Interdisciplinarity, interprofessionality, and racial diversity in the anti-racist training of health professionals: voices and learnings

Interdisciplinaridade, interprofissionalidade e diversidade racial na formação antirracista do profissional de saúde: vozes e aprendizados

Ana Claudia Germani¹, Maria Helena Favarato², Isabel Leme Oliva¹, Rafael Marques Geraldo¹, Júlio César de Oliveira², José Ricardo de Carvalho Mesquita Ayres¹

DOI: 10.1590/0103-11042022E615I

ABSTRACT This is a critical-reflective report on the experience of an elective course aimed at training health professionals in fighting racism. It was offered during the COVID-19 pandemic to undergraduate students from all the health subspecialties at the University of São Paulo. From the description and reflection on the proposed teaching and evaluation activities, we sought to recognize and learn/apprehend the contribution of the integration of knowledge (interdisciplinarity), professions (interprofessionality), and racial diversity in the teaching-learning process aimed at fighting racism. The perspectives of students, monitors, and teachers are reported. The support of guest teachers allowed this initiative to address racism and its influences on the health of black people, and the educational strategies encouraged students' cultural production. The initiative proved to be a possibility for introducing changes in health education in favor of both comprehensive care and interprofessional collaboration in dismantling racism.

KEYWORDS Health. Racism. Teaching. Interprofessional education.

RESUMO Trata-se de relato crítico-reflexivo sobre a experiência de disciplina optativa voltada à formação de profissionais da saúde no combate ao racismo, oferecida aos estudantes de graduação da área de saúde na Universidade de São Paulo, durante a pandemia de Covid-19. A partir da descrição e da reflexão sobre as atividades de ensino e avaliação propostas, buscou-se reconhecer e apre(e)nder a contribuição da integração de saberes (interdisciplinaridade), de profissões (interprofissionalidade) e da diversidade racial no processo ensino-aprendizagem voltado ao combate ao racismo. São relatadas perspectivas de discentes, monitoras e docentes. A oferta da disciplina, com apoio de convidados, permitiu que o projeto abordasse o racismo e suas influências na saúde das pessoas negras e estimulou a produção cultural dos estudantes. A iniciativa mostrou-se uma possibilidade de introduzir mudanças na formação dos futuros profissionais de saúde em prol tanto da integralidade do cuidado quanto da colaboração interprofissional no combate ao racismo.

PALAVRAS-CHAVE Saúde. Racismo. Ensino. Educação interprofissional.

¹Universidade de São Paulo (USP) - São Paulo (SP), Brasil.

accggermani@usp.br

²Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (HC/FM-USP) – São Paulo (SP), Brasil.

Introduction

The 2030 Sustainable Development Goals (SDGs)¹ is a global agenda that seeks to promote public policies on different fronts in favor of advances for humanity which is in the so-called 'decade of action'. We highlight the interface between SDG 3 – Health and Well-Being and SDG 10 – Reduction of Inequalities in order to address the relationship between health, training of health professionals, and racial issues.

The academic production on the impact of racial inequalities on health outcomes of the black population is growing, with one of its milestones being the III World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance² held in Durban. Over the past 21 years, the need for anti-racist training among health professionals has been discussed internationally3 and, more recently, linked to inter-professional education4. In an initiative to move towards an antiracist inter-professional health approach, some actions are proposed such as: the creation of a forum to share stories about racist aspects of different professions; and the provision of opportunities to educate students about diversity, equity, and inclusion⁵.

In the Brazilian context, the need for training to move towards a comprehensive care appears as one of the guidelines and also among the objectives of the National Comprehensive Health Policy for the Black Population⁶; and, in an incipient way, in the National Curriculum Guidelines (DCN) of health academic programs, a text that adds education and interprofessional work as a recommendation. Similarly, it happens in a more recent document, Resolution No. 569, from December 8, 2017⁷.

In the same way, it is also important to highlight the National Curriculum Guidelines for the Education of Ethnic-Racial Relations and for the Teaching of Afro-Brazilian and African History and Culture (DCNERER)⁸, and specific productions discussing the importance of the theme and the need for formative experiences among health professionals⁹.

In the direction of these propositions, and in the difficult context of the pandemic, with the intensification of inequalities and attrition of the teaching-learning process, it has become a great challenge to develop teaching strategies that make it possible to learn-apprehend [in Portuguese the verbs learn and apprehend have similar spelling 'aprender' and 'apreender' to justify the wordplay] and the relations between racism and health, and strengthen anti-racism in the training of health professionals.

The intentional use, above, of the contrast between learning and apprehending comes from the provocations made by Lea Anastasiou¹⁰ about the teaching process:

There is also a difference between learning and apprehending, although in both verbs there is a relationship between the subjects and the knowledge, the apprehend, from the Latin *apprehendere*, means to hold, to arrest, to grasp, to mentally assimilate, to understand, to comprehend, to seize. It is not a passive verb; to apprehend it is necessary to act, to exercise, to inform, to take for oneself, to appropriate for oneself, among other factors.

Faced with this challenge, this article aims to present and discuss a teaching-learning experience focused on favoring anti-racist attitudes in the training of health professionals. The description of the experience addresses three aspects: the integration of different knowledge, that is, interdisciplinarity; the interaction of students from different courses, learning with, about, and among themselves seeking the quality of care (Interprofessional Education – IPE); and racial diversity reflecting on the achievements and challenges of this pedagogical proposal.

Scenario description

The University of São Paulo (USP) offers 16 health courses distributed over three campuses in the city of São Paulo: Butantã, School of Arts, Sciences and Humanities (EACH); and Pinheiros (Health-Law Quadrangle). The USP School of Medicine, in the capital city, includes four courses: physical therapy, speech therapy, medicine and occupational therapy, with totally independent curricular activities and in which racism is still addressed in an incipient way.

The course was proposed by the Department of Preventive Medicine of the School of Medicine of USP and approved by the Undergraduate Committee in the 2nd semester of 2020, as an elective course, with a workload of 15 hours, distributed over five meetings. The participation was open to students from nine units of the University: EACH (4 vacancies), School of Physical Education and Sports (1 vacancy), Nursing School (3 vacancies), School of Pharmaceutical Sciences (2 vacancies), School of Medicine (24 vacancies), School of Veterinary Medicine (1 vacancy), School of Dentistry (1 vacancy), School of Public Health (2 vacancies), Institute of Psychology (2 vacancies). Due to the COVID-19 pandemic, the remote format was chosen for its first offering. The option to offer the course from the perspective of IPE is based on the experiences developed by the authors, as well as on the understanding that the power relations and hierarchy discussed in the IPE have repercussions on the invisibility of racism⁴.

The course pedagogical objectives were defined as: 1) know and distinguish the concepts of minority, prejudice, discrimination and racism; 2) identify everyday practices that involve prejudice and discrimination such as institutional racism and structural racism; 3) correlate racial discrimination with the health-disease-care process; 4) discuss the role of whiteness in combating racism. To achieve these goals, the following pedagogical strategies and techniques were proposed: division of

students into five small groups, intentionally distributed, prioritizing contact between different health courses; initial conversation in the small groups to reflect on the readings and propose questions to guest teachers; exposure, by guest teachers, of experiences – personal, institutional, political – related to racial, racist and anti-racist issues in different areas and dimensions of health care; readings of canonical and current texts on the subject, both mandatory and complementary. The remote learning environment also included voluntary activities, namely: a glossary and an art gallery related to the subject theme, both produced in a collective way with students' participation.

At the beginning of the course, students were asked to fill out the 'Implicit Association Test (IAT) for race', with automatic feedback offered by the test developers (available at https://implicit.harvard.edu/implicit/brazil/). This is one of the instruments to measure the implicit bias arising from stereotypes and prejudices outside conscious perception, which lead to a negative evaluation of a person¹¹. There are reports of the productive use of the test in training health professionals to fight racism^{12,13}.

We had the support of five female volunteer monitors with different backgrounds (social worker, nurse, physician, veterinarian, and naturopathic physician). We received five external guest teachers, all self-declared black also with different backgrounds (medicine, law and social sciences) to talk with students about training health professionals and fighting racism in four settings: primary care (with discussion on comprehensive care and vulnerabilities related to racism), clinical practice, public policies, and scientific research.

The last synchronous meeting was intended for the students' evaluation based on the photovoice method, developed as a resource to allow individuals to represent and expose their community experiences through photographs having as main objectives: 1) allow people to record the priorities and needs of the community; 2) promote the generation of knowledge and critical dialogue about their realities; and

3) access and sensitize public policy makers, through the exposure of photographs¹⁴. The technique consists in inviting each participant to produce photos related to the triggering question and then take part in a collective round of dialogue about them.

During the course, students were asked to respond with at least three photos to the following question: do you have or have you ever had anti-racist attitudes? Recently, the photovoice was pointed out as a powerful way to stimulate critical thinking¹⁵. In our case, we tried to use it as a resource both to assess the students' performance and to provoke reflection and self-evaluation of the teaching-learning process.

Voices, learnings and apprehensions

Thirty students enrolled voluntarily from seven USP units: (School of Nursing, São Paulo and Ribeirão Preto Schools of Medicine, School of Public Health, School of Pharmaceutical Sciences, School of Dentistry, and EACH) and from nine courses (physical education and health, nursing, pharmacy, physiotherapy, medicine, nutrition, dentistry, public health, and occupational therapy). Even without the individual race/color self-declaration survey, it is important to point out that, from the speeches and shared experiences, they were racially diverse. At the end of the academic period, 15 students anonymously answered a questionnaire about their opinion on the program's activities.

To open the course and to warm up the interaction among students, interactive boards were built for each group with the support of the Google Jamboard tool. In this material, each student and each monitor inserted a photo and made a brief personal description pointing out their undergraduate course and their motivation to take the course. The material was available throughout the course for consultation and complementation.

During the lectures, the guests talked about racial issues in their specificities, according to the four areas described above. In the first lecture, a physician with a background in psychoanalysis brought a perspective of subjectivity and the construction of racial identity, hindered by the myth of racial democracy. The guiding axis of the lecture was the comprehensiveness of care linked to equity and the vulnerability model in the analysis of the health-disease-care process. In the lecture about clinical practice, another physician showed epidemiological data exposing the negative differences in the health outcomes of black people, as a result of interpersonal, institutional, and structural racism. This social scientist talked about his trajectory and the movements that supported the proposition of the National Policy for the Comprehensive Health of the Black Population (PNSIPN) and the importance of skin color data collection for disaggregated data analysis. Finally, a teacher with a law degree addressed new epistemologies to support research on the health of the black population.

In the teaching-learning process the exchanges in small groups allowed students and monitors to identify similarities between some professions, such as the lack of understanding of the dimensions of racism at the time of the clinical encounter, at the time of learning anatomy, and in the representativeness of the mannequins used for the training of clinical skills. Particularities between professions were also acknowledged, such as the questions regarding public policies asked by the public health student. In addition, the interaction between students from different courses was considered a positive aspect of the course in the survey answered by the students. Furthermore, the development of collaborative skills among students was observed by coordinators and monitors4.

Throughout the course, there were dialogues and reflections on the comprehensiveness of care recognizing the challenge of health inequalities. It is understood that such

content is part of the values and ethical aspects proposed in the international categorization of the collaborative competencies of the IPE. Regarding professional roles and responsibilities, the classes and the completion of the IAT fostered critical reflection on each student's racial identity and its impact on relationships and communication with patients and other team members⁴.

Regarding the learning objectives proposed in the course, more than two thirds of the respondents evaluated that three of them were totally achieved: know and distinguish the concepts of minority, prejudice, discrimination and racism; identify everyday practices that involve prejudice and discrimination, institutional racism and structural racism; correlate racial discrimination with the health-disease-care process. The debate about the role of whiteness in fighting racism was fully achieved for 9 (60%) of the respondents.

The individual evaluation of the participating students showed a high rate of satisfaction for each class. The IAT, the small group discussions, and the support of the monitors were the teaching-learning strategies evaluated with the best results.

Students considered the teaching-learning environment to be coherent with the concern in developing competences, with support for participation in synchronous classes and in the proposed activities. The Internet access was also considered satisfactory, and the location(s) from which they followed the classes did not hinder their learning.

The art gallery included suggestions from the five guest teachers, three monitors, and three students. Films, books, music, and a painting were suggested. The intention of offering this as a complement to the synchronous activities is based on the premise that anti-racist actions aimed at health equity need to increase individual and collective capacity to look critically at the world and dream of other possible ways¹⁶. It is believed that by merging art and culture with the discipline we broaden the perspective of perceiving and addressing racism, expressing in different languages the importance of listening to narratives about and by the black population¹⁷.

In the questionnaire proposed in the last meeting, one of the students made the following comments about the course's contribution to the training of future health professionals:

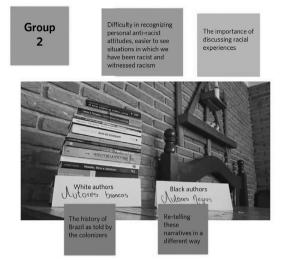
That the lectures had people who are references in the area, and, above all, black people, which is scarce in teaching. I believe this is relevant, especially since practically all of them had master's/doctorate degrees, but ended up following non-academic paths.

And he pointed out as a limitation:

The speeches lacked clear and objective references, and there was no evaluation of tools and knowledge to fight racism. As much as the people [the course students] were touched by the theme, which is the course main objective, I think they still couldn't fight racism in the spaces they occupy. (course student).

Echoing other voices, we illustrate in *figure 1* examples of collective productions created from the individual photovoices and used as student evaluation in the discipline. (the use of texts and imagens have been authorized by the authors).

Figure 1. examples of collective productions created from individual photovoices used as student evaluation of the course



Group 5

The photos we selected describe the feelings that emerged while attending the course. Each student shared his or her experience and how it impacts their daily lives. Lari shared an emotional image in the class about the construction of the PNSIPN, and Paolo shared an image of the trail that represents the beginning of a new path through the opened reflections from new perspectives after the discussions proposed by the course





Source: output of the course MSP 4080 in its 1st edition held in 2021. Prepared by students.

The statement of one of the course's monitors reaffirms aspects related to the interdisciplinary and the interprofessional nature of the activity:

It was an opportunity to bring to the academy people who use their academic training to transform reality. We all got to know the different paths that these (amazing) people have taken. This is also a great gain for health students because it broadens their vision of professional performance beyond the fields of care that they experience in their training, understanding real life scenarios with many different actors. I also agree that the participants could be instrumentalized to act towards changing their own reality beyond reflection. (course monitor).

Given the diversity of teachers and students composition in this experience, it is important to explain the concept of IPE. According to the Municipal Health Organization, it "occurs when two or more professions learn about each other, with each other, and among themselves for effective collaboration and improvement of health outcomes" 18(13). Despite the small workload hours, the interaction in small groups involving students and monitors, as well as the spaces for interaction with guests, showed particularities and similarities between the different backgrounds in favor of comprehensive care focused on the black population's health.

The narrative of one invited teacher highlights aspects of the optional nature of the experience:

It is extremely important to discuss this issue in the training of health professionals, although the subject is not part of the curriculum of most courses. Having the opportunity to be invited to this course is a great privilege. As a black physician, I understand the scarcity and importance of models in which students can recognize blackness. The discussion was of great value and great learning for me too. Possibly because it is an elective course, some students came to the discussions with a high level of knowledge about the subject, eager for answers that were not part of the objective of the activity, or that are still under construction. Putting this theme as a mandatory part of the academic programs, and defining the learning objectives with the students' expectations, I believe, will be the next challenges. (guest lecturer).

As for the teachers responsible for the course, the teaching-learning process was extremely powerful, considering that it was an elective course offered in a remote model in the middle of the COVID-19 outbreak. In the perception of one of them, the format in small groups with students from different health program allowed the construction of a learning community, permeated by enthusiasm and reflection. This path was sensitively illustrated in the discussion of the productions resulting from the photovoice

technique. The exhibition, dialog, and synthesis of the racist and anti-racist situations, experienced and photographed by students, consolidate interprofessional experience involving health students, in which the photovoice made it easier to understand and engage in dialog about inequalities in daily life¹⁹.

The need and the challenge to increase the conceptual and theoretical discussion within the available workload was also evident, as well as to advance in the dialogue for the insertion of such subject in the mandatory core curriculum.

Another point highlighted in the teachers' evaluation was the power of photovoice as a promoter of a hermeneutic of racism and anti-racism:

With the voices of the photos on me, I realized how racism and anti-racism are connected. By seeking to spot your racism, you already put yourself in an anti-racist perspective, a self-awareness. And this is very important, since we live in a racist atmosphere that we often don't realize. When registering anti-racism, we perceive focuses of racism that we are prioritizing, which also opens many perspectives for reflection and action. (course coordinator).

The elective course, open to different USP units, was structured taking into account important resources both for comprehensive health care²⁰ and for interprofessional practice²¹, namely: the ethical-political commitment of health education; the stimulus to integrated teaching between different health areas emphasized in small group discussions; and the inclusion of intersubjective aspects of students. Finally, it is important to reinforce participatory teaching strategies, the recommendation to fill out the IAT, and the student evaluation by photovoice.

The presented report illustrates a dialectical procedural unity in which the leading role of the teachers and monitors as well as the students' activities happened in a reciprocal way with the immersion in the course thematic.

We have prized apprehension, in the sense of entanglement in which we invited the participating students to identify and assemble the necessary knots to weave new anti-racist practices¹⁰.

Challenging and changing the way we think and do the teaching-learning processes is essential to advance in the dialogue and in the construction of a pedagogical community in which borders raised by racial issues, among other differences, can be crossed²². We seek to cultivate dialogue based on the consideration and reconsideration of the different positions of all participants²³.

The first offer of the course proved to be able to engage participants to the three dimensions of racism: internal, understood as feelings and behaviors; interpersonal, interpersonal actions and omissions; and institutional, material, and of access to power²⁴. The experience of developing pedagogical strategies to promote the insertion of the subject in the curriculum also represents a commitment to its replicability, expansion, and sustainability within the institution considering the training of future health professionals.

Hopefully, the reflections and actions shared here will foster advances towards the inclusion of the racism issue and the black population's health in the training processes, as provided for in the PNSIPN together with the agenda regarding the health of the black population in the Brazilian National Health System, a need that has been intensified in this context25. The 2030 agenda adopts as its motto 'leave no one behind'. We support the exercise proposed by Brazilian researchers to reimagine the SDGs within the Latin American reality, thinking and moving towards SDG 18 - Racial Equality, with the "eradication of all forms of racial discrimination against all men and women, boys and girls everywhere"26(164).

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Final considerations

This experience was the first in the institution focused on anti-racist training open to students and educators from different health courses. Different pedagogical strategies were proposed to encourage the participants to come closer to the theme of racism and its influences on the health of black people. In addition, there were opportunities for reflection, discussion in small groups and contact with professionals and students who work in different areas of health care as well as cultural production by students. The racial diversity of teachers and students was an important point for identifying professional similarities and differences in anti-racist practices. The initiative proved to be a possibility for changes in health education in favor of both comprehensive care and interprofessional collaboration in fighting racism.

Collaborators

Germani AC (0000-0002-7409-915X)* contributed to the conception of the report, drafting and approval of the final version. Favarato MH (0000-0003-1039-216X)* contributed to critical analysis of the experience to be reported, writing, literature review, revision and approval of the final version of the manuscript. Oliva IL (0000-0003-2717-8514)* contributed to study design, data collection and interpretation, and drafting of the article. Geraldo RM (0000-0001-6264-7465)* contributed to the writing, review, and approval of the final version of the manuscript. Oliveira JC (0000-0003-0841-3486)* contributed to writing, review, and approval of the final version. Ayres JRCM (0000-0002-5225-6492)* contributed to realization of the experiment studied, analysis of the experiment, review, and additions to the final text. ■

^{*}Orcid (Open Researcher and Contributor ID).

References

- Organização das Nações Unidas. Transformando Nosso Mundo: A Agenda 2030 para o Desenvolvimento Sustentável. Genova: ONU; 2015.
- Comissão Europeia. Conferência Mundial contra o Racismo, Discriminação Racial, Xenofobia e Intolerância Conexa. In: Conferência Mundial Contra o Racismo, Discriminação Racial, Xenofobia e Intolerância Conexa; 2001. 31 ago-set 31-8; Durban. Durban: Governo da África do Sul; 2001. p. 137.
- Bush AA. Anti-Racism, Racism, Race, and the Other "R" Word: Using Critical Race Theory as a Tool to Disrupt the Status Quo in Health Professions Education. Acad Med. 2021; 96(11S):S6-S8.
- Cahn PS. How interprofessional collaborative practice can help dismantle systemic racism. J Interprof Care. 2020; 34(4):431-434.
- Bishop KL, Abbruzzese LD, Adeniran RK, et al. Becoming an anti-racist interprofessional healthcare organization: Our journey. J. interprof. Educ. pract. 2022; (27):100509.
- 6. Brasil. Diretrizes Curriculares Nacionais para a Educação das Relações Étnico-Raciais e para o Ensino de História e Cultura Afro-Brasileira e Africana. Brasília, DF: Ministério da Educação; 2004. [acesso em 2021 ago 30]. Disponível em: http://www.uel.br/projetos/leafro/pages/arquivos/DCN-s%20-%20Educacao%20das%20Relacoes%20Etnico-Raciais.pdf.
- Conselho Nacional de Saúde. Resolução nº 569, de 8 de dezembro de 2017. Diário Oficial da União. 8 Dez 2018.
- Brasil. Ministério da Saúde, Secretaria de Gestão Estratégica e Participativa, Departamento de Apoio à Gestão Participativa e ao Controle Social. Política Nacional de Saúde Integral da População Negra: uma política para o SUS. 3. ed. – Brasília, DF: Editora do Ministério da Saúde; 2017.

- Borret RH, Araujo DHS, Belford PS, et al. Reflexões para uma Prática em Saúde Antirracista. Rev. bras. educ. med. 2020; 44(supl1): e0148.
- Anastasiou LGC. Ensinar, aprender, apreender e processos de ensinagem. Anastasiou LGC, Alves LP, organizadores. Processos de ensinagem na universidade: pressupostos para as estratégias de trabalho em aula.
 v. 7. Joiville: Univille; 2003. [acesso em 2022 nov 5]. Disponível em: https://edisciplinas.usp.br/pluginfile.php/3203177/mod_resource/content/2/Anastasiou%20e%20Alves.pdf.
- Fitzgerald C, Hurst S. Implicit bias in healthcare professionals: a systematic review. BMC med ethics. 2017; 18(1):1-18.
- 12. Gonzalez CM, Noah YS, Correa N, et al. Qualitative analysis of medical student reflections on the implicit association test. Med educ. 2021; 55 (6):741-748.
- 13. Siegelman JN, Woods C, Salhi B, et al. Health care disparities education using the implicit association test. Med educ. 2016; 50(11):1158-1159.
- Wang C, Burri, MA. Photovoice: Concept, methodology, and use for participatory needs assessment. Health educ behav.1997; 24(3):369-387.
- Sethi B. Using the eye of the camera to bare racism: A photovoice project. Aotearoa New Zealand Soc. Work. 2016; 28(4):17-28.
- Griffith DM, Semlow AR. Art, anti-racism and health equity: "Don't ask me why, ask me how!". Ethn. dis. 2020; 30(3):373.
- Burch SR. Perspectives on Racism: Reflections on Our Collective Moral Responsibility When Leveraging Arts and Culture for Health Promotion. Health Promot Pract. 2021; 22 (supll):12S-16S.
- 18. Organização Mundial da Saúde. Marco para Ação

- em Educação Interprofissional e Prática Colaborativa. Geneva: OMS; 2010.
- Gutierrez CS, Wolff B. Using photovoice with undergraduate interprofessional health sciences students to facilitate understanding of and dialogue about health disparities within communities. Pedag. Health Promot. 2017; 3(1):42-49.
- 20. Ayres JRCM. Organização das ações de atenção à saúde: modelos e práticas. Saúde Soc. 2009; (18):11-23.
- 21. Peduzzi M, Silva JA, Leonello VM. A formação dos profissionais de saúde para a integralidade do cuidado e prática interprofissional. In: Mota A, Marinho AG, Schraiber LB, organizadores. Educação, medicina e saúde: tendências historiográficas e dimensões interdisciplinares. Santo André: UFABC; 2018. p. 141-172. [acesso em 2022 nov 5]. Disponível em: https://www.fm.usp.br/museu/conteudo/museu_162_miolo_medicina_v10_divulg.pdf.

- hooks B. Ensinando a transgredir: a educação como prática da liberdade. São Paulo: WMF Martins Fontes; 2013.
- 23. hooks B. Ensinando pensamento crítico: sabedoria prática. São Paulo: Editora Elefante; 2020.
- 24. Werneck J. Racismo institucional e saúde da população negra. Saúde Soc. 2016; (25):535-549.
- 25. Santos MPA, Nery JS, Goes EF, et al. População negra e Covid-19: reflexões sobre racismo e saúde. Est Av. 2020; (34):225-244.
- Cabral R, Gehre T. Guia 2030: Integrando ODS, Educação, Sociedade. São Paulo: Unesp; 2020.

Received on 10/30/2021 Approved on 08/11/2022 Conflict of interests: non-existent Financial support: non-existent