

Full-Length Article

Writing, Painting, Creating: How Can the Arts Augment Psychiatry Training?Jennifer Nicole Harris¹¹Cornwall Foundation Trust, University of Plymouth, United Kingdom**Abstract**

The humanities have recently enjoyed a position in medical school curriculums, but once a graduated doctor, its importance and value appears to diminish in the eyes of the profession. Psychiatry, as the study of the human condition where one must identify the inner worlds of patients, lends itself to creative pursuits encompassing observation and communication. As a specialty, psychiatry continues to suffer stigmatised opinions within the medical profession and poor recruitment across many countries. Incorporating the humanities, including literature, music and art into the training of postgraduate doctors could remedy tired perspectives and busy working lives, as well as providing new and dynamic ways to learn about and connect with patients on a more profound level. .

Keywords: *Music, Psychiatry, Art, Literature, Training*multilingual abstract | mmd.iammonline.com**Introduction**

Psychiatry is a discipline enjoying a pioneering neuroscientific direction in research. On the ground however, psychiatrists need to connect with their patients and tap into the inner dynamic workings of the human psyche. Where psychiatry studies the human condition, creativity expresses it. It therefore stands to reason that being versed in the latter brings a profundity of understanding to the former that may be lost in the exchange of words. The scope of this article cannot be exhaustive, and therefore focuses on the creative arts within the broader reach of humanities (which itself features philosophy, history and other non-scientific disciplines). *The arts* are defined by the Oxford dictionary as “The various branches of creative activity, such as painting, music, literature and dance”[1]. Of these, music, literature and art will be the focus of discussion, with specific application to the training of psychiatrists, though allied professions are discussed. The author is a working psychiatrist in the United Kingdom and although ensuing discussion will have relevance to other countries, it may not be entirely generalizable.

Most research considers the arts as a therapeutic modality[2]. The importance of the arts in training and education occupies literary awareness but begs further

interest. This is relevant considering stigma and stereotypes persist in psychiatry and recruitment remains insufficient. Nayak believes current teaching styles are designed to impart knowledge, but do not intend to change student’s attitudes and stereotypes in their experience of psychiatry[3]. New techniques are needed to reinvigorate young doctors and learning through new mediums may sharpen understanding, whilst engaging the imagination and raising new ideas and innovation.

The General Medical Council’s (GMC) document ‘Tomorrow’s Doctors’ (2003) advocated for the inclusion of medical humanities in special study units at medical schools[4]. Despite the development of these across the country, the replacement document entitled ‘Outcomes for Graduates’ (2018) makes no mention of the humanities in training[5]. Similarly, Humanities is not considered in the Royal College of Psychiatry’s core curriculum either, though art, history and philosophy special interest groups within the college suggest the arts are considered valuable[6].

A literature review found that those with a humanities background prior to medical school had equivalent or improved clinical performance as doctors whilst being able to perform on par with peers in clinical, academic and research areas. Interestingly, they were also more likely to choose general practice or psychiatry as a career[7]. This suggests that combining humanities in training may also help recruit to psychiatry.

Despite promising discussion surrounding humanities and the arts, A 2008 study suggests that psychiatric literature regarding humanities has declined significantly in 30 years, where in general medicine it’s roughly doubled[8]. This may reflect the scientific stance of modern psychiatry. Accordingly, Cameron coined the term ‘biobabble’. He intended to humorously replace ‘psychobabble’ as he had noticed

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International Association for Music & Medicine (IAMM).

patient's narratives of their struggles were increasingly related to biological dysfunction[9]. Pharmaceutical industries have been held culprit for this medicalisation of human anguish[10] as well as on-going resistance to the field of psychiatry itself[11].

Search strategy

The following search terms were used on embase, psychinfo and medline: Music, singing, art*, craft, drawing, painting, humanities, creativ*, book group, reading, literature, fiction, narrative, and bibliotherapy. These were cross referenced with medical student, nurse, trainee, doctor, psychiatr* and medical education yielding 245 results of which 50 were chosen as relevant to the research question. A further search was carried out on the British Education Index using the above terms, but also in addition, creative writing and psycholog* of which a further 12 papers were identified. The general themes emerging were of patient treatment or therapy, (largely excluded due to their irrelevancy to education), healthcare provider well-being, facilitation of empathy, reflection, and new patient insights. Literature and narrative was the most prevalent topic.

A focus on literature, music, and art

Literature bares similarity to psychiatric prose, and is subsequently reviving within research. Narrative approaches provide balance between scientific advances and the principles of empathy, recovery and ethics[10]. Charon coined the term 'narrative' and defined the skill and virtue of narrative competence as 'the ability to acknowledge, absorb, interpret and act on the stories and plights of others'[12]. Narrative is the backbone of psychiatry, being a direct expression of the patient's inner world. Sachdev goes as far as to consider it the only diagnostic tool in a psychiatrist's arsenal[13].

Yet is this a reductionist perspective? Kumar et al states "the creative arts have the potential to communicate a range of subtle and complex emotions and ideas that may be missed in straightforward verbal exchanges"[14]. Music for example, has soothed souls and connected people for centuries. Theories exist that it even pre-dated language[15]. Classic mythology assumed the importance of artistic expression within healing, Apollo being the god of music, poetry and medicine[16]. Somehow, modern society polarises these disciplines. Is music a language? It is predominantly processed in the non-dominant hemisphere, where rhythm and emotional tone of language are also assessed. Darwin suggested it may have evolved from sexual selection calls alongside language. Regardless, it remains integral to any culture. It's therapeutic use yields much literature, but there is little considering its use in educating health professionals on complex emotional themes[15].

Art appears more accessible and has enjoyed an increasing presence in undergraduate medical education[17]. This author experienced life-drawing classes as a special study

unit, which she feels nurtured a respect for the human body and helped sharpen observational skills. Focused skill development also facilitated reflection and gave headspace. Mullangi, a fourth year medical student writes that the arts in medical education offers doctors a "lifelong tool to reorient themselves as they move along in their training" particularly regarding the "hidden curriculum" of the wards which can nurture disdain where reflection would better serve[18].

Fostering new patient insights

"We read many books, because we cannot know enough people."

-TS Eliot[31]

Narrative is the well-trodden road to understanding patient experience, and seeking alternative narratives through reading can feel more logical than drawing insight through music or art. Novels have been used in the supervision of psychotherapy trainees[19], doctors[20] and social workers[21]. Fictional or otherwise, narratives leave an enduring memory in healthcare professionals and offer stimulus for change in practice. A greater understanding of the human element of illness may see the patient emerge as heroic instead of tragic[13]. The Maudsley Hospital, London is leading the way with a trainee-led book group which they conclude broadens learning potential and experience[20]. They also collaborated with US trainees at the John Hopkins School of Medicine to help foster international collaboration[22]. At the University of Lancashire a book group for social-work trainees has grown into a national project, where sessions are streamed three times a year across the UK. The project also has funding for Kindle devices[21].

Creative writing is another avenue to explore narrative. Valenti & Mehl-Madrone ran a workshop where students wrote accounts of patients felt to be "hopeless" and "burned out" by staff. One student presented *Murphy the Motor Mouth*. Murphy is a manic patient with substance abuse who'd caused staff considerable burnout; however the student's narrative account created a richer and more interesting man worthy of time and attention[23]. This is an easily adopted workshop that quite powerfully illustrates the importance of narrative with a humanistic perspective for patient insights.

Art is another medium that is easily adaptable to clinical education. Its strength lies in the flexibility of medium (pens and pencils are easy to carry and distribute) and the duration allocated to complete it. Ruskin has published an article on his own use of art to better understand his therapy patients. He makes the distinction between 'Brut Art' (by artists with mental illness) and 'Outsider Art' (a self-explanatory term of which his own art is an example). Jean Dubuffet (1901-1985) coined the term 'Brut Art', and organised the first public exhibition of his collected works in Paris, 1949. The title

translates as ‘Raw art is preferred to cultural art.’ Ruskin says in creating his own outsider art he hopes to place himself in the ego state of his clients and represent their experience. He does so whilst working closely with the client’s opinion[24].

Should every psychiatrist consider taking an hour to draw out on paper the emotions of those tricky patients that play on their minds? On the flip side, perhaps patient art might offer us greater insights into their mental state. Rosen discusses the risks of abusing artistic endeavours at the expense of the patient. He states that terms such as ‘Brut Art’ or ‘Psychiatric Art’ are vulnerable to perversion and a poor description of the aspirations of living artists. This population wish to be left in peace free from detention and importantly, do not wish to have their work mediated or interpreted by others with solely their illness in mind[25].

In a similar vein, many musicians try to capture their own mental anguish or that of others and this can be glimpsed in every genre of music. McDonald mentions Black Sabbath’s *Paranoid*, and Black Flag’s *Depression* within rock[26], and Reilly discusses Notorious B.I.G.’s *Suicidal Thoughts* within hip-hop[27]. Music itself is a very raw expression of emotion, drawing physical, behavioural and psychological responses from the human body in a dynamic way that visual art cannot. This has been captured in medical education where contemporary music has been used to illustrate personality disorders for students and trainees[28], and opera to demonstrate strong emotion[29]. With such divergent examples, what works of literature, art and music *should* we be considering? Within literature, several canons of improving text have been proposed in the past[30], but the author could not identify similar lists of music or art with medical educational value. The importance of suggested rather than compulsory lists is highlighted by Beverage[31]. Strict regimens risk limiting the scope of creativity where instead it should be nurtured, and the notion of *taste* is an inevitable factor that must be considered.

Enhancing scientific learning

“Man is unique not because he does science, and he is unique not because he does art, but because science and art equally are expressions of his marvellous plasticity of mind.”

- Jacob Bronowski[60]

There is the assumption that the arts can only serve to enhance the humanistic and holistic aspects of medicine, but can they assist with scientific principles? Charles Dickens is held in high regard for his portrayal of psychopathology, and there are accounts of Dickens being used to educate doctors[32]. Dickens was known to own books on psychopathology, and was described by Leonard Manheim as

“the greatest literary psychopathologist since Shakespeare.”[33] Mrs Smallweed’s dementia in *Bleak House* prior to Alois Alzheimer’s description has been described as a flawless example. Similarly, Dickens’ depiction of alcoholism sequelae including delirium tremens is in tales such as *The Strollers Tale of The Pickwick Papers*. The description of ‘the man over the garden wall’ in *Nicholas Nickleby* displays perfectly the grandiosity, flight of ideas, pressured speech and paranoid delusions of hypomania[32]. The phenomenon known as *dysmetropsia* (also called ‘Alice in Wonderland Syndrome’) demonstrates nicely literature’s influence on medicine & phenomenology. Amongst the playfulness of Lewis Carroll’s novel, there’s also a worrying array of visual distortions and disturbances seen in Alice herself[34].

Music has been used to illustrate scientific principles. Pop music in pharmacology student lectures was employed to illustrate ‘health maintenance, medicinal chemistry, toxicology, and drugs of abuse’. This was by use of songs with poignant drug or medical themes that helped reinforce course learning and spark discussion about the related social construct of the time it was written[35]. Could music be used more practically than to simply cement scientific principles? Senior suggests mnemonics or strategically played music during teaching[36], and according to one study, music prior to, or as part of training significantly improved basic clinical examination skills. Medical students with musical training had improved sensory awareness and found it easier to hear and describe the frequency and rhythm of body sounds[37].

Pellico observed similarly that using musical aural training and art appreciation at a museum, significantly improved observational and reasoning skills in 77 nursing students on an accelerated masters entry nursing program. This intervention was compared to watching a DVD music intervention and looking at printed art images[35]. Despite reaching significance, the difference between the two groups reduced over time. This was taken to suggest efficacy of both interventions, but whilst suggesting the live experience intervention wasn’t superior in the long term, it doesn’t take into account that improvement in both groups may have been due to task repetition or the Hawthorne effect. A no-intervention control may have remediated this somewhat. Master’s level nursing entrants may also bare differences in artistic receptivity due to varying life experiences which might bring poor generalizability to results.

Concerning art, the recent phenomenon of anatomy colouring books at medical school highlights a clear visual link with anatomy. Di Matteo discuss the life of celebrated Italian anatomist Giovanni Mascagni who created works of art to teach both artists and physicians human anatomy[39]. Art could be applied in this way to psychiatry training in the appreciation of brain anatomy and physiology which must be learnt for membership exams.

Facilitating reflection, empathy, and retrieval of core values

“When artists give form to revelation, their art can advance, deepen and potentially transform the consciousness of their community.”

- Alex Grey[61]

A psychiatry trainee is faced with obligatory daily tasks in a stretched system. This threatens to bleach the colourful narratives that psychiatrists in the main are proud to say they have additional time for compared to colleagues in other specialties. Bleakley discusses the evidenced reduction in empathy with career progression, and feels the humanities can guard against those days when our empathy falters[40].

Creatively written narrative about patients may foster empathy, develop interview skills and encourage self-reflection[41]. Indeed written reflection garners huge emphasis in psychiatric training, yet reflections are perceived as “tick-box exercises” and often not dwelt upon by supervisors, colleagues or even the author themselves. It is no surprise that some reflections may be as hollow as the expectation that precedes them! Despite being a pre-requisite, the importance of *good* reflective writing has seemingly fallen by the wayside.

Reading can also evoke empathic and reflective attributes. Bleakley feels that classical texts such as Homer’s *Iliad*, can teach much more about empathy than a classroom discussion. *Iliad*, with its strong emotional themes and acknowledgement of mortality, can pull students from habitual communication processes and towards newer formulations that reclaim the lyrical and aesthetic ground of medicine[42].

Keville et al used songs similarly to evoke empathy in psychology trainees during problem-based-learning sessions. 15 reflective narratives were collected from students after listening to songs and imagining them as written by the patient. One student said “I was not thinking about questions I wanted to ask, diagnoses or intervention possibilities I was just imagining another human experience. In this moment I did not feel like a professional, or a trainee or a student, I just felt”[43]. One study took things a step further, helping medical students break down music into component themes, thus increasing their understanding of the music’s emotional narrative in live performance[44]. Though these qualitative studies yield positive feedback from participants, they are not able to demonstrate changes in practice. They are likely to fall victim to reporting bias (negative or neutral feedback may be omitted), as well as pressures upon participants to report favourably.

There is little on the active, as opposed to passive, use of music. Ortega et al created a musical act of medical students and faculty which reportedly encouraged medical humanism and improved communication[45]. This does however illustrate the limited inclusion of only the musically-inclined. Active musical intervention does require some natural

musicality at minimum, and ideally prior knowledge and rehearsal. This could present significant challenges with a collection of doctors who may have a diversity of musical knowledge and experience.

Some authors have considered music as a metaphor to reflect on medical practice[46]. A consultation is a time-measured situation where one is expected to produce near-impossible feats in an encounter that is both moving and beautiful, as with musical performance[36]. This metaphor is taken further with a detailed comparison of jazz performance and medical practice. Improvisation resembles the physician need to manage uncertainty, uniqueness and conflicting values. When Herbie Hancock hit a ‘terrible note,’ Miles Davis instead of judging this, picked up on the note, transporting the music to something entirely new. Could medical students learn the *Miles Davis technique*?[47] The authors allude to including jazz in the medical curriculum, yet simply listening to jazz would only allow one to relate to the metaphorical aspects of the discussion. Though this could be used to spark discussion, it seems the learning points fall flat without practical application and a jazz musician is years in the making.

Creative arts for well-being

I have seen deeply demented patients weep or shiver as they listen to music they have never heard before, and I think they can experience the entire range of feelings the rest of us can, and that dementia, at least at these times, is no bar to emotional depth. Once one has seen such responses, one knows that there is still a self to be called upon, even if music, and only music, can do the calling.”

- Oliver Sacks[62]

Creativity and psychiatric illness links have been supported by research, particularly on the bipolar-psychosis continuum[48]. Pembroke links creativity and the arts to increased well-being, communication and self-worth[49]. An important addition to learning, reflection and empathy through use of the arts, is the propensity for well-being in psychiatrists. In Australia, a creative writing workshop for GP wellbeing was run as three 6-hour masterclasses of 12-15 participants with different themes. Participant feedback identified an urge to tell one’s story. The catharsis of ‘writing ones pain’ and disclosing vexing events was seen as important. Regarding burnout, one participant said ‘We talk a lot about ways you can manage ... that is not a solution. We need to find ways to enjoy the work.’ Another wrote ‘I will suffocate unless I do something creative in my life.’ These comments neatly suggest that fostering creativity can make work more rewarding. Workshops were described as ‘resetting reality’ so challenges may be better met by happier, fulfilled doctors[50].

The stress-reducing properties of music has also been studied, particularly in medical students[51,52,53,54].

Conclusions and Practical Applications for Practices

There is increasing interest in the arts as a tool for training well-rounded, clinically sound psychiatrists. Most scientific literature focuses on narrative, and though there are small studies and recourse on the use of music and art, more research is necessary. How best encourage busy physicians to devote time to creative pursuits? In Canada, the Dalhousie Psychiatry Student Writing Competition has provided a national forum for creative writing[55]. Similar creative writing projects are found worldwide[56,57], and awards for related disciplines are seen such as Exeter Medical School's annual music and poetry prizes[58]. It is important that organisations publish peer-reviewed accounts of humanities projects to strengthen the literature[55], but also develop awareness, foster creativity and share ideas for implementation.

The arts cannot solely be incorporated through extra-curricular competitions and awards. Those with less experience, less confidence, or simply less time on their hands may miss out. Facilitated and supported sessions are likely the key to engagement. The author has founded one such group known as *The Culture Club* for psychiatry trainees in the southwest of England. Review of the literature shows promising application for a group like this, and clear practical examples within art, literature and music have become apparent. Simple and practical sessions working with psychiatrist in training could include:

- Reading novels or poetry with pertinent themes.
- Creative writing exercises in a shared environment.
- Attending plays or performances with colleagues.
- Analysis or creation of thematic works of art.
- Listening and reflecting on pertinent music with focus on either lyrical content or the emotions evoked.
- Discussing the metaphorical aspects of music and how they relate to medicine to explore wider themes.
- Active music-making amongst working professionals.

The author draws a comparison to the phenomenon of *Balint groups* within the UK, where professionals explore difficult patient interactions through presentation and discussion[59]. A humanities group could be run similarly and would provide fascinating new insights into the human condition whilst creating holistic psychiatrists that may feel less stressed and more fulfilled.

References

1. Oxford Dictionary. oxforddictionaries.com. [Online] 2018. [Cited: 12 December 2018.] <https://en.oxforddictionaries.com/definition/art>.
2. Fenner P, et al. Provision of arts therapies for people with severe mental illness. *Current Opinion in Psychiatry*. 2017; 30 (4): 306-311.
3. Nayak A. Changing Medical Students' Attitudes to Psychiatry through Newer Teaching Techniques. *Mens sana monographs*. 2015; 13 (1): 180-186.
4. Educacion Medica. educacionmedica.net. [Online] February 2003. [Cited: 12 December 2018.] <https://www.educacionmedica.net/pdf/documentos/modelos/tomorrowdoc.pdf>.
5. General Medical Council. gmc-uk.org. [Online] June 2018. [Cited: 12 December 2018.] https://www.gmc-uk.org/-/media/documents/dc11326-outcomes-for-graduates-2018_pdf-75040796.pdf.
6. Royal College of Psychiatrists. rcpsych.ac.uk. [Online] 01 July 2013. [Cited: 12 December 2018.] https://www.rcpsych.ac.uk/docs/default-source/training/curricula-and-guidance/curricula-core-psychiatry-curriculum-april-2018.pdf?sfvrsn=881b63ca_2.
7. Hall J, Woods N, Hanson M. Is social sciences and humanities (SSH) premedical education marginalized in the medical school admission process? A review and contextualization of the literature. *Academic Medicine*, 2014; 89 (7): 1075-1086.
8. Rutherford BR, Hellerstein DJ. Divergent fates of the medical humanities in psychiatry and internal medicine: Should psychiatry be rehumanized? *Academic Psychiatry*, 2008; 32 (3): 206-213.
9. Cameron D, Biobabble. *Crit Q*, 2007; (1); 124-129.
10. Lewis B. Narrative and psychiatry *Current Opinion in Psychiatry*, 2011; 24 (6): 489-494.
11. Angell M. *The illusions of psychiatry*. New York : s.n., 2011.
12. Charon R. Narrative medicine: a model for empathy reflection, profession and trust. *JAMA* 2001; 286: 1897-1902.
13. Sachdev P. The narrative in neurology and psychiatry. *Current Opinion in Psychiatry*, 2011; 24 (3): 215-218
14. Kumar S et al. Creative practitioners., *Australian and New Zealand Journal of Psychiatry*, 2014; 48: 69.
15. Mula M, Trimble MR. Music and madness: neuropsychiatric aspects of music. *Clinical Medicine (London, England)*, 2009; 9 (1): 83-86.
16. Schlozman, SC. *The Humanities and the Practice of Medicine*. *Behavior & Medicine*, 2006; 4: 261-649
17. Frich J, Fugelli P. Medicine and the Arts in the Undergraduate Medical Curriculum at the University of Oslo Faculty of Medicine, Oslo, Norway. *Academic Medicine*, 2003; 78 (10): 1036-1038.
18. Mullangi S, *The synergy of medicine and art in the curriculum*. *Academic Medicine*, 2013; 88 (3): 921-923.
19. Leonhardt BL, et al. Allowing for psychosis to be approachable and understandable as a human experience: A role for the humanities in psychotherapy supervision. *American Journal of Psychotherapy*, 2015; 69 (1): 35-51.
20. Kan C, et al. How we developed a trainee-led book group as a supplementary education tool for psychiatric training in the 21st century. *Medical Teacher*, 2014; 37 (9): 803-806.
21. Taylor A. *Guardian.com*. [Online] 2014. [Cited: 19 February 2018.] <https://www.theguardian.com/social-care-network/social-life-blog/2014/jun/06/social-work-book-group>.
22. Lal R, et al. Reading the mind: A social media-facilitated collaboration of US and UK graduate psychiatry trainees. *Academic Psychiatry*, 2016; 40 (1): 141-144.

23. Valenti MP, Mehl-Madrona L. Humanizing Patients through Narrative Approaches: The Case of Murphy, the "Motor-Mouth". *The permanente journal*, 2010; 14 (2): 47-50.
24. Ruskin TA. Using artwork to understand the experience of mental illness: Mainstream artists and Outsider artists. *GMS Psycho-Social-Medicine*, 2008; 5: 1-14.
25. Rosen A. Return from the vanishing point: A clinician's perspective on art and mental illness, and particularly schizophrenia. *Epidemiologia e Psichiatria Sociale*, 2007; 16 (2): 126-132.
26. McDonald J. Psychiatry rocks. *The british journal of psychiatry*, 2013; 453: 200.
27. Reilly TJ. Hip-hop and psychiatry: a fair rap? *The british journal of psychiatry*, 2013; 203: 408.
28. Egan WH. Teaching medical student psychiatry through contemporary music. *J Med Educ.*, 1977; 52: 851-853.
29. Blasco PG, Moreto G, Levites MR. Teaching humanities through opera: leading medical students to reflective attitudes. *Fam Med*, 2005; 37: 18-20.
30. Greenhalgh T, Hurwitz B. *Narrative Based Medicine*. London: BMJ, 1998.
31. Beverage A. Should psychiatrists read fiction? *The British Journal of Psychiatry*, 2003; 182 (5) 385-387.
32. Douglas BC. Dickens' characters on the couch: an example of teaching psychiatry using literature. *Medical Humanities*, 2008; 34: 64-69.
33. Manheim L. Dicken's fools and madmen. *Dickens studies annual*, 1972; 2: 69-359.
34. Kelly BD. Alice in Wonderland: The psychiatric perspective. *Journal of Developmental and Behavioural Pediatrics*: 2008; 29 (3): 239.
35. Vance, MA. Incorporating Music into Health Care Education: Experience at a College of Pharmacy. *Education for health: Change in learning and practice*, 2006; 19 (2): 251-255.
36. Senior, T. Can music be used in medical education? *British journal of general practice*, 2012; 62: 604.
37. Harris A, Flynn E. Medical education of attention: A qualitative study of learning to listen to sound. *Medical Teacher*, 2017; 39 (1): 79-84.
38. Pellico LH, et al. Artwork and music: Innovative approaches to physical assessment. *Arts & Health: An International Journal of Research, Policy and Practice*. 2014; 6 (2): 162-175.
39. Di Matteo B, et al. Art in Science: Giovanni Paolo Mascagni and the Art of Anatomy. *Clin Orthop Relat Res*. 2015; 473 (3): 783-788.
40. Bleakley A. *Medical Humanities & Medical Education: How the Medical Humanities can Shape Better Doctors*. London: Routledge, 2015.
41. Deen S, Mangurian C, Cabaniss D. Points of contact: using first-person narratives to help foster empathy in psychiatric residents. *Academic Psychiatry*. 2010; 346: 438-441.
42. Bleakley A, Marshall R. The embodiment of lyricism in medicine and Homer. *Medical Humanities*. 2012; 38 (1): 50-54.
43. Keville S, et al. So many lifetimes locked inside: reflecting on the use of music and songs to enhance learning through emotional and social connection in Trainee Clinical Psychologists. *Reflective Practice*. 2018; 19 (3): 376-388.
44. van Roessel P, Shafer Ay. Music, Medicine, and the Art of Listening. *Journal for learning through the arts*. 2006; 2 (1): 14.
45. Ortega R, Andreoli M, Chima S. Is there a place for music in medical school? *Medical teacher*. 2011; 33 (1): 76-77.
46. Davidoff F. Music Lessons: What Musicians Can Teach Doctors. *Annals of Internal Medicine*. 2011; 154: 426-429.
47. van Ark A, Wijnen-Meijer M. "Doctor Jazz": Lessons that medical professionals can learn from. *Medical Teacher*. 2018; 1-6.
48. Thys E, Sabbe B, De Hert M. Creativity and psychiatric illness: The search for a missing link - A historical context for current research. *Psychopathology*. 2013; 46 (3): 136-144.
49. Pembroke, L. Recovery and arts as activism. *Journal of Psychiatric and Mental Health Nursing*. 2007; 14 (8): 768-770.
50. Bradley Smith S. This sylvan game - creative writing and GP wellbeing. *Australian Family Physician*. 2008; 37 (6): 461-462.
51. Baste V, Gadkari J. Study of stress, self-esteem and depression in medical students and effect of music on perceived stress. *Indian journal of physiology and pharmacology*. 2014; 58 (3): 298-301.
52. Herlekar S, Doizode A, Siddhangoudar S. Stress perceived and its effect on concentration in first year medical students of different ethnicities. Can instrumental background music act as a common coping strategy? A randomised controlled trial. *Biomedicine (India)*, 2017; 37 (2): 256-261.
53. Latha R, Sairaman H. The role of classical music on stress alleviation and autonomic functions in medical students. *Biomedicine (India)*. 2015; 35 (1): 90-94.
54. Srikanth S, et al. Effect of music on stress and academic performance of undergraduate medical students. *National Medical Journal of India*. 2014; 27 (6): 351-352.
55. Hazelton L, Delva N. Exploring the intersection of mental health and humanities: The Dalhousie psychiatry student writing competition. *Academic Psychiatry*. 2016; 40 (2): 337-338.
56. Leonpacher A, Chisolm M. Mentored writing: An arts-based curriculum for first-year psychiatry residents. *Academic Psychiatry*. 2016; 40 (6): 947-949.
57. Burruss J. The first annual AAP humanism in medicine medical student essay contest. *Academic Psychiatry*. 2006; 30 (1): 79.
58. University of Exeter. exeter.ac.uk. [Online] 2018. [Cited: 12 December 2018.] <https://www.exeter.ac.uk/staff/policies/calendar/part2/prizes/>.
59. van Roy K, Vanheule S, Inslegers R. Research on Balint groups: A literature review. *Patient education and counseling* 2015; 98: 685-694.
60. Bronowski J. *The Ascent of Man*. Boston: Little, Brown and Company. 1974.
61. Phillips R. *The Healing Power of Art and Artists*. [Online] 2015. [Cited: 26 November 2018.] <https://www.healing-power-of-art.org/benefits-of-art/>.
62. Sacks, O. *Musicophilia: Tales of Music and the Brain*. Reprints edition. New York: Picador, 2011.

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