Reviewer's report

Title: Home based music therapy - A review of conditions, settings and indications for an innovative field of health service.

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Reviewer: Vera Brandes

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No Major Compulsory Revisions

Minor Essential Revisions:

Page 10 (Indications and patients) - The 4th word in line 6 (and) should be eliminated

Page 10 (Legal aspects) - Line 9 should read: in the publications from AUSTRIA, Australia and USA there ....

Discretionary Revisions

Home based music therapy- A systematic overview .... (Wolfgang Schmid and Thomas Ostermann)

Review by Vera Brandes (07/09/2010)

The article submitted by Wolfgang Schmid and Thomas Ostermann mark a respectable effort to embrace the field of home based music therapy (HBMT) from the perspective of active music therapy. However, some methodological problems remain unaddressed since several important differentiations have to be included to avouch the paper to be accepted as a systematic overview of the field. As members of the research community engaged in the field of music therapy research and music effect research, we need to point out more clearly what the differences are between interventions coined as „active music therapy“ versus „receptive music therapy“— both of which can be rendered in a clinical as well as in a home based setting.

„Active music therapy“ envolves a trained music therapist using music as her or his core therapeutic tool by making „life music“ in the presence of one or more patient(s) (with an instrument and/or her or his voice) AND encouraging the patient(s) to respond in a musical way using one ore more instrument(s) and/or his voice or movement.

„Receptive music therapy“ can mean three different methods: (a) life music made by a music therapist directed to a patient who can not respond (i.e. vegetative state after severe brain damage), (b) recorded music used by a music therapist in a music therapy session while he and (mostly one) patient are present and (c)
the field of therapeutic music listening and systematic music based auditory stimulation which together may represent the most common therapeutic use of music in the United States. Whereas the ambit of (a) and (b) often become indistinct, especially in palliative care and in settings which involve family members, the differentiation between „therapeutic music listening“ and „systematic music based auditory stimulation“ are crucially important as they point to an aspect which has been widely unresearched: the detection of the „active ingredient“, which can be one or more element(s) including, but not limited to:

- The „social component“ in active music therapy
In most „active music therapy“ sessions, the quality of the communication between the therapist and the patient form the basis of the therapeutic relationship. Since music - in particular music made FOR somebody- instantly evokes an emotional response, the rapport between the therapist and the patient is intense, positive and mutually rewarding and contributes to a large extend to the therapeutic outcome of the intervention.

- The „social component“ in receptive music therapy
may be a more or less important factor compared to active music therapy interventions, depending on the setting in which it is rendered. For home based music therapy interventions, it is important to differentiate between the methods based on (a) visits by a music therapist - commonly practiced in the area of music therapy in geriatric care in the United States- and (b) methods which are self-administered.

- The „repertoire component“ in active music therapy
Under ideal circumstances, the music therapist is highly intuitive and at the same time a skillful expert with an in-depth knowledge of the repertoire of songs which may be familiar to the patient and evoke memories of happy times in the past – a technique often used in the care of dementia patients.

- The „repertoire component“ in receptive music therapy
can be defined on a comparable basis as in active music therapy i.e. in case of GIM (Guided Imagery and Music) but with a different intention, since this method does not always use music to comfort the patient but may employ specific selections of recorded (classical) music programs to trigger emotional responses related to traumatic experiences in the past which are then addressed in talk therapy.

- The „repertoire component“ in therapeutic music listening
is relevant for (a) interventions based on the notion that only patient self-selected music is effective (which excludes the part of the population that could benefit from therapeutic music listening but has no repertoire knowledge), (b) interventions that are based on the evidence that notion that music selected for the patient by the therapist is more effective and (c) interventions which are based on systematic epidemiological research of the therapeutic effects of
specific music in relation to the desired effect.

- The „repertoire component“ in systematic music based auditory stimulation

The outcome of systematic music based auditory stimulation depends on three factors: (a) The selected repertoire is specifically addressing the condition that is intended to be improved, (b) the therapist considers possible patient-related individual confounders when selecting the repertoire and (c) the patient adheres to the listening recommendations.

We must identify and discriminate between the „active ingredient“ (or the combination of them) in successful music interventions to enable the music therapist and/or care giver to replicate the results of his endeavours. And it is crucially important to inform the health care community about the differences between the methods and to address the specificities in medical and social care curricula. This would allow medics, nurses and social workers to make well-informed choices in the selection of the appropriate intervention.

Schmid and Ostermann emphasise the trend towards home based music therapy and point out that this is an area in which music therapists will most likely be seeing a growing interest from the health care system, provided that cost effectiveness can be proven. At this time, however, the international discussion is still focussed on three other aspects: (a) the acceptance of music therapy as a medically effective intervention - a goal that can only be achieved by well-designed studies, (b) the relevance of evidence based criteria in the assessment of the effects of music interventions and (c) the acceptance of therapeutic music listening and systematic music based auditory stimulation by the community of music therapists.

In some areas of rehabilitation medicine, sheltered from the upheavals of these discussions (or sometimes firing them for marketing reasons), music therapists have developed very effective music interventions to improve the conditions of patients which can not be (or much less effectively) helped with other therapies, ranging from methods for the treatment of chronic aphasia patients like SIPARI (1) and MIT (2,3) to music supported (movement) training for stroke patients like MUT(4) or rhythmic auditory stimulation (RAS) in gait training for i.e. Parkinson's disease patients (5). All of these methods have the potential to being integrated into continued care of patients in their own home.

The field of therapeutic music listening research has been adopted by nursing science and the studies are conducted with patients in hospitals and not in home settings. However, if the compliance to the listening recommendations can be secured, positive effects of therapeutic music listening at home can be assumed, although they may be attributable to different factors. Siedlecki and Good (6) did compare self-selected with nurse-selected repertoire and found no difference in the effects, but this finding is most likely attributable to the fact that both patients groups listened to the same music selections. This supports the hypothesis that the qualities of the music itself triggers the effects and that the effects do not depend on whether the patient selects the repertoire or the nurse. Wolfram Goertz (7) reports on findings supporting that music selected FOR the patient
has better effects. The results of the research on the effects of music interventions conducted by nursing science in hospitals could be also utilised in home care settings.

If Siedlecki and Good’s study - as suggested by Schmid and Ostermann- are acceptable to support the concept of HBMT, Ulrica Nilsson’s (8) work should be mentioned. She investigated i.e. the effects of therapeutic music listening on oxytocin levels. Oxytocin is a hormone that acts as a neurotransmitter in the brain and influences social behaviour and diminishes anxiety (9) - a research result that may impress traditional medicine even more than psychometric quality of life scores. Findings like these suggest that the range of home based therapeutic music interventions could even be extended by considering the realm of prevention through music listening and possibly including the encouragement of singing as a form of self care as well as „therapeutic music making“.

For all of the above mentioned reasons, I recommend to Schmid and Ostermann to state the limitations of their overview more clearly and to address that the propagation of HBMT will ultimately not only depend on the proof of cost-effectiveness, but on the therapeutic effectiveness which can only be improved by a broader spectrum of well-researched interventions and well-informed health care practitioners that know about them. This, of course, applies not only to home base music therapy but to all music interventions currently practised in clinical settings.

Recent neurophysiological (10), endocrinological (11) and psychophysiological (12) research demonstrated the profound biological effects which can be evoked by the conscious and informed application of music stimuli. This body of evidence should be extended to the research of the specific effects of specific music interventions in populations afflicted with specific health problems. These research efforts should encompass all the factors that contribute to the improvement of the patient that can be achieved by the use of music and account for the whole range of benefits, starting from better quality of life and enhanced self care competence to i.e. decreased levels of stress hormones, increased immune parameters and even altered gene expression (13).


Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

Vera Brandes owns shares of Sanoson GmbH, Vienna, Austria