

# “A course on music history for medical students?”

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## ABSTRACT

Participation in playful and reflective activities could increase the students' resilience to the stress associated with the medical course. In this sense, music could facilitate the development of feelings and attitudes, such as social inclusion, balance, attention, imagination, and reflection, essential for clinical practice. In this article, I report my experience with the optional discipline "Introduction to the history of Western classical music." This course has been offered annually to medical students since 2015. The anonymous evaluations received by 62.5% of the 64 students who have attended the discipline so far showed a high satisfaction rate (100% of the assessments marked as good or excellent) and the recognition of its importance for medical training (95% of evaluations marked as good or excellent). These results encourage the continuation of the discipline and the introduction of similar activities into our curriculum.

**Keywords:** Music, Medical Education, Arts

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The influence of quality of life on the teaching-learning process is well recognized in the literature<sup>1-4</sup>. The medical course can be an important source of stress and psychological disorders, negatively impacting this quality and, thus, the students' academic performance<sup>1-3,5,6</sup>. However, it is paradoxical that a course that aims to train health promoters often offers few activities aimed at preventing these problems in their students<sup>4</sup>. Our Faculty is an exception to this, having, since 1990, a center dedicated to educational support and the promotion of mental health, CAEP (Center for Educational and Pedagogical Support).

In an additional challenge to this center, in the year 2020, the negative consequences of the COVID-19 pandemic were added to the high stress levels usually present in academic life. In addition to apprehension with one's own health, it resulted in an emergency change from the face-to-face format to that of distance learning, bringing extra concerns related to reduced motivation, increased pressure for independent learning, and abandoning routines and well-established social relationships inside

the academy<sup>7</sup>. It is not by chance that the first studies indicate that a considerable percentage of students report a significant reduction in their quality of life associated with a substantial increase in mental disorders<sup>7</sup>.

Responding to this situation, the CAEP, together with other groups from the Ribeirão Preto School of Medicine (FMRP), launched in 2020 the campaign "FMRP united for a better semester." Among its objectives are those of "permanently stimulating the personal and professional development of members of the community in all spaces of work or personal and virtual living; being an open space for reflection, dialogue, and exchange of experiences; favoring respectful and qualified communication, and creating opportunities for the acquisition and improvement of the necessary skills to fulfill our role as students/apprentices and professionals/educators."

The recognition that humanistic training is essential in medical education has led to numerous formal disciplines on this topic. Some medical schools, in addition, incorporated activities specifically focused on teaching the

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arts. For example, in 1996 the University of Oslo started a course based on literature, visual arts, architecture, and music. The objectives of the discipline were to demonstrate how art can serve personal and professional development, being a source of reflection on the social, cultural, and historical context of medical practice, and improving the training and quality of life of students<sup>8,9</sup>.

Could a course on the history of classical music also contribute to these objectives? Inspired by this possibility, in 2015 I started offering medical students an optional discipline with this theme. In this paper, I seek to provide a brief history of the course and reflect on its potential impact on students' quality of life and personal development, particularly under the conditions imposed by COVID-19.

## THE ORIGINS OF THE DISCIPLINE

In 1975, when I was taking the exam to start the medicine course at the Federal University of Rio Grande do Sul (UFRGS), a friend invited me to watch a presentation of Beethoven's Ninth Symphony by the Porto Alegre Symphony Orchestra (OSPA), at the time directed by the great conductor Pablo Komlós. That experience represented a real epiphany and aroused a deep desire to learn more about classical music. My interest in this area coincided with medicine's learning, creating a permanent association between these two topics.

At the time, most of the OSPA concerts were held at the UFRGS main Auditory, to which, as students, we had free access. In addition, I was fortunate enough to attend a library that had an excellent collection of vinyl records (LPs) of classical music. There, I came across the book "A new history of music"<sup>10</sup>, by Otto Maria Carpeaux, a great Austrian intellectual that lived in Brazil. Thanks to his vast scholarship, Carpeaux clearly and concisely associate music development with that of visual arts and Western literature.

Many records, cassette tapes, books, a medical course, and a residency in internal medicine later, I came to Ribeirão Preto to do my postgraduate studies in Pharmacology. Here I had

the first experience of teaching music history. Taking advantage of my already considerable collection of LPs and cassette tapes, I organized, at the request of colleagues from the boarding house "Vita et Pax" where I lived, a short course on the topic.

After being hired as an assistant professor in the Department of Pharmacology, FMRP (1987), and following my post-doctorate at the University of Manchester, United Kingdom (1989-1990), I finally enrolled in a formal music course. There I learned piano for two years, playing (with a lot of sweat and little inspiration and skill) some basic repertoire pieces. By that time, my music collection had grown significantly and included many "compact disks" (CDs) and several new books on music. The United Kingdom period also allowed me to attend several opera performances and acquire the first videos of this fascinating art form.

## THE MOTIVATION TO OFFER THE DISCIPLINE

A long time ago, when I was still a monitor of Pharmacology's discipline for the Medical Course at UFRGS, I participated in an excellent workshop for teaching training. Of the many experiences received, one in particular greatly influenced my future activities as a teacher. It was the definition of education as the "possibility of opening new paths." At this point, I would like to refer to a film, Jonathan Demme's "Silence of the Lambs." In this movie, the character Hannibal (who, for those who didn't watch it, was a sociopath psychiatrist brilliantly played by Anthony Hopkins) offers the clue that will allow FBI detective Clarice (played by Jodie Foster) to identify the "serial killer" she was looking for: "we want what we see." Adapting this phrase to education: "we only want what we know." Thus, I started to see teaching as an activity that provides students with new possibilities of expanding their range of life choices. As for some, great music is not just entertainment, but a "reference point in an unpredictable world, a source of reconciliation, joy, and hope that never fails"<sup>11</sup>. Why not, then, take advantage of the vast musical collection I

had and offer students the opportunity to know (and eventually “desire”) this new “path”?

## MUSIC AND MEDICINE

The relationship between music and medicine is ancient<sup>12, 13</sup>. It is interesting that the Greeks, for example, placed the same god, Apollo, in charge of music and medicine<sup>14</sup>. In the Old Testament, in the first book of Samuel, its therapeutic capacity on King Saul’s mental torments is described: “Whenever the spirit of God came upon him, David took the lyre and touched it; then Saul calmed down, felt better, and the evil spirit left him” (1 Samuel, 16:23).

In the last decades, the scientific investigation of music therapy has advanced significantly. For example, music can alter cardiac function, neural circuits’ functioning, and reduce plasma levels of hormones associated with stress and inflammatory responses. Controlled clinical trials have supported its therapeutic potential in certain situations<sup>13-15</sup>.

In addition to therapeutic aspects, however, music has also been incorporated into some medical schools with the additional objectives of expanding student appreciation of the human condition, encouraging interrelationships with the humanities, strengthening interpersonal relationships, dissolving traditional hierarchic organization (professor-resident-veteran-freshman), and promoting reflections on patients’ experiences in a social, cultural, and historical context<sup>13</sup>.

## THE COURSE STRUCTURE

The course is part of the discipline RCG0394 - Culture and Extension Activities.

This discipline was created jointly by the Vice-(Deans of Graduation and Culture and Extension of the University of São Paulo through resolution CoG and CoCEX Nº 4738, of February 22, 2000. Based on § 2 of the resolution, our Faculty divided the discipline into modules, one of them the “Introduction to Western Classical Music.”

The course aims primarily to provide the student with a historical view of Western classical music development, from its beginnings (from where history can reach, since music has been with us since prehistory), that is, from Gregorian chant, to modern and contemporary music. It initially involved about 16 weekly face-to-face meetings lasting 1.5 to 2 hours, always held at 6:30 pm in our home located near the USP Campus in Ribeirão Preto.

The module is officially offered in the second semester, but in practice it starts in mid-March and usually ends in early September. With this approach, we have greater flexibility to modify the meeting days due to the students’ (exams, for example) and mine (trips to congresses, etc.) impossibilities. In Table 1 below, it is possible to see the developed program and the recommended primary bibliography.

Although the minimum frequency for approval, as determined by USP, is 70%, we insist that all students attend the first class. Based on the book by the American composer Aaron Copland, I discuss “What to hear in music”<sup>16</sup>. In this initial meeting, it is informed that no technical knowledge about music will be required. I highlight the various elements that make up the music (rhythm, melody, harmony, timbre, texture, and musical form) so that, later, I can point out their evolution throughout history. In this approach, the discipline tries to stimulate active hearing development, a skill also essential in a clinical interview.

**Table 1**

## Course program

1. General introduction: Course description, the indication of didactic material, basic principles (melody, rhythm, harmony, color, texture, and musical forms), modal and tonal system.
2. Middle Ages: Gregorian chant. The birth of vocal polyphony: Ars Antiga and Ars Nova, Guillaume de Machaut
3. Renaissance music (Josquin, Byrd, Lassus, Morales, Palestrina, Gabrieli)
4. Baroque: Homophony and the birth of the opera: Monteverdi. Development of instrumental music: Corelli, Frescobaldi. Opera in the 17th century: Alessandro Scarlatti, Lully, Purcell. The opera Buffa: Pergolesi. The Protestant Baroque: Schutz. 5. Baroque in the 18th century: Vivaldi, Domenico Scarlatti, Couperin, Rameau, Handel, and Bach.
5. Classic period: Beginning: J.C. Bach and C.P.E. Bach. Development of the sonata form. Haydn, Mozart, Beethoven.
6. Romanticism: Start: Schubert, Mendelssohn. German opera: (Weber) and Italian (Bel canto: Rossini, Donizetti, and Bellini). High French (Berlioz) and German (Schumann) romanticism. Chopin and Liszt.
7. Nationalism in music: Grieg, Smetana, Dvorak, the "five" (Mussorgsky, Rimsky-Korsakof, Borodin), Tchaikovsky.
8. Verdi, Wagner, Verismo (Bizet, Puccini), Brahms, Frank, Elgar.
9. The Wagnerians: Bruckner and Wolff
10. Western music crisis: Strauss and Mahler
11. Impressionism: Debussy and Ravel
12. Stravinsky. Neoclassicism and national musicians: Falla, Granados, Gershwin, Ives, Villa-Lobos, the "six" (Milhaud, Honegger, Poulenc).
13. The Vienna school: Schoenberg, Berg and Webern
14. The post-war: Varese, Messian, Cage, Boulez, Berio, Stockhausen, serialism, random music, concrete music, minimalism.

Basic bibliography: 1. Carpeaux, OM. Uma nova história da música.  
2. Copland A. What to listen for in Music.

## THE IMPACT OF COVID-19

In 2020, I faced an unprecedented challenge. Immediately after our first face-to-face class, quarantine due to the pandemic by COVID-19 began. After consulting the students via the Whatsapp group we had created, we decided to keep the course via distance learning. After this decision, I was contacted by four more students who expressed the desire to take the course and repeated the initial class.

The first two classes using distance learning, in our understanding, were not satisfactory. This fact reflected my inexperience, having tried to transmit the lecturer over the internet. The sound's quality was poor, depriving the students of the most important aspect of the course: to listen to quality music actively. However, thanks to a "tip" from one of the students, I started to use "Youtube" video-presentations, sharing them during the classes offered via "Google meet."

The experience was very enriching, allowing students to meet, in addition to the main music pieces and their composers, great soloists,

orchestras, conductors, singers, and concert halls. We were also able to present selected excerpts, with subtitles in Portuguese or English and commented by us, from the great operas. These activities' success allows me to anticipate their integration into future versions of the course (post-COVID), at least in a mixed-mode that includes classroom and distance learning activities.

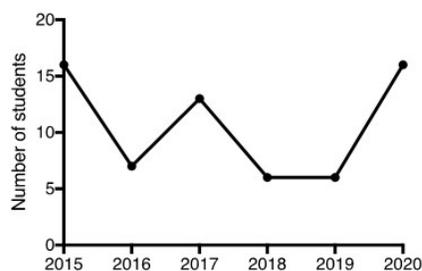
It is interesting that, even though dismissed by the Course Coordination Commission from attending optional disciplines in the year 2020, all students opted for its continuity, even during the period of regular school holidays in July.

## STUDENT ASSESSMENTS

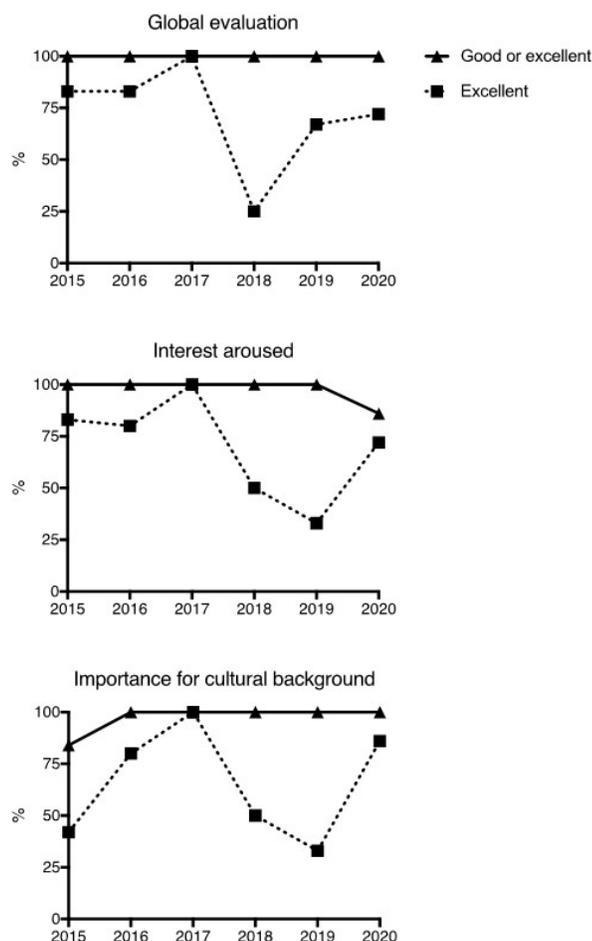
Figure 1 shows the number of students who participated in the discipline annually from 2015 to 2020, in a total of 64 students. Of these, 40 (62.5%) returned the anonymous self-assessments that we distributed at the end of the course.

The course's good acceptance is visible in the answers, with 100% of the students considering the discipline as good or excellent. The interest aroused was also high (97.5% good or excellent in total). Likewise, 95% of the students understood that the discipline was good or excellent for their cultural background

as future doctors. Figure 2 shows the evolution of the assessments over the several editions of the discipline. It is possible to observe that the tendency to decrease the "excellent" concepts in the years 2018 and 2019 was reversed in 2020, possibly reflecting the introduction of distance learning resources in this period.



**Figure 1:** Annual number of students enrolled in the discipline



**Figure 2:** Evaluation of the discipline by students in% of responses related to global evaluation, interest aroused, and importance for cultural training as a doctor. The results referring to the "Excellent" category and the sum of the responses with "Good" or "Excellent" ratings are shown.

## CONCLUSIONS

One of the alternatives proposed to strengthen medical students' resilience to stress is participation in playful and reflective activities<sup>6</sup>. In this sense, music can promote feelings of social inclusion, coherence, balance, and purpose and encourage awareness and strengthening of our emotions<sup>17</sup>. In addition, as mentioned above, the active listening necessary for musical appreciation helps in the development of essential skills in clinical practice, such as attention, imagination, and reflective thinking<sup>8</sup>. With these objectives, I tried to open "a new path," starting the discipline of music history six years ago.

In 2020, the course had unique characteristics and, in my opinion, contributed to the CAEP and FMRP objectives of "making this semester better". In this sense, I reproduced one of the anonymous evaluations we received, and which left me immensely pleased: "I traveled through Europe, I was able to enjoy works of art, visit theaters, meet artists, watch operas and orchestras without leaving home. This discipline has increased my cultural background, and I believe that to be a good doctor, it is necessary to contact several areas of knowledge, among them Music, art capable of awakening different feelings through sound".

These and the other positive evaluations that the discipline has received encourage me to continue. Besides, perhaps this experience, by showing its receptivity and the importance attributed by students to professional training, may stimulate other courses aimed at teaching arts at our Faculty.

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