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USING PAINTING AS A TEACHING METHOD: ADDRESSING THE SOCIAL DETERMINANTS OF HEALTH IN TRADITIONAL AMAZONIAN POPULATIONS

UTILIZANDO A PINTURA COMO MÉTODO DE ENSINO: ABORDANDO OS DETERMINANTES SOCIAIS DA SAÚDE EM POPULAÇÕES TRADICIONAIS AMAZÔNICAS

UTILIZANDO LA PINTURA COMO MÉTODO DE ENSEÑANZA: ABORDANDO LOS DETERMINANTES SOCIALES DE LA SALUD EN POBLACIONES TRADICIONALES AMAZÓNICAS

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ABSTRACT

This article introduces an innovative pedagogical approach: the utilization of painting as a teaching and learning method to depict the experiences of traditional Amazonian populations, with a specific focus on the social determinants of health. The diversification of teaching methodologies proves to be imperative in adequately preparing nursing professionals to navigate the intricate cultural and social intricacies of healthcare delivery. The integration of painting as an educational tool offers a distinct and enriching perspective for comprehending the multifaceted realities encountered by these communities. Through the creation classroom images representing riverside, quilombola, and indigenous communities, students engaged in an exploration of the challenges and social determinants of health prevalent in these settings. The subsequent analysis uncovered valuable insights into the intricate interplay between social, cultural, and health-related factors, underscoring the paramount importance of cultural sensitivity and empathy in the provision of effective healthcare. Group discussions provided students with a platform to share and critically assess their artistic creations, thereby deepening their comprehension of the adversities confronted by these communities. The amalgamation of art as an interdisciplinary approach not only enriches the educational process but also empowers healthcare professionals to deliver care that is more attuned to the cultural nuances of their patients. Furthermore, this innovative approach facilitates a comprehensive grasp of the synergistic connections between social, cultural, and health determinants that significantly shape the lives of these communities, thereby emphasizing the essential role of innovation within the realm of teaching and learning.

KEYWORDS

Teaching Method. Interdisciplinary Placements; Traditional Populations; Social Determinants of Health.

RESUMO

Este artigo apresenta uma abordagem pedagógica inovadora: a utilização da pintura como método de ensino e aprendizagem para retratar as experiências das populações tradicionais da Amazônia, com um foco específico nos determinantes sociais da saúde. A diversificação das metodologias de ensino mostra-se imperativa para preparar adequadamente profissionais de enfermagem para navegar nas intricadas complexidades culturais e sociais da prestação de cuidados de saúde. A integração da pintura como ferramenta educacional oferece uma perspectiva distinta e enriquecedora para compreender as realidades multifacetadas encontradas por essas comunidades. Por meio da criação de imagens em sala de aula, representando comunidades ribeirinhas, quilombolas e indígenas, os estudantes exploraram os desafios e determinantes sociais da saúde prevalentes nesses contextos. A análise subsequente revelou insights valiosos sobre a intrincada interação entre fatores sociais, culturais e de saúde, destacando a importância fundamental da sensibilidade cultural e empatia na prestação eficaz de cuidados de saúde. As discussões em grupo proporcionaram aos estudantes uma plataforma para compartilhar e avaliar criticamente suas criações artísticas, aprofundando assim sua compreensão das adversidades enfrentadas por essas comunidades. A combinação da arte como uma abordagem interdisciplinar não apenas enriquece o processo educacional, mas também capacita os profissionais de saúde a fornecerem cuidados mais sintonizados com as nuances culturais de seus pacientes. Além disso, essa abordagem inovadora facilita uma compreensão abrangente das conexões sinérgicas entre determinantes sociais, culturais e de saúde que moldam significativamente a vida dessas comunidades, enfatizando assim o papel essencial da inovação no âmbito do ensino e da aprendizagem.

PALAVRAS-CHAVE

Método de Ensino. Práticas Interdisciplinares. Populações Tradicionais. Determinantes Sociais da Saúde.

RESUMEN

Este artículo presenta un enfoque pedagógico innovador: la utilización de la pintura como método de enseñanza y aprendizaje para representar las experiencias de las poblaciones tradicionales amazónicas, con un enfoque específico en los determinantes sociales de la salud. La diversificación de las

metodologías de enseñanza resulta imperativa para preparar adecuadamente a los profesionales de enfermería para navegar las intrincadas complejidades culturales y sociales de la prestación de servicios de salud. La integración de la pintura como herramienta educativa ofrece una perspectiva única v enriquecedora para comprender las realidades multifacéticas encontradas por estas comunidades. A través de la creación de imágenes en el aula representando comunidades ribereñas, guilombolas e indígenas, los estudiantes se embarcaron en una exploración de los desafíos y determinantes sociales de la salud prevalentes en estos entornos. El análisis subsiquiente reveló valiosas percepciones sobre la intrincada interacción entre factores sociales, culturales y de salud, destacando la importancia fundamental de la sensibilidad cultural y empatía en la prestación efectiva de servicios de salud. Las discusiones grupales proporcionaron a los estudiantes una plataforma para compartir y evaluar críticamente sus creaciones artísticas, profundizando así su comprensión de las adversidades enfrentadas por estas comunidades. La amalgama del arte como enfoque interdisciplinario no solo enriquece el proceso educativo, sino que también capacita a los profesionales de la salud para brindar atención más sintonizada con los matices culturales de sus pacientes. Además, este enfoque innovador facilita una comprensión integral de las conexiones sinérgicas entre los determinantes sociales, culturales y de salud que dan forma significativamente a la vida de estas comunidades, subrayando así el papel esencial de la innovación en el ámbito de la enseñanza y el aprendizaje.

PALABRAS CLAVE

Método de Enseñanza. Prácticas Interdisciplinares. Poblaciones Tradicionales. Determinantes Sociales de la Salud.

1 INTRODUCTION

Traditional populations are ethnic and cultural groups that maintain historically rooted practices, ways of life, and relationships with the environment, often passed down through generations. They possess a profound knowledge and connection to the ecosystems in which they live, playing a crucial role in the preservation of biodiversity and cultural diversity. In Brazil, these populations include indigenous peoples, quilombolas, riverside communities, rubber tappers, among others. These populations face unique health challenges due to social, cultural, economic, and environmental factors (Guimarães *et al.*, 2020). A deep understanding of the social determinants of health is crucial for providing practical and culturally sensitive nursing care (Souza *et al.*, 2022; Castenali *et al.*, 2019). These communities subsist in a richly diverse cultural landscape with challenges that shape their health conditions (Yoshida; Penna, 2021).

Teaching nurses to understand these complexities is essential for providing practical and culturally appropriate care (Vilela; Janeiro, 2012). While Master's in Nursing programs have historically

relied on traditional teaching methods, the need for a more comprehensive and interdisciplinary education is becoming increasingly evident (De Tantillo; Christopher, 2020).

In this context, this article proposes an alternative and innovative approach: the incorporation of painting as a teaching method. Through this approach, we aimed to explore the social determinants of health that affect the health-disease process of traditional Amazonian populations in a deeper and more engaging way. Furthermore, we emphasize the importance of diversifying teaching methods to enhance the learning of nursing professionals, equipping them to deal more effectively with the cultural and social complexities inherent in healthcare contexts (Mattia *et al.*, 2018).

While traditional teaching methods such as lectures and critical reflection on scientific articles play an essential role in health education, the incorporation of alternative teaching methods like painting not only keeps students engaged and motivated but also allows for a deeper understanding of health complexities (Silva; Brito, 2019). Art, as a universal means of human expression, has the power to transcend linguistic and cultural barriers, making it a powerful tool for communicating emotions, experiences, and perspectives that often cannot be captured through words alone (Biesdorf; Wandscheer, 2011).

By adopting interdisciplinary and creative approaches, educational institutions, both in undergraduate and postgraduate settings, can prepare nurses to address the adversities experienced by traditional populations in the Amazon. These nurses often serve as the first point of contact in healthcare delivery, underscoring the importance of understanding and addressing the complex interactions between social, cultural, and health factors that shape the lives of these communities (Flaubert *et al.*, 2021; kwame; petrucka, 2021).

Given this scenario, the objective of this article is to present and discuss the proposal of using painting as an innovative pedagogical tool in Master's in Nursing classes. By visually reproducing the realities faced by traditional Amazonian populations, we also expand the understanding of the social determinants of health that affect the health-disease process in this context. Additionally, we emphasize the importance of introducing diverse and creative teaching methods as an interdisciplinary approach to enrich learning and prepare nursing professionals for more comprehensive and culturally sensitive care for the populations they serve.

2 MATERIALS AND METHODS

The traditional teaching approach in Master's in Nursing classes often relies on lectures and discussions of scientific articles. However, the introduction of alternative pedagogical methods can enrich the educational experience and enhance students' understanding (De Tantillo; Christopher, 2020). For the implementation of the method, six (06) students enrolled in the "Nursing and Epidemiological Process in the Amazon Context" course in August 2023 participated.

Painting, as a form of visual art, allows for the expression of complex experiences and emotions that often cannot be fully communicated through words (Rakici; Karaman, 2019). The methodologi-

cal implementation consisted of five steps. Initially, cultural contextualization was provided, offering students information about the culture, way of life, and health challenges faced by traditional Amazonian populations. This helps establish a solid context for the activity. The second step involves exploration and research, where students conduct research on traditional peoples of the Amazon, their traditions, beliefs, and health challenges. This helps them better understand the complexities involved.

The third phase involves the painting activity itself, where students are invited to create paintings that represent the living conditions, health challenges, and social determinants in traditional Amazonian populations. They can use colors, symbols, and visual elements to convey these messages artistically. After completing the paintings, the fourth step involves group discussion, where students share their works and explain the artistic choices they made. This encourages reflection on the complexities involved in health issues. The fifth stage involves analyzing social determinants through a discussion in which students identify and examine the social determinants of health represented in their paintings. This allows for a deeper understanding of the interconnections between social and health factors.

To further elucidate the points highlighted in this stage, the construction of a mental map was proposed. The process commenced with a comprehensive analysis of the images produced by our students, each of which provided a unique glimpse into the lives and environment of traditional Amazonian populations. Through interactive discussions and thematic categorizations, we identified recurring motifs and themes within the artwork, such as elements of culture, community life, and environmental influences. These themes were subsequently systematically organized into a coherent framework, with each node representing a specific social determinant of health.

The result is a rich, multidimensional representation that encapsulates the intricate web of factors shaping the health of traditional Amazonian populations, offering valuable insights for future research and policy interventions. Finally, the module concludes with teacher evaluations highlighting the benefits and results, including cultural awareness. The painting approach allows students to emotionally connect with the experiences of traditional Amazonian peoples, promoting cultural sensitivity and enabling a holistic understanding. By visualizing and discussing the social determinants of health through art, students are encouraged to adopt a holistic view of healthcare.

3 RESULTS

The implementation of the teaching methodology based on painting proved to be extremely enriching for understanding the social determinants of health in traditional Amazonian populations. The images created in the classroom highlighted the depth and richness of this approach, enabling a more profound exploration of the cultural and social realities of these communities.

The students vividly portrayed the reality of riverside communities. The depiction of the river, the fisherman in his canoe, the houses on stilts, and the trees representing natural food consumption were central elements. The group discussion emphasized the role of modular education and the significance of healthcare provided through the ABARÉ boat, registered as a family health team on the

river. These images reflected not only the physical aspects of the riverside environment but also the challenges faced by these communities regarding access to health services.

The images portraying quilombola communities highlighted the community hall and football field for social interaction, including the church and school. They brought up issues related to their way of life and subsistence, such as the representation of plantations, peculiarities, and everyday elements like chickens and pigs, as well as children playing and hammocks at the doors of houses. Production through painting captured the essence of community life, emphasizing the importance of social projects and cultural interactions for the health and well-being of this community.

Regarding the indigenous population, the paintings contained the iconic representation of a hut. The image featured elements such as the presence of the Special Indigenous Health District (DSEI), responsible for healthcare, a community meeting hall, a central bonfire, and a fishing canoe. The visual representation of archery and plantations also highlighted aspects of the community's culture and livelihood, illustrating how the indigenous health approach is deeply rooted in the cultural traditions and specific needs of these populations.

The painting approach played a pivotal role in fostering empathy among the students toward the traditional Amazonian populations. Students shared that, despite being aware of the challenges these communities faced in accessing healthcare services, the act of painting brought them a deeper and more personal understanding of these hardships. They were astonished to uncover previously unknown issues, such as the difficulties in mobility during the dry river seasons and the repercussions of land erosion during floods, often resulting in the loss of homes.

Furthermore, the predatory fishing practices by companies and the subsequent scarcity of fish, a crucial dietary staple for these communities, became evident. Respiratory issues due to waste burning and parasitic infections stemming from the use of river water for drinking and daily activities were also highlighted. This experience transformed the students' perception of healthcare and heightened their sensitivity to the intricate cultural realities that shape the health and illness processes of these populations.

After the production of these evocative images, a crucial step was taken to further enhance our understanding of the social determinants impacting the health of traditional Amazonian populations, including riverside communities, indigenous groups, and quilombolas. A comprehensive mental map was meticulously crafted, meticulously integrating the visual representations into a coherent framework that delineates the intricate web of social factors influencing the well-being of these communities. This map serves as a powerful tool for dissecting and analyzing the multifaceted challenges and opportunities faced by these populations in their quest for improved health outcomes. Figure 1 provides an insightful glimpse into this comprehensive mental map, offering a visual gateway into our exploration of the complex interplay between culture, environment, and health in the Amazon.

Figure 1 - Mapping the Social Determinants of Health in Amazonian Traditional Populations



Source: Authors themselves (2023).

When discussing the potential long-term implications of this methodology, it is essential to consider how it can shape the future of nursing practices, public health policies, and educational approaches in the Amazonian regions. Raising students' awareness of the specific needs and challenges faced by traditional populations can lead to a more holistic and culturally sensitive approach to healthcare delivery. Additionally, this methodology has the potential to influence the formulation of public policies addressing the identified issues, such as the protection of natural resources and the improvement of healthcare access in these remote areas.

The challenges and limitations encountered during the implementation of this methodology have also provided valuable lessons, including the need for a deeper understanding of community vulnerabilities and the importance of facilitating reflective discussions. These reflections contribute to a better grasp of the cultural complexities that play a significant role in the context of health and disease among traditional Amazonian populations.

4 DISCUSSION

The utilization of painting as an innovative teaching method has proven to be a highly effective strategy for deepening the understanding of the social determinants of health within traditional Amazonian populations. An analysis of the outcomes derived from the images created in the classroom vividly illustrates how this approach enriched student learning and facilitated a more profound exploration of the cultural and social realities within these communities. In this context, the methodology

presented not only expanded the understanding of the social determinants of health but also fostered a more comprehensive and holistic perspective of the health-disease process.

The images depicting riverside, quilombola, and indigenous communities enabled students to establish an emotional connection with these experiences, thereby promoting cultural awareness and empathy. This emotional bond is crucial for the development of nursing professionals who can comprehend not only health conditions but also the social, cultural, and emotional factors influencing the well-being of the communities they serve (Moudatsou *et al.*, 2020).

Authors emphasize the importance of cultural knowledge in delivering effective healthcare (Nair; Adetayo, 2019). The painting approach provided students with the opportunity to delve into the cultural perspectives of these communities, thus promoting a deeper understanding of belief systems, traditions, and ways of life, aligning seamlessly with the concept of transcultural nursing.

The analysis of the images produced and the group presentations unveiled insights into the complex interplay among social, economic, cultural, and health factors. The image representing the riverside community highlighted not only the physical conditions but also the challenges of accessing health services due to remote geographic locations. Esteemed authors discuss the Social Determinants of Health model, emphasizing the influence of social factors on health disparities. The painting approach allowed students to visualize these theoretical concepts in a real context (Kaihlanen *et al.*, 2019; Dahlgren; Whitehead, 2021).

The representation of the quilombola community emphasized the significance of social projects and social interactions in promoting health. Authors emphasized education as an act of liberation, and the use of painting as a teaching method echoed this notion by enabling students to explore the reality of these communities in a creative and collaborative manner (Freire, 1970). This aligns seamlessly with the principles of popular education, where knowledge is collectively constructed.

The image of the indigenous village highlighted the imperative need for culturally sensitive health-care approaches adapted to local traditions. Authors emphasized the importance of culture in shaping perceptions of health and illness (Tukuitonga, 2018). The painting not only highlighted architecture and daily activities but also emphasized the centrality of culture in providing effective healthcare.

Consequently, the active methodology employed allowed master's students to become active participants in the teaching and learning process. Through painting, the students not only expressed the daily lives of traditional populations but also identified the social determinants of health that are profoundly present and significantly impact the health-disease process within these communities.

This approach awakened critical reflective thinking in the master's students, who contextualized the historical processes underlying the formation of these communities and the resulting impacts in the contemporary context, including challenges in accessing health, education, and other essential services. In line with this, contend that the use of teaching resources other than traditional ones contributes to improving the quality of the teaching/learning process, in addition to stimulating critical thinking, participation, and interaction among students during the class (Nicola; Paniz, 2016).

Furthermore, one of the drawings addressed daily habits that negatively impact the health of this population, such as the common practice of open-air garbage burning, identified as a trigger for lung diseases, especially in children under five years of age. During the discussion, students emphasized

the importance of health education and teaching alternative methods of disposing of household waste, mentioning the recycling process, which can even be a potential source of income.

The inclusion of a drawing highlighting the negative health impact of common practices, such as open-air garbage burning, underscores the importance of considering not only the immediate health issues but also the long-term implications for these communities. This observation aligns with the findings of various scholars in the field of public health and environmental studies. For instance, researchers have highlighted the adverse effects of household air pollution, which can result from activities like open burning of waste, on respiratory health, particularly among young children. Additionally, the emphasis placed by the students on health education and alternative waste disposal methods reflects the potential for community-driven solutions and empowerment (Raju; Siddharthan; Mccormack, 2020; FAdhullah *et al.*, 2022).

Promoting health education and sustainable waste management practices can have a significant positive impact on the overall well-being of these communities. By raising awareness about the health risks associated with open burning and advocating for recycling and responsible waste disposal, these communities can potentially reduce the prevalence of respiratory diseases and other health issues. This approach resonates with the principles of community-based participatory research (CBPR), where community members actively engage in identifying and addressing their health concerns (Jull; Giles; Graham, 2017).

Moreover, the suggestion that recycling could serve as a potential source of income highlights the interconnectedness of health, environment, and socioeconomic factors. This aligns with the broader perspective of the social determinants of health, which recognizes that income and employment opportunities are integral to health outcomes. Encouraging sustainable practices like recycling not only improves environmental conditions but also offers economic benefits to these communities (Magnan, 2021).

The mental map plays a crucial role in our discussion as it serves as an essential tool for contextualizing and representing the social determinants of health that impact traditional Amazonian populations. By integrating the visual representations created by the students into a cohesive and comprehensive mental map, we are able to provide a consolidated and holistic view of the factors shaping the health of these communities.

This map serves as a visual bridge connecting individual images to the intricate web of social, cultural, economic, and environmental influences affecting the well-being of these populations. Furthermore, it proves to be a powerful tool for future research and policy interventions, enabling a deeper and more strategic analysis of the challenges and opportunities faced by these communities in their pursuit of improved health outcomes. Therefore, the mental map not only enriches our understanding of the social determinants of health but also offers a captivating and informative visual representation of these complex and interconnected factors (Darling-Hammond *et al.*, 2020).

In this way, the results obtained with the use of the methodology proposed by the educator had a positive impact on the teaching-learning process of the master's students, considered by them as an important strategy that brought them closer to the reality experienced by the communities, arousing interest and facilitating the understanding of the content covered.

5 CONCLUSIONS

The teaching method of using painting in Master's in Nursing classes has yielded significant results by visually representing the realities faced by traditional populations in the Amazon. The findings have demonstrated a deeper understanding of the social determinants of health in these communities, fostering cultural awareness, empathy, and a more holistic approach to healthcare. By integrating art into the science of nursing, this methodology provides nursing professionals with a richer and more informed perspective, enabling them to provide culturally sensitive care tailored to the needs of traditional populations in the Amazon.

Additionally, it has the potential to influence the formulation of public policies addressing issues such as the protection of natural resources and the improvement of healthcare access in these remote areas. The challenges and limitations encountered during the implementation of this methodology have provided valuable lessons, including the need for a deeper understanding of community vulnerabilities and the importance of facilitating reflective discussions. These reflections contribute to a better grasp of the cultural complexities that play a significant role in the context of health and disease among traditional Amazonian populations. This innovative and holistic approach has the potential to reshape nursing practices, public health policies, and educational approaches in the Amazonian regions, ultimately improving the well-being of these unique and culturally diverse communities.

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