Training the eye during pandemics with an Art webinar: genetic diseases

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Observation is a key step preceding diagnosis, prognostication, and treatment. Careful patient observation is a skill that is learned but rarely explicitly taught [1]. The emergence of CT scans, MRI, US, and other diagnostic tools revolutionized modern medicine. Nevertheless, there is a negative impact on visual skills, as medical students/physicians are becoming more reliant on technologies to gather patient information rather than direct observation [2]. The Arts or "medical humanities" are increasingly used in medical education, and growing evidence exists that visual arts-based activities can enhance visual skills. During the lockdown associated to the COVID-19 pandemics, within the context of the medical students' cultural project "Art and disease: knowing how to observe to take care", a series of 2-hour webinars (via Zoom) were organized to keep an interactive dialogue among medical students and teachers. Each webinar was promoted in several ways and transmitted live through social and media networks (Facebook, YouTube). Our aim is to summarize one of these webinars, connecting human anatomy with artworks and genetic diseases. Figurative paintings from the 15th to the 20th Centuries depicting some traits of genetic disease (Down, Angelman, Prader-Willi, Noonan, Marfan, Ehler-Danlos syndromes; achondroplasia; pycnodysostosis; Paget's disease, and consanguinity) were selected. Particular attention was given to "Las Meninas", a painting by Diego Velázquez. Following the specific approach to teaching, known as Visual Thinking Strategies -VTS-, a facilitated group discussion was encouraged. Our faculty actively and enthusiastically participated in the process of artistic interpretation with peaks of 200 online presences. Students noted figure position and expression; color nuances; differences in texture; perspective, and shading of the various artworks. The painting became richer because different eyes focused on different things. The process increases analytical thinking as students "decode" the images seen in the paintings [3]. The use of Art impacts on students' diagnostic skills, competence in physical exam ability, empathy, teambuilding facilitation, promoting wellness/preventing burnout, and cultural sensitivity and acceptance of ambiguity; promotes problem solving, communication, thinking creatively, and appreciating other perspectives, all of which are fundamental in the progression of a good physician [2].

References

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Key words -

Art, visual skills, genetic diseases, eLearning, social networks, medical education, webinar.