

ONLINE COURSE OF SUSTAINABLE DEVELOPMENT GOALS: AN EXPERIENCE REPORT

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KEY MESSAGES

The Sustainable Development Goals (SDGs) encompass the social, economic, and environmental pillars serving as a guide for practical actions; Undergraduate medical students in Brazil would like to know more about the topic to be able to apply the SDGs locally; Knowledge about the 2030 Agenda becomes a tool that guides the academic to apply public health actions; Through the course it was possible to motivate and exemplify to academics how to apply the SDGs when carrying out community interventions.

ABSTRACT

INTRODUCTION: The Sustainable Development Goals (SDGs) were defined by the United Nations in the preparation of the 2030 Agenda and represent an attempt at a global effort to poverty eradication, environmental protection, sustainable development and the establishment of decent living conditions. In this context, the link between health and sustainable development stands out, especially when we bring planetary health, significant youth engagement and global health to the fore, it expands health promotion within the reach of all the SDGs. **EXPERIENCE REPORT:** The I Course on Sustainable Development Goals of International Federation of Medical Students Associations of Brazil (IFMSA Brazil) was developed between October 8 and 10 with the objective of promoting the debate on the SDGs in an integrated manner with the IFMSA Brazil's main discussion themes. The event was restricted to 40 participants for better theoretical-practical interaction and held by the Zoom platform. **DISCUSSION:** Considering the alarming finding of only 20.5% of the participants with any previous contact with SDGs in the curriculum, the discussion of this topic is very important. This fact is emphasized with the current scenario in Brazil, as recent research shows that the country will hardly reach the Agenda's goals, especially with regard to health, which is the scope of the target audience of the course. Social accountability promoted by medical schools is an important way of promoting SDGs by medical students. **CONCLUSION:** The event forms showed that the event fulfilled its purpose of presenting the SDGs to the participants and integrating them with practical ideas about its approach, thus enabling these students to promote changes in their local realities with the community.

KEYWORDS: Environmental Health; Medical Education; Sustainable Development Indicators

INTRODUCTION

The Sustainable Development Goals (SDGs) were defined by the United Nations on 2030 Agenda's elaboration. They represent a global effort to advocate for eradication of poverty, environment protection, sustainable development and worthwhile life conditions. To achieve these goals, governments, civil societies and the private sector, which are compromised with the 2030 Agenda, must develop public policies, social programs and encourage discussions on the topic.¹

The SDGs are: eradication of poverty; zero hunger and sustainable agriculture; health and well-being; quality education; gender equality; clean water and sanitation; clean and sustainable energy; decent work and economic growth; industry, innovation and infrastructure; reduction of inequalities; cities and sustainable communities; responsible consumption and production; action against global climate change; water life; terrestrial life; peace, justice and effective institutions; partnerships and means of implementation.²

Essentially, SDGs are intersectoral and collaborative. The health is expressed as a result of interaction between social and environmental determinants.³ Therefore, SDGs represent an effort to manage risk factors in order to avoid illness - and thus, they symbolize prevention, in terms of public health, from primary to quaternary.

In this context, health and sustainable development intersection is highlighted, mainly through SDG 3. Approaching Good Health and Wellbeing, the 3rd goal could be related to the concept of Planetary Health (PH), which understands that natural and human systems should interact in balance to promote health, equity, and sustainability.⁵

Thus, in view of the importance of SDGs for health - and consequently for the medical academic curriculum, the I Sustainable Development Goals Course was held.^{1,2} The stage of this experience is the International Federation of Medical Students' Associations of Brazil (IFMSA Brazil), a non-profit organization, widespread nationally in more than 160 medical schools, uniting more than 8 thousands students with a view to make a difference in their communities and their medical education.⁶ The present work aims to report one of the first attempts to present and improve the knowledge of IFMSA Brazil filiates about the 2030 Agenda.

EXPERIENCE REPORT

The I Sustainable Development Goals Course at IFMSA Brazil was an online event designed by the members of the Environment, Health and Sustainable Development Small Working Group of IFMSA Brazil, and aimed to promote an introductory discussion about the 2030 Agenda, stimulating a critical thinking of medical students regarding the significant student engagement. With the presence of 40 students from all Brazilian regions, the event happened in 2020, between October 8 and 10 via Zoom and addressed the 2030 Agenda with its possible practical applications in communities and medical schools.

The following subjects were approached: Sustainable Development Goals (history and introduction to the Agenda 2030), global health and access to scientific research, equity in health, neglected tropical diseases, occupational health, climate changes and health, youth and sustainability, capacitism, screening methods to breast cancer in Brazil, SDG 17 and Meaningful Youth Participation.

There was also a partnership established with Youth Action Hub - Curitiba, an initiative located in the South of Brazil which aims the amplification of knowledge about the topic, specially motivating young people to propose new ideas and act locally. They participated in the first day of event giving an introduction about SDGs and the 2030 Agenda on the first lecture ministered. Participants were registered through a form that was promoted on social networks and were selected based on the analysis of their motivation letter and previous curriculum. The limited number of participants was proposed to guarantee the effectiveness of theoretical-practical methodology. The impact assessment of the activity was carried out using a pre and post evaluation forms, approaching the previous contact with the SDGs in medical curriculum, and extracurricular activities.

During the course, organizers were able to work dynamically with the participants, promoting debates associated with group dynamics that enhanced learning and the exchange of experiences among the listeners. The first and last lectures were to all participants, in order to present the seventeen SDGs and propose a closure thought about students' role of applying and spreading all they have learned. Thus, to encourage the participation of those registered, during the workshops, breakout rooms specific to the themes mentioned above were created, which occurred simultaneously. It was proposed that each of the lectures were correlated to the corresponding SDG, allowing participants to correlate the exposed subjects with the Agenda 2030. This division allowed for greater interaction between those registered, since they were divided into small groups, which were defined at the time of registration, and thus it was possible to launch problems that stimulated debate and group interaction, apart from practical application of SDGs.

Because of event's national range, in the report of some participants, it was noted that the event provided an environment in which it was possible to perceive different realities in Brazil, mainly due to the geographic variety, making the SDGs to be perceived in a broader and more diverse way, since the environmental issues and the vision of the SDGs can vary, according to the social and economic reality of each region. The main limitation to this analysis was the variant number of participants during the event, not allowing a generalization of the post event answers.

An impact assessment questionnaire was carried out, using Google forms, in which it was possible to visualize data on the knowledge of medical students about the SDGs. Few of the participants reported already knowing the topic in their medical program, mainly restricted to the discipline of Primary Health Care.

DISCUSSION

According to Moreira et al. (2020), the implementation of the quality of education and primary care are the main solutions to the

targets related to SDG 3: Good Health and Well-Being, which highlights the importance of discussing the 2030 Agenda in the formation of young medical graduates.⁷ Unfortunately, only a small proportion of the participants had had prior contact with the topic before the course.

Although SDG 3 is the most directly related to medical students, knowledge of its interrelationships with other areas covered by Agenda 2030 is essential. Globally, for example, only 15% of medical schools address climate change and air pollution (SDG 13: Climate Action) and other themes regarding environment and health or PH in its curricula.⁸ In addition, actions and policies in relation to themes such as SDG 1: Poverty Reduction; SDG 4: Quality Education; and others related to universal health coverage, as SDG 10: Reduction of Inequalities, are also crucial when talking about health determinants and human rights.^{7,9}

Moreover, considering the current Brazilian scenario, it is prudent to discuss the topic within IFMSA Brazil, one of the most widespread student organizations in the country.⁶ Recent research shows that the country is unlikely to meet the Agenda's goals.^{7,10} According to experts⁷, this improbability is even more prominent when it comes to SDG 3, which is closely linked to medical education and further highlights the importance of events like this.

Even with meager prior contact with the topic, all of the attendees stated that the course was able to add knowledge to their health education, since the interpretation of the communities' demands and its resolutions are indispensable attributes for the social accountability promoted by medical schools.¹¹ When asked about ideas for action in their communities based on the course's learning, some participants wrote about carrying out campaigns and social actions targeting general population, with a focus on health education, sustainable living habits and dissemination of the SDGs. In this regard the acknowledgement of the curriculum proposed by the Medical Course National Curriculum Guidelines ratifies a humanitarian, critical, thoughtful and ethical education, in consonance with actions based on the 2030 Agenda.^{9,12}

In this context, young leadership training is indispensable for a hopeful health care, based on the increase of social and environment awareness, which should permeate all activities and initiatives in health elaborated by medical students and future physicians.^{13,14} The building of these capacities was a commitment of the course with its participants, guaranteeing 100% positive affirmations related to the intention to carry out future actions within IFMSA Brazil addressing these skills.

CONCLUSION

The I Course of SDG of IFMSA Brazil was a space for open discussions among medical students, in which the attendees were able to enhance their knowledge regarding the 2030 Agenda. Spaces for discussion and learning like this one are essential for improving the social accountability of medical schools and their multidisciplinary teaching focused on promoting the health of the future. Given this experience, the participants became multipliers of the SDGs principles within their local realities, promoting a meaningful youth participation,

either by advocating about it with their medical schools and other regional stakeholders.

By promoting this open space of discussion, the participants showed through the pre and post form that they felt able to understand their roles as health promoters and, therefore, felt able to carry out interventions in their communities, seeking to promote improvements, through campaigns and social actions that emphasize and disseminate the SDGs. Some intrinsic negative points of online meeting platforms were present, such as the limitation of interaction between participants and the possibility of unstable internet connection.

Furthermore, more events in this area are recommended in order to enhance the awareness of medical students regarding the intrinsic relation between the 2030 Agenda and professional practice. It is highlighted the importance of bringing all SDGs into discussion, embracing the correlation and unit of the Goals.

CONFLICT OF INTEREST

There were no conflicts of interest throughout the development of the article.

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REFERENCES

1. Souza JP. Maternal mortality and the new objectives of sustainable development (2016-2030). *Rev. Bras. Ginecol. Obstet.* 2015 Dec;37(12):549-551.
2. Roma JC. Os objetivos de desenvolvimento do milênio e sua transição para os objetivos de desenvolvimento sustentável. *Cienc. Cult.* 2019 Jan;71(1):33-39.
3. Garbois JA, Sodré F, Dalbello-Araujo M. From the notion of social determination to one of social determinants of health. *Saúde debate.* 2017 Jan-Mar;41(112):63-76.
4. Depallens MA, Guimarães JMDM, Faria L, Cardoso AJC, Almeida-Filho N. Quaternary prevention, curricular reform and medical education. *Interface (Botucatu).* 2020 Sep; 24.
5. Prescott SL, Logan AC. Planetary Health: From the Wellspring of Holistic Medicine to Personal and Public Health Imperative. *EXPLORE.* 2019 Mar-Apr;15(2):98-106.
6. Lacerda P, Souza L, Endo R, Nazima M. University extension today: IFMSA Brazil on focus. *Rev. Med.* 2015 Oct;94(2):81-6.
7. Moreira MR, Kastrup E, Ribeiro JM, Carvalho AI, Braga AP. Brazil in 2030? Brazilian health specialists' perceptions of the country's potential to comply with the Brazil heading to 2030 SDGs. *Saúde debate.* 2019 Jul;43(7):22-35.
8. Omrani OE, Dafallah A, Castillo BP, Amaro BQRC, Taneja S, Amzil M, et al. Envisioning planetary health in every medical

- curriculum: An international medical student organization's perspective. *Med Teach*. 2020 Oct;42(10):1107–11.
9. Albuquerque A. Human rights in medical training. *Rev. Med*. 2015 Jul-Sep;94(3):169-178.
 10. Vieira FS. Health financing in Brazil and the goals of the 2030 Agenda: high risk of failure. *Rev. Saude Publica*. 2020 Mar; 54:127.
 11. Boelen C. Why should social accountability be a benchmark for excellence in medical education? *Educ médica*. 2016 Jul-Sep;17(3):101–5.
 12. Ministério da Educação. Diretrizes Curriculares Nacionais do Curso de Graduação em Medicina [Internet]. 2014 [Cited 17 May 2021]. Available on: <http://portal.mec.gov.br/cne/arquivos/pdf/Med.pdf>.
 13. Idso JM, Helmen ZM, Hueston WJ, Meurer JR. Student Leadership Development Initiative: A Pilot for a Sustainable, Replicable Model for Incorporating Leadership into Medical Education. *WMJ*. 2019 Apr;118(1):39-41.
 14. McKimm J, Redvers N, Omrani OE, Parkes MW, Elf M, Woollard R. Education for sustainable healthcare: Leadership to get from here to there. *Med Teach*. 2020 Oct;42(10):1123–7.