard University students which revealed a variety of problems, including those of language barrier, social isolation, pervasive anxiety, difficulties with adjusting to American social customs and communication problems between Japanese students and their spouses and healthcare professionals because of the language barrier as well as the students' unfamiliarity with the role of nurse practitioners and the American insurance system. De Verthelyi (1995), in her study involving spouses of international students at a large university in rural Virginia, discovered additional issues which spouses of international students reported facing, such as frustration stemming from a lack of purposeful activities to do, a loss of professional identity as spouses are prohibited from working due to visa regulations, and financial restrictions and instability. Wives of students also figure out that "in a very practical sense their participation in university life is severely limited ... When they have problems, they cannot automatically expect to use school resources and usually do not know how to get linked to community resources" (Schwartz and Kahne, 1993; p. 454). Myers-Walls et al. (2014), in their study of 31 international graduate students and spouses, listed among six categories of stressors, the anxiety some students reported experiencing regarding their spouses not having health insurance coverage in the U.S. This reflects a persistent problem since one of the earliest comprehensive studies done by the National Association of Foreign Student Advisers (NAFSA) in 1981 about the needs of international students placed the "need for having enough money for basic living expenses" (p. 49) was right at the top of the list, and the "need for enough money for necessary medical care" (p. 49) as the fifth item on the list. In spite of three decades having passed since that study, both the above-mentioned need has not been met.

At the time this research was being done, a graduate student at the university where this project was conducted was earning \$13,322 a year if she was a teaching or research assistant or \$14,630, if she was a graduate lecturer (Sen, 2014). The year before, the Federal Poverty guidelines pegged the minimum annual income of a family of three at \$19,090 (2012 HHS Poverty Guidelines, 2012). Thus, at the university where this research was done, an international married graduate student, who lived with her spouse and child, could only live below the poverty line.

Not much has changed since the time when the white paper was written. For the academic year 2021-2022, according to the graduate staff employment manual of the university where the research was done, a graduate teaching or research assistant was receiving a minimum of \$15,912, if she was working half-time [the longest duration an international student is allowed to work per week during school year (F-1 Student On-Campus Basic Guidelines, 2020)]. If she was a graduate lecturer—a rank higher than a graduate teaching or research assistant-working half time, she would receive \$17,474 during the academic year (Purdue University Graduate Staff Appointments Minimum Salaries, 2021). However, the U.S. federal poverty guideline for 2021 said a family of two had to make more than \$17,420 to live above the poverty line (2021 Poverty Guidelines, 2021). A family of three had to earn \$21,960 (2021 Poverty Guidelines, 2021). An international graduate student with a spouse at this university was thus living below the poverty line if she was a teaching or research assistant, and close to the poverty line is she was a graduate lecturer. If she had a child, then the family of three was most certainly living below the poverty line. Consequently, affording health insurance is difficult.

At this university, a single graduate student working half-time would pay at least \$251 per month if she added her spouse to her insurance, and at least \$331 per month if she added her spouse and child to her health insurance (Sen, 2014). For an individual earning about \$1,480 a month as a graduate assistant, paying \$331 a month for health insurance for her spouse and child is a hard choice since it leaves her with <\$1,150 to pay for food, rent and other miscellaneous costs.

The situation was far worse for an international student who had no funding or who worked <20 h a week. She paid \$1,135 annually for her own insurance, but the yearly amount rose to \$4,985, if she added her spouse to her insurance plan, or \$6,386 if she added her spouse and a child to her insurance plan (Sen, 2014). If she wanted to add more than one child and her spouse to her insurance plan, the annual payment escalated to \$6,790—an exorbitant amount for one dependent largely on her own funds.

In spite of the persistent nature of the problem of accessing healthcare with limited funds, no studies have exclusively looked into how international students and their spouses negotiate the problem of their financial limitations restricting their access to healthcare. Nor has any study provided a discursive space where international students and their spouses could articulate ways in which a recalcitrant problem of this nature could be redressed. This current study could be a step toward fulfilling that gap in the literature.

Theoretical framework

Since this paper explores the barriers to healthcare access that spouses of married, international students faced at a particular Midwestern university where they were a minority group, this study used the theoretical framework of the culture-centered approach (CCA) to health communication which "provides a lens for analyzing and interpreting the lived experiences of minority communities" (Koenig et al., 2012; p. 820) as well as seeks to create discursive spaces where minority voices can be heard, articulating their needs as well as proposing solutions. This is exactly what this study does by listening to the rarely-heeded opinions and suggestions of international students and their spouses.

Building upon subaltern theory that "proposes that historical, economic, and ideological forces silence marginalized communities by imposing a 'one size fits all' set of values offered by the dominant paradigm" (Koenig et al., 2012; p. 820), the CCA posits that marginalization takes place "through systematic institutional mechanisms that are invisibly enacted through the ideologies of the health care system. As a result, the subaltern sectors are rendered absent from the dominant spaces of knowledge" (Koenig et al., 2012; p. 820). This absence is seen in case of spouses of international students, as we have discussed earlier. The CCA then aims to mitigate these asymmetries of power in the context of health inequalities and redress the concomitant erasure of voices of marginalized communities (Sastry et al., 2021) by creating discursive spaces where these voices can be heard.

Incidentally, the CCA posits that "communication exists at the intersection of culture, structure, and agency" (Dutta, 2018; p. 241). According to Sastry et al. (2021), in the context of CCA, "culture refers to the dynamic webs of shared meanings that are (re)constituted through everyday interactions among cultural members, within their local contexts" (p. 381). Structures appertain to "institutional roles, rules, practices, and ways of organizing that constrain and enable access to resources" (Dutta, 2011; p. 40). In this study, structures would include medical services available at the community level and/or on campus. They also would include healthcare-related policies at the university that impacted the lives of students. By agency, one "refers to the capacity of human beings to engage with structures that encompass their lives ... to live within these structures and, at the same time, to create discursive openings to transform these structures" (Basu, 2008; p. 30).

In the context of this research project, married, international students and their spouses were considered as belonging to a marginalized group, not only due to their meager income but also because their opinions are rarely sought or heard within the mainstream discursive spaces of the American academe. Also, because international students and their families typically come from societies vastly different from mainstream America, using a theory that valorizes the role of culture in understanding the articulations of health experiences in marginalized communities, was considered appropriate for guiding this paper.

Methods

Focus groups and in-depth interviews were used to gather data in this study. They were considered appropriate for this study because, first, this study is undergirded by the theoretical underpinnings of the culture-centered approach to health communication which aims to open up discursive spaces for marginalized voices to be heard. It was therefore appropriate to use a data-gathering method such as focus groups and indepth interviews that would allow those voices of the marginalized to emerge. Although the intention of the study is not to create a theory, nevertheless the principles of constructivist grounded theory (Charmaz, 2000) has been used to do a thematic analysis of the data since the co-creations of meanings through the researcher's conversations with the participants via the focus groups and the interviews, have been examined here.

Setting

This study was conducted at a large Midwestern university, and was funded by a Graduate School grant that was awarded to projects focused on addressing some problem of graduate student life with the intention of making improvements. Incidentally, this university has a record of being among US universities with the largest international student populations; in 2022, it is among the top 10 (Colleges with the most international students, 2022). This is a significant fact because although the setting is a location where international students are numerically significant in the campus community, yet knowledge of their struggles to afford healthcare for their spouses has eluded the authorities. This then further raises the question that if this problem could persist where international students have a robust presence, what might be the plight of international students' spouses on campuses where they are fewer in number and therefore all the more negligible in presence and importance.

The researcher, as stated earlier, was an international graduate student at the university where this research project was conducted. From his interactions with fellow international students, who were married, he was aware of the problems those students were facing affording health insurance for their spouses. But he wanted to explore the problem deeper and doing focus groups seemed to be an appropriate starting point, followed by a series of indepth interviews.

Data collection and recruitment strategy

Data collection for this study was done in two-phases. In the first phase, a series of three focus groups were conducted oncampus. Information gathered during these focus groups informed the questions that were subsequently asked during in-depth interviews that constituted the second phase of data-gathering.

Recruitment for this project was done in a number of ways. The Office of International Students and Scholars sent out a recruitment email to all international students on campus. Flyers also were posted around campus. Both the recruitment email and the flier specified that participants had to be either international graduate students who had spouses and/or children living with them, or they could be a spouse of an enrolled international graduate student. Purposive sampling was also used to contact some married, international students who the researcher personally knew. These individuals were included in the study because they had their spouses and families residing with them.

Subsequently, those interested contacted the researcher and was told to come to a specific room on campus at a particular time and date. Each focus group had 5 to 6 participants. The researcher was there to welcome participants to the venue, read out the IRBapproved consent form and get their consent signatures. Each focus group was recorded using a digital voice recorder with the participants' consent.

The in-depth interview participants also contacted the interviewer directly. The one-on-one interviews were scheduled at an agreed-upon time and venue on campus. After each interviewee read and signed the IRB-approved consent form, the researcher conducted the interview and recorded it using a digital voice recorder. The in-depth interviews were semi-structured, giving the researcher the opportunity to ask follow-up questions, wherever necessary. Some of the questions asked were: What kind of healthcare is available to you and your family here at this university? What is your opinion about the healthcare facilities that are available to you and your spouse/family here? What are some barriers, if at all, that you encounter when you try to get adequate healthcare for yourself, your spouse and/or your family here at this university?

Participants

A total of 17 participants participated in the focus groups, while 22 participants were interviewed in-depth during the course of the study. Some of the participants of focus groups came back to be interviewed in-depth. Overall, participants included 10 Chinese students of whom two were accompanied by their spouses, 4 Indian students, 2 South Korean students, one of whom was accompanied by his spouse, 2 Pakistani students, and one Nigerian student. Of the total participants, 19 were male and 3 were female. Among the participants, the Nigerian student had a daughter and an infant boy. One of Korean students revealed during the interview that he had a son. The ages of the children were not asked during the interviews. None of the participants were accompanied by his or her children. All of the participants were in their late 20's except for one individual who was in his early 30's. The participants were not required to reveal the specific degree that they or their spouses were pursuing at the university where the research was conducted.

Data analysis

The transcripts of the focus groups and in-depth interviews were analyzed keeping in mind the principles of constructivist grounded theory. According to Mills et al. (2006), grounded theory "is a methodology that seeks to construct theory about issues of importance in people's lives ... through a process of data collection that is often described as inductive in nature ... in that the researcher has no preconceived ideas to prove or disprove. Rather, issues of importance to participants emerge from the stories that they tell..." (p. 27). In fact, in constructivist grounded theory, the interactive process between the researcher and the research subjects brings out the reality in its temporal, cultural and structural contexts (Charmaz, 2000). This approach to data gathering was considered appropriate for this study because it would allow the researcher to interview participants without any preconceived notions and thereby offer participants an open discursive space within which to express themselves and co-create meanings through their conversations with the researcher.

The main questions asked during the in-depth interviews were informed by the viewpoints that participants articulated during the focus groups. For instance, the first question of the focus group asked participants to share their experiences while trying to get healthcare for their spouses or children at the university. The ensuing discussions revealed a deep sense of dissatisfaction that students articulated and negative opinions about the university. In order to provide students a discursive space to voice their feelings more openly, in the in-depth interview, a question was included that asked their "opinion about the healthcare facilities that are available to you and your spouse/family here at this university." Also, during the focus groups, while talking about their experiences trying to get healthcare for their families, a number of participants mentioned the mental stress they underwent and how that in turn affected their studies. In order to give students a fuller scope to talk about this, a question was included in the in-depth interviews which asked in what ways "the health of your spouse and/or family affect you as a student." Thus, the questions of the in-depth interview examine more intensely issues that came up in the focus groups and help students and/or their spouses elaborate upon some of the viewpoints that were raised during the focus groups.

The audio files of the interviews were transcribed by the researcher and a research assistant and analyzed using the Constructivist Grounded Theory approach (Creswell, 2006). The transcripts of the in-depth interviews were closely read multiple

times by both the research and his research assistant, followed by open coding, axial coding and selective coding. The involvement of two coders in the transcription and coding stage ensured greater reliability and validity of the data. During open coding, the researcher went line by line through the transcripts, noting down first impressions through code words jotted alongside the lines. A total of 51 codes emerged from open coding. Among these codes were "high cost of insurance," "limited income as students," "spouse not allowed to work as a dependent of an international student," and "dependence on personal funds." In the axial coding phase, similar codes arrived at during the open coding phase were grouped into 12 broader categories or axial codes. For instance, open codes such as "use of home remedies," "dependence on young age to stay healthy," "bringing medicines from home" were grouped under the category of "ways of coping." In the selective coding phase, the axial codes were further reduced into three major themes. During the different stages of open, axial and selective coding, the researcher conversed with some of the interviewees to evaluate the validity of our findings (Lincoln and Guba, 1985). Once the final themes were decided upon, these were discussed with these interviewees to ascertain the validity of the themes. These themes have been reported in the "findings" section.

Trustworthiness and credibility

In order to ascertain trustworthiness and credibility in the findings, the researcher used data triangulation. The transcripts of the focus groups as well as those of the interviews, along with the memos kept after each interview and focus group were all read and re-read multiple times and used together during the data analysis to ensure that the findings were trustworthy and credible.

Results

The results of the in-depth interviews can be placed under three broad categories that correspond with the research questions that this study aimed to answer: (i) the barriers that married, international students and/or their spouses faced trying to access adequate healthcare; (ii) the strategies they adopted to overcome the barriers, and (iii) suggestions they offered to address the problems surrounding healthcare access.

This results section is therefore divided into three sections respectively.

The first section that talks about the barriers to healthcare is further subdivided into two parts: (i) The prohibitive cost of health insurance and (ii) the lack of understanding of the American healthcare system.

The third section that discusses interventions is also divided into three suggestions: (i) Insurance with more options; (ii) better dissemination of information and (iii) expanding services at the university's student health center.

Barriers to healthcare

The primary barrier that prevented married international students from accessing adequate healthcare for their spouses

and/or families was the prohibitive cost of health insurance. What compounded the problem were the complexities of the American healthcare system that students and their spouses—new to the US found difficult to understand and navigate through. The following sections elaborate on both these issues.

The prohibitive cost of health insurance

The biggest barrier to healthcare that the focus groups and in-depth interviews revealed was the prohibitive cost of health insurance. Majority of participants in the study reported that their spouses did not have health insurance simply because it was too expensive for them. They reasoned that, given the high cost of health insurance and their meager income, it was financially more prudent to preserve the money they would spend on health insurance premiums every month and use it if and only if their spouses ever needed medical assistance.

Students cited numerous scenarios where they had no leeway in terms of income with which they could afford health insurance for their spouse. Participant No. 3, in Focus Group 1, for instance, reported earning \$772 a month as a quarter-time graduate assistant. Out of this amount, he said he paid \$628 for his one-bedroom apartment and \$30 to \$40 for gas for his car. Consequently, he reported meeting his other expenses with money from his savings, which left him no option but to leave his spouse out of his health insurance plan.

Lack of understanding of the American healthcare system

Another barrier to accessing adequate healthcare was a lack of understanding among international students about the workings of the healthcare system in the U.S. In-depth Interviewee No. 6, for instance, was caught unawares when his wife became pregnant right after his joining the university as a doctoral student from an African county. Since he had insurance for his wife, he assumed his wife was covered. But he discovered that she would not get insurance benefits until he had paid enough money through premiums into her account. The following excerpt from his in-depth interview reflects his frustration:

Interviewee 6: The authorities... need to do a lot of enlightening or orientation or educating of the incoming students so that they know how the system functions. Secondly, the health insurance companies themselves ... also need to do a bit of educating, because it's like you're taken unawares. Because if I knew they're not going to cover this then why do I end up spending 460 bucks and my account being in red? I could have used that and said, "Hey! Let's go by fate. If anybody falls ill, we'll try our luck." Because that makes more sense! Like, that's fraud! That's broad-day fraud! They're taking money from me yet I cannot get anything from them. Researcher: They should let you know right when you are starting off that okay you're being charged \$460 a month, but you will not be able to withdraw anything for 1 year. Interviewee 6: Yeah.

Researcher: That needs to be told right at the get-go. Did they tell you that?

Interviewee 6: No, nobody tells you that.

Interviewee No. 4 also articulated the need for international students to be educated about how the medical system works in the U.S.

Another barrier [to healthcare] is ... [knowing] how the Medicare's system in the United States works. So sometimes we don't know how to respond, you know. How to check in, how to check out, how to pay the medical bill. This is also a barrier since we're not familiar with this medical system.

Interviewee No. 5, a graduate student from Pakistan, also voiced a need for educating incoming international students about how the medical and financial system work in the U.S. To illustrate his point, he mentioned an instance where he had to engage in a prolonged exchange with a laboratory that could not access his insurance information and was, therefore, forcing him to pay a certain amount. After receiving numerous bills from the laboratory—which also had reported his name to a collection agency—and making repeated phone calls to his insurance company, he succeeded in resolving the issue.

The focus groups and interviews also revealed a dearth of information on the healthcare resources available in the offcampus community for the under-insured and the uninsured. Few participants, for instance, knew about a community health center that was there off-campus, which served the uninsured and those living below the poverty line in the area for the past 25 years. Also, out of all the interviews and focus groups that were conducted, only one focus group participant—a graduate student from India— referred to a health insurance program that was there for uninsured residents of the state.

Coping strategies

Besides taking the risk of not signing up for health insurance for their spouses, international graduate students employed various unsafe strategies to encounter the barriers they faced in trying to get adequate healthcare for their families. For couples without children, where the spouse of the student did not have health insurance, a common strategy was to bring medicines from their home countries with which they treated minor health problems. In some extreme cases, spouses without insurance, simply tried out home remedies hoping a certain physical ailment will cure itself in time. Participant No. 3 in Focus Group 1, for instance, stated that for the past few months his wife had been suffering from sensitivity in her teeth but had been trying to cure the problem using the home remedy of brushing her teeth with turmeric powder and oil twice a day—a strategy that had not brought her any relief.

The exorbitant cost of healthcare sometimes deterred even those with insurance from seeking medical help. In-depth interviewee No. 5, for instance, had the following narrative:

Interviewee: Once my daughter was a little sick. I was very worried as to what I should do that. She was vomiting once or twice. So I was thinking if I should go to the emergency or whether I should wait? Researcher: Because emergency room is more expensive? Interviewee: Yeah. And if they admit you, then your bill will cross \$1,000 or something. So I contacted the nurse, and she gave some tips and she was fine. But there could be something which could get out of your control ...

Another strategy, articulated during the focus groups, was getting short-term traveler's insurance from one's home country. Participants also spoke of using money from their savings-which they had accumulated while they were employed prior to their graduate studies. For example, Participant No. 2 from Focus Group 1—a master's student from India—said he was employed for <20 h a week as a tutor on campus for which he got paid \$12 an hour. He supplemented his income by the savings he had put aside while working full-time for 6 years before returning to graduate school. Since he was employed for <20 h a week, he paid \$1,135 per year for his health insurance. At the time of the focus group, he intended to get a traveler's insurance for his wife, who was scheduled to come to the U.S. the following month. Paying \$4,985 for his and his wife's insurance was beyond his means, he said. He, however, did not consider his case an anomaly since, according to him, several master's students in his department did not have funding from the department.

Focus Group Participant No. 6, a Ph.D. student from South Korea, who talked about coming from a poor working-class family, said he supplemented his assistantship salary with money—"a very, very small amount"—that he brought from his home country. Incidentally, Participant No. 6 was one of those individuals who said that his wife did not have insurance. At the time of the focus group, they had just had their first child. Although Medicaid covered the child—since he was a U.S. citizen by birth—Participant 6 had to apply for Emergency Medicaid for his wife in order to pay for the delivery. He also applied for financial assistance from the hospital so that his portion of the hospital bill was subsidized. In addition he reported engaging in intense financial juggling in order to make ends meet.

Interviewee No. 6: I've been able to do additional hours during the summer vs. the usual 20 hours [when school is in session] and that gives me extra income. And I save up huge because I know that hey! I've got a family. That's one. Secondly I've latched on to credit cards very much (laughs). So you kind of revolve and what that does is, it puts you back in a continuous cycle. So what I've done is to be strategic in the sense that when I do summer jobs, I use them to pay off my credit cards...

Researcher: And then the credit cards are free for you to use during the school year.

Interviewee No. 6: Exactly. So it's kind of being strategic backand-forth.

Coping with intense financial pressure can take a toll on students as was revealed, in particular, during focus groups. As one focus participant stated: "See, we are here to study, focus on research or whatever. These things [financial pressure] really bother us a lot. I don't see even a single day me not thinking about this aspect [of life] which is affecting me." The following exchange between a Chinese focus group participant and the researcher also revealed that struggling with myriad copying strategies against inadequate healthcare facilities made international students feel as though the university did not care enough to help them in their predicament.

Participant No.5: This university is known for its large majority of international graduate students.

Researcher: Yes.

Participant No. 5: Lot of Indians, lot of Chinese, lot of South Koreans.

Researcher: Yes.

Participant No. 5: And we are making contributions ... We are not just here playing around. But sometimes it feels that we don't get what we deserve, if you can call it so.

In-depth interviewee No. 2 echoed a similar frustration when he said:

Spouses of grad students can get at least 25% [insurance coverage]. At least 15[percent]. And even if they get 25%, it's somehow particularly very helpful but also there is a symbolic part too. Because [the university] can give other prospective student employees impression that [it] cares about your family.

Suggested interventions

Along with articulating the barriers they faced trying to access adequate healthcare for their spouses and families, research participants in this project offered suggestions on how the university could fix the problem surrounding healthcare for the families of married, international students. Their suggestions have been placed under three sections: (i) better communication of information, (ii) insurance with more options, and (iii) expanding services at the university's student health center. The following sections elaborate on each of these suggestions.

Better communication of information

One of the major barriers to healthcare, which emerged in this study, was the need for better communication of information to international students regarding the benefits that their health insurance can get them; a clearer idea of the healthcare facilities that are available to them on and off-campus; and an overall understanding of how the healthcare system works in the U.S.A number of participants complained that coming from another country, they had a hard time understanding the healthcare system in the U.S., with its copayments, deductibles and so on. In-depth Interviewee No. 6, for instance, complained about "the lack of education or clarity about what the [insurance] program can or cannot offer. You blindly get involved in a routine into [the] health insurance program that doesn't cover anything for you, but they collect money from you. I mean ... it is so annoying."

In addition to the opinions expressed by the participants, the need for more information also was revealed by the fact that few interviewees—only three out of a total of 22—seemed

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to be aware of an off-campus healthcare facility, where the uninsured and the under-insured could seek medical assistance at a subsidized rate. In-depth Interviewee No. 3 also articulated the need for more information regarding urgent care, since the university student health facility did not have a 24/7 emergency room. One of the participants of the first focus group, in fact, suggested that the university ought to have consultants that international students could go to if they were faced with any major dilemma regarding healthcare as well as student life, in general. She said:

I was thinking, maybe there can be some consultants, whenever we have any questions, we can go over to them and ask. You have housing problems, you have health issues, you can go to someone and ask, "What shall I do?" This is new experience for us. We don't have the time to find out how to call and how to file claim. At least, have someone who can help us deal with all these issues, if you cannot help us directly financially.

Insurance with more options

One of the main suggestions that participants in this study offered was that the university should give more options to students when it comes to purchasing student health insurance. By options, participants referred to alternative insurance plans that students could opt for, based on the amount of medical assistance they need. As In-depth interviewee No. 1 said:

Interviewee No. 1: I think if they [the university] can figure out a better way to tell different group of people apart, they can design a more reasonable insurance package for low risk group like us with acceptable insurance fee. I think we are really happy to take that.

Researcher: So you're saying more segmentation in terms of... Interviewee No. 1: Kind of...

Researcher: So people who are less likely to fall sick can be offered a cheaper insurance... Not just one big broad service under whom everyone is brought, is that what you are saying? Interviewee No.1: Yeah... yeah you got it.

In-depth Interviewee No. 2 also emphasized the need for the university to offer insurance plans that are customized to the students' needs. Since most college-aged students are in their 20's and 30's, Interviewee No. 2 proposed that the university health insurance could opt not to cover certain diseases that usually do not affect younger populations, but rather focus on health problems that are common among young people.

In-depth Interviewee No. 5 suggested having "two or three options" to choose from. He also favored the idea of the university using multiple vendors so that they could compete with each other and offer the best prices for students. In-depth Interviewee No. 3 said that the university should negotiate better with insurance companies to lower health insurance costs for students.

Expanding services at the university's student health center

In spite of there being a Women's Clinic at the university's student health center, a number of participants in this study articulated the need for a women's health section at the student health center, where pregnant women in particular could go for medical assistance. Some interviewees who had children, also expressed a wish for a pediatric section where children of students could go for treatment. In the following conversation, for example, In-depth Interviewee No. 6, whose wife gave birth to two children after he became a graduate student, articulated the need for a woman's health section and a pediatric section at the student healthcare center.

Interviewee No.6: They need to have the facilities. They need to recruit physicians. They need to have a section that treats pregnant women. They need to have a section for children because if my kids are not feeling well, I cannot take them to the [on-campus health center].

Researcher: I know.

Interviewee No. 6: If my wife is not feeling well, I cannot take her there. But I'm still paying money to them. What sense does that make?

Interviewee No. 6 also expressed reservations in the following excerpt about the quality of services he received at the student health center.

Interviewee No. 6: Most of the people there, do not have expertise in their [fields?] ... just a few of them [do]. They treat you like ... when you go to a specialist, they sit down and listen to you and see... because it looks like they are under a clock to kick you out within a space of 10 minutes or 6 minutes. Researcher: Because there are people waiting outside. Interviewee No. 6: Yeah, which doesn't make sense.

As is evidenced in the above categories under which the overall themes of the interviews and focus groups have been presented, participants had lots of anecdotes by which they illustrated their struggle in accessing adequate healthcare for their spouses and children. At the same time, they also were vocal in articulating possible interventions and solutions by which the system could be changed for the better. The implications of their viewpoints will be discussed in the next section.

Discussion

The main purpose of this project was to examine the barriers that married, international students faced at this particular Midwestern university while trying to access adequate healthcare for their families. It was therefore considered best to begin with giving those affected to communicate first-hand the barriers they faced and then propose solutions—both material as well as communicative—that would ameliorate the situation. Incidentally, as the researcher was an international student at the same university, he found the suggested health interventions most reasonable and implementable—and certainly some of the best approaches one could take to address the problems the researched demographic was encountering.

Through focus groups and in-depth interviews, the primary barrier that emerged was one of affordability. The health insurance rates that were offered to spouses and children of international students were too high for students to afford—who at best were supported by their 20-h graduate assistantship, or at worst were entirely self-funded. In other words, the primary need of money which was found to be the foremost need among international students in the NAFSA study conducted back in the 1980's continues to hound international students three decades later. The financial instability and restrictions that De Verthelyi (1995) discovered among spouses of international students at a large university in rural Virginia back in the mid-1990's also remained a concern among students and their spouses at the site of the current research in the Midwest.

In addition to the material problem of affordability, there also emerged an equally pressing problem of a lack of communication between international students and the university, especially in explaining to international students a healthcare system that's new to them. Thus, the problem of unfamiliarity with the American medical insurance system that Vogel (1986) revealed among wives of Japanese students in Harvard University in the 1980's continued to be an unresolved issue, as several of the interviewees and focus group participants in this study articulated a dire need for the university to better inform international students on how the healthcare system functions in the U.S. as well as what facilities their insurance could or could not provide them. Participants in this study also suggested the need for more insurance optionswith the options being more affordable. Participants also articulated the need for the university to expand its services at the student healthcare center-adding, in particular, a children's section and a women's health section that could assist pregnant women.

The persistence of some of the above-mentioned problems over the decades raises some disturbing questions. One wonders why the same problems affected international students at different universities in different parts of the country during different decades. If international students indeed bring valuable skills into the U.S. and contribute, in particular, to America's advancements in science, technology and engineering disciplines how is it that the needs of this particular segment of the student population has gone unaddressed? Is there then a link between this lingering issue and the feeling expressed by a number of participants that the university is really not concerned about its international students—in spite of publicizing and priding itself on its large international student population? Can that be said, in general, about the American academe too?

It needs to be emphasized that the focus groups and in-depth interviews for this research project were being conducted two years after the Affordable Care Act had been signed into law. Yet not a single research participant reported being benefited by it or talked about using it. Was that because the Affordable Care Act in its early days wasn't available to international students' families? Or were international students not aware about it? The researcher of this project had called the Affordable Care Act customer service while gathering data for this project and was told at that time that the Act was available only to US citizens and Green Card holders. Currently, however, the healthcare.gov website does list an I-20, which is a certificate of eligibility for non-immigrant student status, and a foreign passport as documents one can use while applying for and enrolling in Marketplace coverage (Immigration Documentation Types, n.d.). The researcher, once again, had contacted the Affordable Care Act customer service to clarify this listing. He was informed that spouses and families of international students could now apply for health insurance through the Marketplace as long as they had their I-20s. Nevertheless, it would depend on the individual application if one would be approved for coverage or not. It is also noteworthy that none of the research participants revealed any knowledge of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which is administered by the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture, to help women and children who live in poverty lead healthy and nutritious lives (Yehya and Dutta, 2015). According to the WIC webpage, "health care referrals" is one of the services WIC provides.

The results of this study substantiate the idea underlying the culture-centered approach to health communication that "structural inequities go hand-in-hand with communicative inequities" (Dutta, 2018; p. 239). Through the narratives of the research participants, we discovered that there is a gaping lacuna in communication between international students and the university, in addition to the material need for affordable health insurance options for international students' families. The absence of a two-way communication channel or platform where international students could get their questions regarding healthcare for their accompanying families answered, only exacerbated their sense of feeling lost in a new culture.

As research participants in this study revealed, a new international student in the U.S. needs to be informed about all the options available to her or him, and would need the university she or he was enrolled in, to help her or him understand and navigate through the health insurance system which is likely to be confusing to a foreigner. The health insurance information at the university where this study was conducted does not discuss the Affordable Care Act options on the webpage where it elaborates on student health insurance. There is in-fact a condition that appears in bold fonts on the enrollment information page for international students that reads "enrollment in student insurance is a condition of enrollment for international students ... and is MANDATORY [sic]" (Enrollment Information-International Students, 2020). The only cases were a student may get a waiver to buy student health insurance is when the student's home government is providing a health insurance that is comparable to that of the university, or when the student is sponsored 100% by a US organization such as Fulbright or USAID and has insurance provided by them, or when the student is in an approved exchange program, or when she or he already has health insurance through a U.S.-based employer (Waivers for International Students, 2020).

At the site of this research project, at the time when the data was being gathered there was no forum or entity on campus, where international students could go for guidance as they negotiated an entirely new medical system in a foreign country. A lack of empathy for the problems faced by married, international students was reflected in the simple math that

indicated that health insurance rates, which the university offered spouses and children of international students, were too high when compared with the assistantships that several graduate, international students depended on for their livelihood. This lack of concern was in congruence with Martens and Grant's (2008) statement that universities typically tend to ignore the welfare of the spouses of international students as not being within their realm of responsibility. The dearth of empathy also bolsters the claim that Santiago et al. (2017) made when they labeled graduate students "low-wage earners" within the structures of higher education institutes. International graduate students, who are more disadvantaged than domestic graduate students by the limitations of their immigration status, which also restricts working options for their spouses, are perhaps too lower down in the labor hierarchy to draw the attention of the university authorities especially with regards to matters related to their spouses.

The financial hardship of married, international students also is a glaring example of how the structures of federal regulation can marginalize a minority group. It must be remembered that much of this hardship is the result of federal laws that restrict the number of hours that international students (an F-1 visa holder) can work during a week, while school is in session, to 20 h, and which additionally prohibit the spouse of an F1-visa holder from working altogether (Foreign Students, 2011). These regulations thus deprive married, international students and their spouses of the agency to redress their own financial situation. At the institutional level also there was no platform where international students could articulate their needs and seek a remedy. While it is beyond the scope of any educational institution to modify federal laws, providing better financial options to those already economically-disadvantaged by federal rules, could be a positive step toward building a positive relationship between the university and its international student population. As one participant said, by offering better healthcare facilities and health insurance options, the university could convey a symbolic message to its current and prospective international students that it cares about their wellbeing and that of their immediate families.

Another compelling aspect of the focus groups and interviews was the detailed suggestions that participants offered as solutions to their problem of accessing adequate healthcare for their families. The practicality of these interventions demonstrates how, if provided the discursive space to articulate their viewpoints, marginalized sections of society can indeed produce viable answers to their own problems. It is to be noted that each of the solutions proposed by the participants-for instance, the suggestion to educate incoming international students on how the healthcare and insurance systems work in the U.S., or, the suggestion to provide more health insurance options to students-is most reasonable and implementable. In fact, listening to how financial problems jeopardized the overall mental wellbeing of international students and their families, one might argue that there actually is a strong pragmatic reason why any academic institution should address this problem urgently. This is especially true for international students whose children are unwell. In-depth Interviewee No. 6, whose wife became pregnant and whose daughter fell sick at the same time, is such an example. Another such example is the focus group participant from South Korea, whose wife had no medical insurance yet found that she was pregnant. From a practical standpoint, a university would do itself a disservice if its international students and scholars were unable to put their best into or focus on their academic pursuits merely because they were too occupied by their financial woes in trying to obtain proper healthcare for their spouses and children.

This paper reveals a major problem that has been ongoing in the international student community across America over the decades. But for the first time, in addition to listening to the abiding problems, we also get to hear the voices of international students and their spouses as they propose interventions to change the existing system. As a former international student who studied at two different universities in two different parts of the U.S., the researcher does not recall a single occasion where he was asked to fill out a survey or answer a questionnaire that examined the problems of his international student life. In fact, at numerous points during his graduate studies, he felt there was an unspoken assumption in the academe that financial hardships were almost a rite of passage for those pursuing higher education in this country. This research project, therefore, provided a much-needed discursive space that foregrounded the rarely-heard voices of international students-and especially their spouses-and acknowledged their agency as they articulated ways in which the structural inequities of the healthcare system within the American academe can be redressed through practical steps as well as communicative means.

Practical implications

This study has implications not only for the particular site where the research was conducted but also for the American academia in general. For the particular university where the project was conducted, the suggestions offered by the research subjects provide concrete steps that can be taken to improve the healthcare that is available to families of international students. There is also the need for the university to establish a twoway communication platform or forum specifically that caters to the needs of international students as they acclimatize to their new environment-which is essential for their academic success. But beyond these practical steps, there is a pressing need for the structures of American higher education to engage in a soul-searching that would answer why international students, who contribute so much to universities across the nation, feel unwelcomed in some cases. And what measures can be taken to ensure that graduate students, both international and domestic, who typically contribute substantially to a university's research output by assisting professors, can be treated in a manner both in terms of remuneration as well as recognition where their status is better than that of a low wage earner.

Limitations

One of the limitations of this study is that the international students interviewed were all men, accompanied by their

wives who were their dependents. No female married, international student with a dependent husband was among the interviewees or among the focus group participants. Nor were there any queer, married students, or students with apparent disabilities. Therefore, the viewpoints revealed in this study belong to heterosexual male, married international graduate students and their spouses, who are all relatively healthy. The study also does not focus on how race or gender might influence the perceptions of the interviewees. Finally, due to reasons of confidentiality, focus group participants and interviewees were not asked if they were master's students or doctoral students. Therefore, the study is unable to make a distinction between the viewpoints of master's students and doctoral students.

Future studies could explore the unmet healthcare needs of LGBTQ international students. It will also be interesting to factor in race and examine the barriers that international students of color face trying to access adequate healthcare facilities at their universities. Another study could examine the challenges that international students with disabilities face getting sufficient healthcare support at their universities.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving human participants were reviewed and approved by Purdue University IRB. The patients/participants provided their written informed consent to participate in this study.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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