
 Editorial

Digital Research Communities Changing Scripts of Knowledge and Understanding

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As ‘*Music and Medicine*’ approaches its 7th year, it may be time to take notice of some apparent and pressing issues at a year’s turn. The *Scientist Magazine* in its December 23rd issue, lists “*The Top Ten Retractions of 2014*” on a global scale [1]. The list, to many readers aghast includes computer-generated papers that utilized a random text generator between 2008 and 2013. The embarrassment of this finding rendered the reality that any person can fake an entire publication, and present it as if it were a multidisciplinary research trial.

As a research community, it is time to not only acknowledge that digital media has changed our habits in writing, but it has changed our habits in how and what we are reading as well. This may be a difficult realization and one that certainly presents numerous intellectual and creative challenges for the future of research and the way in which we present clinical knowledge, and the very forums for how journal-reporting mechanisms are valued. Compared to the way in which such activity took place some years ago, the quality of manuscripts in general did seem to improve as we initially began to use computers and other electronic media, because every author had an improved chance for the immediate editing her/his sentences at the moment they were written, and as often as was desired. Friedrich Nietzsche, some 200 years ago thought that our writing instruments would work to enhance our ideas and thoughts. And of course, to that premonition, there is a bright side, and a dark side.

Let’s begin with the bright side.

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Having switched to in-house publishing and to pure e-publishing, our journal *Music and Medicine* proudly begins its 7th year of existence with another full issue, comprising 6 articles, a Letter To The Editor, and a book review. The last year of transition was quite a unique and exciting experience, not only for IAMM, and EICs Joanne Loewy and Ralph Spintge. At the same time, it saw a growing group of dedicated co-workers, including production manager Julian Koenig, managing editor Amy Clements-Cortes, our new Book Review editor, Reza Abdollahnejad and our assistant managing editor Erik Baumann and business manager Mareen Latocki, establishing successfully a team of experts providing every reason to see a bright future for the journal.

At the same time it is important to note that the journal *Music and Medicine* does not ask for publishing fees, while subscription fees are relatively low, both of which facets leading to a growing basis of both, authors and audience. As editors, the dark side of e-publishing has to be taken into account.

At the turn of the year there are several issues of principle importance with respect to our quest for to foster scientific significance and quality as well as growing impact on research community and public. A subjective selection of such issues may be tackled below.

Among editors there is at present an intense discussion going on considering the fact that quality of pre-publication peer review must secure that post-publication peer review does not lead to retraction of published papers. Our Editorial Board is striving to avoid any such mishap. However, we are well aware of the fact that research in Music Therapy (MT) and MusicMedicine (MM) is extremely difficult to replicate. Yet, looking at those ongoing discussions within the science community about “*standard protocols for how researchers attempt to reproduce the work of others*” [2] it seems necessary to begin to discuss such issues in our fields, as well.

One topic could be methodology. There should be consensus about the fact that MT and MM research both must be qualitative and quantitative, as the object of research, the music, otherwise would be reduced to a mathematical algorithm, and the interaction between therapist and patient would be reduced to technical communication, i.e. the human factor and the art within the music would be eliminated.

Marco Warth and his colleagues highlight the example of "methodological challenges for music therapy controlled clinical trials in palliative care" [3]. Their recommendations call for basic standards for controlled clinical trial designs. One essential aspect is a priori involvement of biostatistician's expertise to identify adequate sample size and secure adequate statistical data analysis. It is unacceptable that after 30 years of MT and MM that research meeting such basic standards is still not met in a vast number of trials published. Our impression is that a major reason for this situation is a lack of truly interdisciplinary collaboration in research. There are many "good" reasons in every single case, but yet, these reasons don't count. To be very clear, The Editorial Board of this journal excludes any submission lacking adequate interdisciplinary expertise in design and conduction of research trials. Acknowledgement of MT and MM through science community and consecutively through society depends on such standards.

Identifying significant target parameters also demands interdisciplinary expertise in conducting research trials. To give just one example, we would say that no clinician and no Music Therapist alone have enough expertise to design trials using for instance heart rate variability (HRV) as neurovegetative target parameter. While HRV is one of the most sophisticated and significant parameters to describe emotional behavior, psychophysiological stress, acute and chronic pain, performance level in athletes and many more aspects easily transferrable to the field of Music in Medicine as well as MT, there is a growing number of publications where either methodological issues are not adequately discussed and described, or, general assumptions are made which by no means meet actual state of neurophysiological and technical knowledge in HRV. Not to mention the vast neglect of interfering physiological systems such as cardiorespiratory and neuroimmuno-intestinal, just to name two.

And now, while may we try to explain what we are discussing here to any health care administrator, funding institution, insurance manager, or politician, if we don't succeed in implementing real standards and we fail to follow these, while at the same time considering personalized integrative approaches in clinical therapy, the entire field of Music in Medicine will dry out. A split, yes indeed, but we must address it. In this very same sense, the journal *Music and Medicine* provides an essential medium for progress in state-of-the-art health care. *Let it grow!*

The series of articles in this issue starts with a contribution from David Alter, Shanmugappiriya Sivarajah, Carolyn Freedman, Heidi Ahonen, Laurel Young, and Susan Marzolini comparing the impact of music, exercise, self-reported health, and health behaviors among outpatient cardiac rehabilitation patients. While there are a variety of interfering parameters to be considered in undertaking an outpatient setting of this kind, the integrative aspect of this study is unique. It becomes evident that further studies on long-term effects should be recommended.

Quite another aspect of music listening is described in Masako Otera, Yuichi Wada, Barbara Wheeler, and Masayoshi Icie's study about differences in expected music perception between Japanese and American college students. Further investigations should elaborate on responses to actually perceived music, also considering various cultural backgrounds.

Hospice care is one of the most significant areas that is growing in many developing societies. Jose Planas Domingo, Nuria Escude Matamoros, Christina Farriols Danes, Helena Villar Abello, Jordi Mercade Carranza, Ada I Ruiz Ripoll, Sergi Mojal Garcia, and Andrew Rossetti elaborate on the effectiveness of music intervention in advanced cancer patients. The study highlights the benefits that come from combining qualitative and quantitative measures in music and medicine research. As quality of life is the major target parameter in modern health care, this study underlines the significant role music therapy can make.

Abbas Rattani, Raafay Syed, and Jeremy Sugarman have identified a specific aspect of Hip Hop lyrics, which predestines that kind of music to be used in AIDS prevention programs. Although pharmacological treatment nowadays can hold up clinical and deleterious symptoms of an HIV infection, prevention stays in the center of all health care measures against such a fatal disease. Hip Hop is widely used in underserved populations, but rarely studied.

Case reports often provide a treasure of insights leading to new concepts or improvement of existing ones. Anita Gadberry and Vijayachandra Ramachandra describe a case of involving non-fluent aphasia due to a left hemispheric lesion successfully treated through a multifaceted music therapy approach leading to improved accuracy of speech combined with a decrease in negative emotional feelings.

In a unique kind of an interview Suzanne Hanser reports about her encounter with Marc Neikrug, Artistic Director of the Santa Fe Chamber Music Festival, who has composed "Healing Ceremony", a holistic musical event comprising "indigenous rituals with the beauty of the music". Targeting a general public audience in creating a state of receptiveness to music's healing processes, this compilation is dedicated to the New Mexico Cancer Center.

As the journal grows new sections are introduced. A first Letter to the Editors submitted by Ravi Bhatt, De Wayne Williams, Michael Kessler, Thomas Hillecke, Julian Thayer, and Julian Koenig opens up discussion about impact of environmental acoustic pollution towards pain perception. While they use also White Noise only as interfering stimulus, clinical experience in pain medicine and anesthesia clearly underlines their respective findings. Ergonomic design of the patient environment in clinical settings is a topic of growing significance since cost containment in architectural design of health care facilities is critical. These issues seem to increasingly collide with measures against acoustic environmental pollution, directed in both directions: towards patient and staff [4].

Our new section "Book Review" starts within this issue. Amy Clements-Cortes comments on Allison Wojiwada and Robert McMechan's book about "Allison's Brain". A fascinating journey elaborating upon a musician's nightmare as materialized in life-threatening brain surgery fighting back towards recovery.

Again, *Music and Medicine* offers leading edge research and thorough discussions of significant topics with interdisciplinary impact. We await your contribution.

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