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SELFCARE AND WELLBEING AS PROFESSIONAL COMPETENCE IN THE COVID-19 PANDEMIC: RESIDENTS' WELLBEING **PROGRAM**

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Abstract: International studies have reported that quality in patient care and safety, as well as the personal well-being of resident doctors, may suffer a detriment if a highly demanding or hostile clinical training environment is present. The objective of the Professionalism and Wellbeing Program for Medical Residents implemented by a university in northern Mexico is to integrate strategies for the development of wellbeing as a professional competence, and to contribute to strengthening clinical training environments, with the intention of improving personal selfcare, wellbeing, and patient care. The program was implemented with the 290 medical residents of the 17 specialty programs from March 2019 and, additionally, an hybrid model was implemented due to the COVID-19 pandemic from April 2020 to date. In February 2019 and 2020, medical residents participated in the induction sessions of the Professionalism and Wellbeing Program and at least in 3 sessions through the semester, in 2019 face-to-face and in 2020 virtually. The chiefs and co-chiefs of residents were trained in a Workshop so they could help other residents in adverse situations. Among the virtual strategies, we implemented an online website, an electronic form for residents' wellbeing and mentoring follow-up, individual virtual counseling and Balint groups in Zoom. From April 2020 to February 2021, 220 residents registered online their wellbeing follow-up. The topics of greatest interest for discussion selected by the participants (n= 51) in the Balint group sessions were: emotional well-being in health professionals (94.1%) and burnout syndrome (94.1%). These initiatives aim to strengthen the training processes of education, professionalism, and humanism, with the residents as an expression of the social responsibility of the profession to contribute to selfcare, wellbeing, and patient's care.

Keywords: higher education, educational innovation, hybrid postgraduate medical education, residents' wellbeing, COVID-19

Introduction

Diverse calls to action have been made during the past decades to promote well-being in graduate medical education (Ripp et al. 2017). An action that requires to eradicate medical education worst phenomena of discrimination, abuse, harassment, and burnout in Residency Training (Hu et al. 2019). It is necessary to address the barriers to self-care and help-seeking common among residents and which may be worse among those with burnout (Dyrbye et al. 2020).

To make possible a change of paradigm from burnout to well-being, strategies to reduce stigma and promote a culture of well-being are needed. And also to promote the most needed curricular reform that includes self-care and well-being as a professional competence, not only for medical residents but for all healthcare professionals, as declared in the latest report "Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being" by the National Academies of Sciences, Engineering, and Medicine (2019).

International studies have reported that quality in patient care and safety, as well as the personal well-being of resident doctors, may suffer a detriment if a highly demanding or hostile clinical training environment is present (Dyrbye *et al.* 2014, Fargen *et al.* 2016, Jennings and Slavin, 2015). In the last decade, as an alternative intervention against this phenomenon, programs have been designed and implemented internationally to strengthen clinical training environments and programs to promote self-care and personal well-being of resident doctors (Dyrbye *et al.* 2020). This programs, along with the redesign of the learning environment, are expected to have a favorable impact to promote learner well-being and professional development, learning outcomes and professionalism, as well as on the quality of care and patient safety (Cordero *et al.* 2017, Drolet and Rodgers, 2010, Kalet and Chou, 2014).

In parallel, academic health institutions, universities and accrediting organizations consider the need as a central element to well-being to have a mentoring program that supports the resident during their training (Davis and Nakamura, 2010, Kashiwagi *et al.* 2013, Valencia *et al.* 2019).

Likewise, the experience with Balint Groups, small groups aimed at the objective of specific tasks, have shown results in addressing aspects of the doctor-patient relationship, burnout syndrome and emotional well-being, both in face-to-face and virtual online groups (Nease *et al.* 2018).

The responsibility and responsiveness of educational institutions to address these challenges and their impact on educational results, well-being, and patient care are essential in the current pandemic. Nowadays, the pandemic has posed many challenges for clinical training and has also been a rich educational opportunity, full of teachable and significant moments, with its own hidden curriculum (Botros and Cooper, 2020).

Residents and fellows have been hailed as heroes that risk their lives to provide patient care. Their direct involvement in patient care required the establishment of mentoring protocols and support services for self-care. The importance of establishing mental health strategies and preventing burnout in residents is a shared responsibility between educational institutions and hospitals (Valdez *et al.* 2020).

The Accreditation Council for Graduate Medical Education (ACGME) has recognized clinician well-being as a major challenge in health care and stressed the importance of resident and faculty safety and well-being, with an emphasis on psychological safety (Byrne *et al.* 2021). As Schwartz *et al* (2020) had underscored, not only safety and wellbeing, but also residents' mental health are at the epicenter of the COVID-19 Pandemic. Therefore, there is an urgency to implement policies to protect trainee safety in unprecedented working conditions related to COVID-19, before there are damaging consequences for resident well-being (Schwartz *et al.* 2020).

This study aims to contribute to the experience related to the design and implementation of strategies to promote and support self-care in the learning environment that are needed to build a culture of well-being across graduate medical education (Dyrbye *et al.* 2020).

The objective of this paper is to describe the challenges and actions taken in face of the COVID-19 pandemic presented on aspects of the Professionalism and Wellbeing Program for Medical Residents in a Multicentric Program of postgraduate medical education to continue to offer strategies for the development of wellbeing and selfcare as a professional competence.

Methods

A comprehensive strategy to implement the Professionalism and Wellbeing Program for Medical Residents was designed and implemented since 2019 and amid the pandemic transformed to a hybrid program in 2020 to date.

The research question was what actions must be taken to guarantee the access to the Professionalism and Wellbeing Program for Medical Residents in a Multicentric Program of postgraduate medical education amid the COVID-19 pandemic?

The participants in this study include six training centers which represent 290 resident physicians in 17 medical specialties programs.

The nature of the study is quantitative and descriptive. The data related to the Professionalism and Wellbeing Program was gathered from the registration and attendance files for the activities offered to residents, and from the data gathered through the self-reported wellbeing and mentoring for residents follow-up electronic form. Microsoft Excel® was used to collect data and data analysis (Elliott *et al.* 2006).

Professionalism and Wellbeing Program for Resident Physicians of Medical Specialties

The Program is the first of its kind in Mexico and its purpose is to improve the well-being of residents, educating them about the importance of self-care and its relationship with professionalism (Cordero *et al.* 2017).

The objective of the Professionalism and Wellbeing Program for Medical Residents is to integrate strategies for the development of wellbeing as a professional competence, and to contribute to strengthening clinical training environments, with the intention of improving personal selfcare, wellbeing, and patient care.

The program was implemented with the 290 medical residents of the 17 specialty programs from March 2019 and, additionally, an hybrid model was implemented due to the COVID-19 pandemic from April 2020 to date.

In February 2019 and 2020, medical residents were required to participate in the orientation sessions of the Professionalism and Wellbeing Program and at least in 3 sessions through the semester, in 2019 face-to-face and in 2020 virtually. A leadership Workshop for Chief Residents was designed and offered face-to face in 2019 and February 2020.

Among the virtual strategies designed amid the pandemic in 2020 to be offered to all medical residents were an online website, an electronic form for residents' wellbeing and mentoring follow-up, individual virtual counseling and online Balint groups in Zoom.

Results

Wellbeing Program with 1st-year resident physicians from March 2019 to February 2020

It was implemented with first-year resident physicians who entered specialty programs in March 2019. Attendance at orientation sessions was required prior to the start of the program. A questionnaire on well-being and basic mental health evaluation was applied electronically, with prior consent. Resident physicians were asked to schedule an individual meeting with the counseling service to learn about their results.

The semester sessions were implemented in protected academic periods. Different individual and group sessions were offered: individual session with the Counseling Service, QPR Certification Workshop of basic training for suicide prevention, Workshop "Active Witness" to promote respectful environments, stress management workshop, and Resident Strengths and Vulnerability Workshop.

Participation in the Wellbeing Program was achieved by all first-year resident physicians of the specialties in the orientation sessions and at least 3 of the semester sessions. Most of the resident physicians scheduled an individual meeting with the counseling service and developed a personal and professional wellness project.

Sessions of the Wellbeing Program in face-to-face workshop modality in February and March 2020

They were held with residents of 7 programs (Cardiology, Quality of clinical care, Psychiatry, Ophthalmology, Internal Medicine, Pediatrics and Neurology).

Several group sessions were offered and implemented. In session 1 to carry out the individual exercise of the Personal and Professional Wellbeing Project. In sessions 2 and 3 to carry out a group exercise of strengths and challenges of the program with action alternatives.

A specific 1-day training session on the Wellbeing and Mentoring Program at the Leadership Workshop for Chiefs of Residents physicians was designed and implemented in February 2020, face-to-face for the chief and co-chief of the 17 medical specialty programs. The support services and strategies for the accompaniment of their resident colleagues were reviewed, and a session of simulated cases of interviews with residents with various problems was held.

Finally, the Orientation session of the Wellbeing Program with first-year resident doctors of the 17 programs, was held in person in February 2020. The topics included: introduction to the Wellbeing Program, information about support services, counseling service information and basic evaluation of mental health, and substance abuse prevention program.

The face-to-face sessions were suspended in March 2020 due to the health contingency of the pandemic.

Hybrid Wellbeing Program with resident doctors of all programs from April 2020 to date in the context of the pandemic

Due to the health contingency caused by the Covid-19 pandemic, the Wellbeing Program for Residents was transformed to an hybrid model. An online version of the program was designed and implemented in April 2020 with the aim of having close accompaniment and monitoring of residents, to offer virtually the different support services available, as well as workshops and activities of the Wellbeing Program.

Among the virtual strategies, we implemented an online website, an online electronic form for residents' wellbeing and mentoring follow-up, individual virtual counseling, and Balint groups in Zoom. The mentoring meetings, face-to-face or virtual between the medical resident and his/her mentor, were integrated as part of the Wellbeing program and required to be registered in the online form.

From April 2020 to February 2021, 220 residents registered online their wellbeing and mentoring follow-up in the electronic form. Tables 1 and 2 describe the results from April 2020 to date.

Table 1: Wellbeing Program: electronic form for residents' wellbeing and mentoring follow-up (April 2020 to February 2021)

Residents N	Residency year n (%)	Medical specialty program n (%)	Times online form filled	Modality or Platform for Mentoring Meeting
			n (%)	n (%)
220	R1: 64 (29.1)	Psychiatry 72 (32.7)	1: 58 (26.4)	Zoom: 87 (35.8)
	R2: 35 (15.9)	Internal Medicine 23 (10.5)	2: 44 (20.0)	Face-to-face: 82 (33.7)
	R3: 61 (27.7)	Quality Clinical Care 12	3: 37 (16.8)	WhatsApp text: 30 (12.3)
	R4: 50 (22.7)	(5.5)	4: 31 (14.1)	WhatsApp video: 24 (9.9)
	R5: 10 (4.5)	Cardiology 14 (6.4)	5: 14 (6.4)	WhatsApp call: 6 (2.5)
		General Surgery 19 (8.6)	6: 7 (3.2)	Phone call: 7 (2.9)
		Anesthesiology 14 (6.4)	>7: 29 (13.2)	Videoconference: 5 (2.1)
		Urology 11 (5.0)		Email: 2 (0.8)
		Ophthalmology 30 (13.6)		
		Radiology 7 (3.2)		
		Pediatric Neurology 7 (3.2)		
		ObGyn 6 (2.7)		
		Geriatrics 3 (1.4)		
		Neonatology 1 (0.5)		
		Neurology 1 (0.5)		

Residents from 14 programs registered online their wellbeing and mentoring follow-up, mainly first year residents (29.1%). The form was filled 1 time by 26.4% of residents and 2 times by 20%. The most common modality for the mentoring meeting reported was virtual through the Zoom® platform (35.8%), followed by face-to-face meetings (33.7%).

Table 2. Electronic form for residents' wellbeing and mentoring follow-up: domains and topics mentioned by residents (April 2020 to February 2021)

	•			
Residents N	Areas mentioned	n (%)	Topics considered most relevant	n (%)
220	Academic 168		B. Support networks*	134 (60.9)
	Professional career	156 (70.9)	H. Personal goals **	109 (49.5)
	Personal	79 (35.9)	A. Satisfaction with choice of specialty	108 (49.1)
			E. Goals of responsibilities you have as a resident ***	106 (48.2)
			F. Academic goals for term ****	102 (46.4)

^{*} a. Family, b. Place of origin and with whom you currently live, c. Friendships.

Residents from the 14 programs reported in the online electronic form for residents' wellbeing and mentoring follow-up that the main domains and topics addressed with their mentor were related to the academic area in 76.4%, and to the topic of support networks with family and friends in 60.9%.

Online Counseling. Due to the pandemic in April 2020, an online format was implemented to request an appointment with the psychologist. The sessions were carried out by video call through the Zoom® virtual platform. Table 3 describes the results from April 2020 to date.

Table 3. Wellbeing Program: Online Counseling (April 2020 to February 2021)

Residents N	During the current semester I have attended at least 1 appointment in the counseling and counseling department n (%)		Using the online format to request an appointment n (%)
218	Yes	28 (12.8)	33 (15.1)
	No	183 (83.9)	
	I already have an appointment scheduled this month	7 (3.2)	

^{**} Personal goals (bio/psycho/social), actions and agreements.

^{***} Those of greater and lesser relevance, with actions and agreements to achieve them.

^{**** 3} academic goals with actions and agreements to achieve them.

Only 12.8% of the 218 residents reported that they have attended at least 1 session with the counseling department and 3.2% reported they already have an scheduled appointment. Only 15.1% used the online format to request an appointment with the counselor. All sessions were carried out by video call through the Zoom® virtual platform.

Online Balint groups for resident doctors. In July 2020 the invitation to all residents to join the Online Balint Groups was made through a digital flyer and included a link to a Google Forms® for pre-registration. 51 resident physicians from 12 programs responded and pre-registered. Also, they selected the following topics as the ones with the greatest interest for discussion in the Balint group sessions: Burnout syndrome (n = 48, 94.1%), emotional well-being in health professionals (n = 48, 94.1%), relationship with resident colleagues (n = 30, 58.8%), Physician-health team relationship (n = 23, 45.1%), and Physician-patient relationship (n = 21, 41.2%). The weekly sessions began in July 2020 virtually on the Zoom® platform, registering an average of attendance of 6 to 12 residents per session.

Discussion

The Wellbeing Program for Resident Physicians was implemented with the resident physicians of the 17 specialty programs from February 2019 to March 2020 face-to-face and, additionally, virtual strategies were implemented due to the pandemic health contingency from April 2020 to date. Residents were offered as part of the Professionalism and Wellbeing Program mentoring and support services, such as counseling and mental health services, as strategies for self-care, well-being, mental health care, and burnout syndrome prevention. All residents received direct support from their program director and chief residents.

In 2019 and until February 2020, medical residents from all programs participated face-to face in the orientation sessions of the Professionalism and Wellbeing Program, and at least in 3 sessions throughout the semester. The higher attendance was registered during the sessions programed at academic protected times.

The program included a specific Workshop offered to Chief Residents, who serve a distinctive role as part of the residency leadership to foster the education and development of their fellow residents (Rakowsky *et al.* 2020). All Chiefs and co-chiefs of Residents were required to attend the Leadership Workshop in February 2019 and 2020.

In march 2020 due to the Covid-19 Pandemic virtual strategies were implemented. Mainly, the hybrid program elements included: an online website for the Program support services and sessions, an electronic form for residents' wellbeing and mentoring follow-up, individual virtual counseling, and online Balint groups.

From April 2020 to February 2021, 220 residents for 14 programs registered their wellbeing and mentoring follow-up in the electronic form. This participation was more successful than the face-to-face version of the program, and therefore the online registration form will be continued to be used as part of the Wellbeing and Mentoring Programs.

On the other hand, both the individual virtual counseling sessions and the online Balint groups, initially registered some demand, but were not able to maintain a regular attendance. Therefore, new

strategies, for example peer-to-peer promotion will be developed with residents to improve both initiatives and generate new activities as part of the hybrid program.

The transformation of the Wellbeing Program considering the involvement of medical residents in patient care while continuing their training in the COVID-19 pandemic has been both a challenge and an opportunity. To successfully implement it, an action plan was followed in medical residency programs amid COVID-19. Communication, mentoring and emotional follow-up of the medical residents were offered to mitigate the anxiety, uncertainty, and burnout (Valdez-García *et al.* 2020).

These initiatives strengthen the training processes of education, professionalism, and humanism as an expression of the social responsibility of the profession to contribute to residents' self-care, wellbeing, and patient care. Academic health centers are on the frontlines of the pandemic, the health effects on learners were and continue to be significant even with the best efforts by programs and institutions to maintain the safety of residents. The experience from the initial stages will be helpful in following up and gathering important lessons during and after the pandemic (Byrne *et al.* 2021).

The COVID-19 pandemic has revealed the fragility of the medical workforce as a whole, bringing to the frontlines our own vulnerability (Botros and Cooper, 2020). Clinician well-being is a major challenge in health care and amid the pandemic it has been especially important to care for medical residents' wellbeing. Programs and policies must be applied to protect trainee safety in unprecedented working conditions related to COVID-19, mainly oriented to prevent devastating consequences for resident well-being (Schwartz *et al.* 2020). Today, more than ever, self-care and well-being prevail as a fundamental professional competence.

Study limitations, recommendations, and scope of future research

The main study limitation was being only descriptive of the strategies designed and implemented, and not including an assessment and feedback instrument, for example, a questionnaire for program directors and residents related to the impact and effectiveness of the comprehensive strategy. Therefore, a next step to the research for the 2021 academic period will be to gather quantitative data by having an assessment and feedback instrument and add indicators on the Program.

Another important recommendations it to integrate medical residents to the Wellbeing and Professionalism Program Committee. This will promote direct resident participation in the identification of the needs and preferences of their colleagues in order to design, implement and support specific strategies and activities. Offering resources for self-care without being overly prescriptive about what to do is likely to be effective and well received. Also, consider providing access to resources inside and outside the training environment may help lower barriers for residents to access care (Dyrbye *et al.* 2020).

For future research, it is important to identify evidence-based system solutions to improve the learning environment to enhance learner well-being, as well as approaches to reduce the risk of learner burnout and promote recovery when it does occur (Dyrbye *et al.* 2020). Residents' and chief residents' perception about challenges and recommendations for the future of postgraduate medical education amid the pandemic should be also explored (Rakowsky *et al.* 2020). Particular attention should be

given to this issue, due to the rapid shift in demands on residents in the face of the pandemic, to help prepare the residents to meet these demands as frontline providers.

Conclusion

The Professionalism and Wellbeing Program for Medical Residents implemented strategies since 2019 for the development of well-being as a professional competence, to improve personal self-care, wellbeing, and patient care; a hybrid model was implemented due to the COVID-19 pandemic from April 2020 to date.

The Wellbeing Program was implemented with 290 medical residents of 17 specialty programs from March 2019 and, additionally, virtual strategies were implemented due to the health contingency of the COVID-19 pandemic. During 2019 and 2020, either face-to-face or virtually, most residents participated in a session of the Wellbeing Program during an academic protected time. Most of the sessions were virtual during 2020 and more than half the residents registered at the wellbeing program follow-up electronic form.

The commitment of universities should be beyond the academic and professional, it should address self-care and wellbeing strategies as well, that could provide graduates with the skills that are essential to thrive. However, barriers to self-care and help-seeking are common among residents and may be worse among those with burnout (Dyrbye *et al.* 2020). Therefore, effective strategies to promote self-care in the learning environment are needed to build a culture of well-being and to reduce the stigma.

In the near future, new challenges and opportunities will shape the new era of postgraduate medical education. For example, starting residency during a pandemic. There are many unknowns in starting residency at any time, but experienced residents say one thing is clear from before and especially now: stress is unavoidable (Weiner, 2020). It is also clear that academic health centers have the social responsibility to provide wellbeing programs and support services to medical residents. Learner wellbeing and professional development are a shared responsibility between the learner, the institutions, and the clinical training sites responsible for their education (Dyrbye *et al.* 2020).

Because Covid's disruption to postgraduate medical education and clinical training, first we should acknowledge the professionalism demonstrated residents during one of the worst health care crises in history (Byrne *et al.* 2021). Then, we should advance educational reform (Goldhamer *et al.* 2020), including self-care and well-being of health care professionals as a fundamental professional competence and as an elemental human right.

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