

## VIEWPOINT

# Increasing Public Health Awareness of and Capacity for Arts-Based Therapy in Medicine

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**Quality of life** for patients can sometimes be overlooked during medical therapy stemming from pressures to treat them efficiently and cost-effectively and from overly focusing on cure rather than care. This understanding of health care also focuses patient outcomes on desired quantitative results that often disregard the qualitative patient experience. For patients with chronic or incurable illnesses, this approach can be especially damaging because the time between the onset of the condition and treatment may be years or never at all.

In the Constitution of the World Health Organization (WHO), "health" was defined as a state of complete physical, mental, and social well-being rather than merely the absence of disease or sickness.<sup>1</sup> As awareness grows of the role that social determinants have on health, there has been a renewed appreciation that health extends beyond the lack of illness. This is reflected in the WHO Commission on the Social Determinants of Health report, which acknowledged that causes of well-being and health overlap but are not identical.<sup>2</sup> The report recommended that further work be conducted to identify personal, social, and environmental factors that benefit health and well-being.<sup>2</sup>

**Research shows** that arts-based medical therapies can have a significant influence on improving the health care outcomes and experience of patients, medical students, and hospital staff. In several leading medical schools and teaching hospitals around the world, expressive writing, drama, and visual art classes together with exposure to music therapy programs are being incorporated into the curriculum.<sup>3-6</sup> From these educational experiences, it has been found that medical students display better clinical observation, listening, and critical thinking skills and demonstrate greater empathy toward patients.<sup>3-5</sup> For specific arts-based therapy programs, theatrical performance participation can improve team building, improvisation, and communication skills among medical students.<sup>5</sup> This form of art therapy also allows students to rehearse difficult medical scenarios and to practice management of possible responses in clinical situations.<sup>5</sup> Arts-based modules integrated into the medical curriculum also enable students to develop self-reflection and awareness, confidence, and medical identity that extends beyond observation or imitation of professional conduct.<sup>5</sup> In neurology, museum-based art activities allow patients with dementia, their caregivers, and medical students an opportunity to discuss and create art. This art-based activity provides comfort to medical students when they are in the presence of persons with dementia, and relief at seeing the patients use their capabilities while relating with their caregivers in a meaningful manner.<sup>7</sup> Art-

based therapies not only have a beneficial effect on the approaches used to enhance patient quality of life, they can also influence the attitudes and career choices of medical students by changing their perspectives about certain medical fields.

**Music** therapy programs have been found to reduce anxiety, pain intensity, fatigue, and opioid use in patients with cancer.<sup>8</sup> For patients with coronary heart disease, music listening may have a beneficial effect on blood pressure, heart rate, respiratory rate, anxiety, and pain control.<sup>8</sup> For patients with depression, music therapy can not only reduce their depressive symptoms but can stimulate social engagement in patient groups.<sup>8</sup> Studies examining the role of visual arts, movement-based creative expression, and expressive writing are limited but have been shown to help elderly or chronically ill patients, and patients with cancer. These patients learn to express experiences often too difficult to put into words and improve mobility, body image, and cognitive measures while reducing stress and anxiety.<sup>6</sup> Neurologically, music therapy helps improve gait ability, timing of upper extremity function, communication outcomes, and quality of life for patients who experienced a stroke.<sup>9</sup> For patients with dementia, music therapy has been shown to encourage recall of autobiographical memory while reducing agitation and aggressive behaviors.<sup>8</sup> Neurological assessments also improve as seen in the use of children's headache drawings. This tool is simple and inexpensive and has high sensitivity, specificity, and predictive value for migraine vs nonmigraine headaches.<sup>10</sup> Art-centered experiences provide patients with dementia and their caregivers a meaningful vehicle for nonverbal emotional expression while these individuals develop a state of concentration and pleasure derived from a rewarding activity that creates a sense of well-being.<sup>11</sup>

The health care experience of patients and staff is also enhanced with arts-based therapies. Until recently, health care institutions were designed on the basis of efficiency, infection control, cost-effectiveness, and new technology accommodation. However, research has shown that patients have less stress and anxiety, have reduced need for analgesia, and are ready for discharge earlier when the health care environment provides them greater opportunity to view natural and urban scenery.<sup>12</sup> Exposure to the arts also has a comforting effect that can offset stress associated with working in a health care environment, facilitate improved staff and patient interaction and rapport building, and create an encouraging hospital experience.<sup>13</sup> Surgeons listening to music in the operating room can reduce their heart rate, blood pressure, and muscle effort while increasing their surgical accuracy and speed at performing tasks.<sup>14</sup> Pa-

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tients also benefit when hearing music before and during surgery. They exhibit lower anxiety levels and have a significant reduction in analgesia and sedation requirements.<sup>14</sup>

These findings conclude that more randomized clinical trials using standardized tools to demonstrate the benefits of art-based therapies are warranted. Arts-based therapy studies need to use both qualitative and quantitative data analyses to better understand health effects among populations and to build on the research already conducted in this area. Applying both analytical methods would also allow research in the arts to expand beyond evaluating health benefits to include examining the increased use of art interventions and long-term sustainability of arts-based programs and to assess the effect of art therapies on patients of diverse cultural and socioeconomic backgrounds via cross-study comparisons.

The use of arts-based therapies to promote health and well-being does not contradict the biopsychosocial medical approach to improve patient outcomes. Rather, they complement one another by managing patient symptoms while improving quality of life. It is also important to note that the arts have played a role in society since the beginning of time. Every culture in every age has used music and art as a means of communication, self-expression, and social bonding. Given the growing evidence of how arts-based therapies can improve clinical skills, patient outcomes, quality of life, and health care experience, greater advocacy for the arts in medicine is needed. The challenge now is to ensure that one of the original declarations of the WHO is upheld by increasing proven arts-based therapy initiatives so that they can have measurable public health benefits that support a patient's physical, mental, and social well-being.

#### ARTICLE INFORMATION

**Published Online:** August 7, 2017.  
doi:10.1001/jamaneurol.2017.1639

**Conflict of Interest Disclosures:** None reported.

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