# Music as a nursing intervention, not as crazy as it sounds

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Considering our work conditions in this day and age, to discuss music as a nursing intervention may seem extravagant. Indeed, because of a severe lack of personnel which



renders our work more difficult, we are going through a trying period at this moment. With the acceleration of our tasks in addition to mandatory overtime, nurses unfortunately feel that they are obliged to focus almost solely on interventions of a medical nature. Alas, they too often put aside those deeds which could bring comfort, reassurance and hope to their patients. (Image)<sup>1</sup>.

We often hear it said that medical care is becoming more and more dehumanized, that the technical and mechanistic side has taken over to the detriment of less spectacular but none the less necessary care for the suffering patient. Nevertheless, the present period of crisis in our profession, albeit painful, may perhaps lead us, despite everything, to a positive change. Maybe societies and systems, like individuals, must traverse moments of chaos, which call everything into question, before renewal and progress can take place.

## The necessity for change

During this sombre period, our thoughts turn to the way things were traditionally organized, where the nurse was the person in charge of all that concerned the patient, where she was the universal purveyor of solicitude, well-being and treatments. Invested with all the grandeur of a profession consecrated to devotion, this type of organisation was once possible when personnel were abundant and above all when health care was less

There is music in the sigh of the reeds. There is music in the bubbling of the brook. There is music in everything, if only men could hear it.

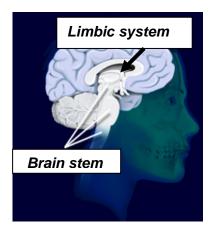
HGeorge Gordon, Lord Byron, H from *Don Juan*.

complex. However, we still cling to this deeply ingrained idea, this almost mythical image, that this is the only way to be a nurse. In our highly technological medical world, at a time when prestigious nursing roles appear, we should ask ourselves and consider other ways of care giving where the nurse, while remaining close to the patient, can finally consecrate a bit more of her time to interventions of another nature.

Perhaps our decision makers will finally understand that nurses cannot do everything, well, and all the time, and that it is maybe time to make use of our abilities which have, too often and for too long now, been underutilised. Let us be perfectly clear about this. There are no insignificant tasks with respect to our patients and all that we do contributes to their well-

<sup>&</sup>lt;sup>1</sup>. Image free of charge. *Roses on a music sheet.* Fotosearch : <a href="http://www.fotosearch.fr/PHC013/sb10063702j-001/">http://www.fotosearch.fr/PHC013/sb10063702j-001/</a>

being and remains important. The satisfaction of their needs, even the most elementary, is essential, but what is not essential is that the nurse be the only one who can carry them out. Why not let nurses concentrate on the different aspects of care by a reorganisation of the workload? Why not, for example, consecrate more time to helping patients better carry the burden of illness and improve their quality of life by listening, comprehension, support and making their condition easier in moments of suffering? Music could thus become a practical intervention much more currently used to accompany those who are suffering, depressed or losing their cognitive autonomy.



## The action of music on our organism

We all know the pleasure that we get from music but we do not always realize that its effects go well beyond a pleasing sound which enters our ears. Music is a wave, a vibration, which resonates with our nervous system and gives rise to emotions which can calm or stimulate. It modifies our mood and facilitates the body's homeostasis. Without going so far as to endow it with a power it does not have, it is well known that music helps one to relax and enjoy life.

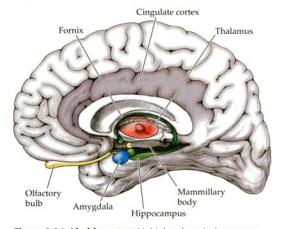
Research on the physiological effects of music demonstrates that it acts on our *parasympathetic nervous system* which acts

in a way as a natural protector of our body by preventing its twin, the *sympathetic nervous system* from racing out of control. One can feel its effects by the slowing of our respiratory and cardiac rhythms, by a lowering of arterial tension, by muscular relaxation and the establishment of a state of calm.<sup>2</sup>

#### A short review of neurology

In order to better understand the effects of music, let us recall some useful notions. First of all, the action of music touches the limbic system where the key to our emotions is situated. The rhythm, tonality and intensity of sounds stimulate our emotional reactions and produce a state of well-being which in turn equanimity, favours calmness. improvement in our physical and psychological state, when necessary and possible.

We should also note its action on the *autonomic nervous system* whose two constituents, the parasympathetic nervous



**Figure 2.24 Limbic system** Multiple subcortical structures interconnect to form the limbic system, which is critical to learning, memory, and emotional responses. Rich connection with areas of association cortex contribute to decision making and planning.

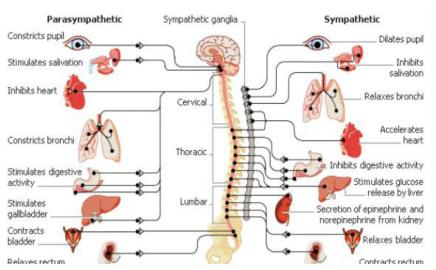
system and the sympathetic nervous system make it up. The *autonomic or visceral nervous* system, functions without our conscious control.<sup>3</sup> The activation of the parasympathetic nervous system brings about a general slowdown of the functions of the organism in order to

<sup>&</sup>lt;sup>2</sup>. Margot Phaneuf (2007). *Le vieillissement perturbé. La maladie d'Alzheimer*. Montréal, Chenelière Éducation, p.171-174.

<sup>3.</sup> Image: http://fr.brainexplorer.org/brain\_atlas/Brainatlas\_index.shtml#image

conserve energy. That which was increased, dilated or sped up by the sympathetic nervous system is decreased, contracted and slowed down. It is not only the digestive and sexual functions which are acted upon by the parasympathetic nervous system. The functioning of the two systems is inverse, or rather, complementary. For example, when the sympathetic nervous system accelerates the cardiac rhythm, the parasympathetic can act to re-establish equilibrium by slowing it down.<sup>4</sup>.

systems, These two making up our autonomic nervous system, are directly attached to the brain where stem our subconscious is situated, and also to the limbic system, emotional centre of our brain. This enables our organism react to rapidly and efficiently to the various situations which occur in our lives



and enables our body to adapt to them.<sup>5</sup> Thus, the sympathetic nervous system reacts to situations of stress, danger and emergency while the parasympathetic nervous system calms things down and is particularly active during rest.<sup>6</sup> All that surrounds us activates these nervous systems in one way or the other. For example, we only need to open our eyes on a ray of sunshine to notice that our pupils will contract in response to the protective action of our parasympathetic nerves. Our need to survive is thus assured by these two systems and music can influence them. But how? (Figure).<sup>7</sup> .<sup>8</sup> .<sup>9</sup> .<sup>10</sup>

## **Fascinating theories**

Modern research in chronobiology using the electroencephalogram and Positron Emission Tomography (Pet Scan) helps us to understand the effect of musical waves by showing the modulating action of music on our nervous system. As pointed out by Professor Hans Ullrich Balzer, listening to music provokes muscular relaxation, as well as a state of emotional and cognitive relaxation. Moreover its effect is much more complex, for under certain circumstances, states of fear, sadness and joy can even be activated by music or more precisely, its rhythm.

http://lecerveau.mcgill.ca/flash/a/a\_01/a\_01\_cr/a\_01\_cr\_ana/a\_01\_cr\_ana.html

<sup>&</sup>lt;sup>4</sup> . Vulgaris médical. *Système nerveux parasympathique* : <a href="http://www.vulgaris-medical.com/encyclopedie/systeme-nerveux-parasympathique-4463.html">http://www.vulgaris-medical.com/encyclopedie/systeme-nerveux-parasympathique-4463.html</a>

<sup>&</sup>lt;sup>5</sup> . Le cerveau à tous ses niveaux :

<sup>&</sup>lt;sup>6</sup>. Atlas du cerveau: http://fr.brainexplorer.org/brain atlas/Brainatlas index.shtml

<sup>&</sup>lt;sup>7</sup>. Le système limbique : <a href="http://www.neuropsychopathologie.fr/downloads/structure\_cerveau003.jpg">http://www.neuropsychopathologie.fr/downloads/structure\_cerveau003.jpg</a>

<sup>8.</sup> Le système limbique : http://fr.brainexplorer.org/glossary/brainstem.shtml

<sup>9.</sup> Le système nerveux : organisation structurale : <a href="http://www.scifa.univ-metz.fr/cours/Langlet/Le-systeme-nerveux-cours1.pdf">http://www.scifa.univ-metz.fr/cours/Langlet/Le-systeme-nerveux-cours1.pdf</a>

<sup>10.</sup> Alain Mauve. *Le système nerveux végétatif ou autonome* : <a href="http://www.francaise-bio-energetique.com/systeme-nerveux-veget.htm">http://www.francaise-bio-energetique.com/systeme-nerveux-veget.htm</a>

Other theories have also been postulated to show the important effect of music on our organism. The Mozart effect may not live up to all the therapeutic properties ascribed to it but we must recognize that the beneficial action of music on stress is a prevalent observation. "Music is the language of our emotions" wrote Paul Verlaine. It penetrates us to our very soul, or rather as modern science has revealed, it resonates with our cells, these primordial structures of our tissues. 11 "All is energy" wrote Einstein and music is no exception. 12

#### The influence of different kinds of music

Music possesses an exceptional capability to mobilize the emotions which we can make use of in nursing care to help our patients. Besides, one does not have to be an expert in order to verify it. We can easily experiment the effect of different kinds of music, whether more stimulating or more nostalgic, on our own mood. Music therapy makes judicious use of all kinds of music. Portrait.<sup>13</sup>



Moreover, it is interesting to note that some research results establish a link between music and the emotional state of certain subjects. For example, there exists a correlation between certain musical styles and feelings of depression in some adolescents: those who love "hard rock" and especially "heavy metal" are more prone to suffer from depression compared with those who prefer "hip hop". <sup>14</sup>

PasseportSanté.net reports an interesting study carried out in 1998 on 144 individuals. The author noted that *classical music* resulted in a notable decrease in tension for all subjects

without provoking other significant changes in their mood. *New Age music* significantly increased a state of relaxation and diminished feelings of aggressiveness and tension. However, it also significantly lowered mental clarity and vigour, On the other hand, *grunge rock* markedly increased aggressiveness, fatigue, sadness and tension and at the same time, diminished relaxation, mental clarity, vigour and empathy. For its part *specific music* increased empathy, relaxation, mental clarity and vigour while decreasing feelings of aggressiveness, fatigue, sadness and tension. Taking into account the numerous links shown between our attitudes, emotions, and health, these results clearly indicate that music may be an inexpensive and effective means to facilitate stress reduction.

Prof. Dr. Hans Ullrich Balzer, University Mozarteum, Salzburg, Austria: <a href="http://www.mozart-science.at/index.php?id=76&det=1&p\_id=257&from\_id=&L=1">http://www.mozart-science.at/index.php?id=76&det=1&p\_id=257&from\_id=&L=1</a>

http://www.mozartforum.com/images/Wolfgang\_Mozart\_posthumously\_by\_Kraft\_1819.jpg

http://www.iforum.umontreal.ca/Forum/ArchivesForum/2003-2004/030908/article2609.htm

<sup>&</sup>lt;sup>11</sup>. "As a result the muscles are relaxed, but an emotional or cognitive relaxation can also occur. Synchronous states in which many functions are stimulated or specific psychological states such as fear, sadness, joy, etc. can also be triggered or deliberately influenced by music. Music, or rather its rhythmical or periodical content" *Regulatorische Veränderungen vegetativer Funktionen bei der Wirkung von Musik*)

<sup>12.</sup> CNRS. *L'eau dans l'organisme*: http://www.cnrs.fr/cw/dossiers/doseau/decouv/usages/eauOrga.html

<sup>&</sup>lt;sup>13</sup>. *Portrait de Mozart* par Barbara Kraft 1819

<sup>&</sup>lt;sup>14</sup>. Anne Fleischman. Les adeptes de heavy metal sont plus dépressifs

<sup>&</sup>lt;sup>5</sup>. PasseportSANTÉ.net <a href="http://www.passeportsante.net/fr/Actualites/Nouvelles/Fiche.aspx?doc=1998020400">http://www.passeportsante.net/fr/Actualites/Nouvelles/Fiche.aspx?doc=1998020400</a>

These research data can help us understand how to use music according to the circumstances and needs of the patient. They justify their therapeutic value and pertinence as nursing interventions.<sup>16</sup>

#### **Music therapy**

Music therapy, as we know it today, is of recent origin. It was born after the war in the United States, and in Canada in the 60's, and since then has grown rapidly. For us nurses,



who are not specialists in this discipline, the use of music, although worthy of mention, remains less formal which is why we speak of listening to music rather than of music therapy.

The intervention can be done individually or in a group. It is adapted to everyone, those who suffer, those at the end of life, children, cancer patients, those suffering psychological problems or those who are losing their cognitive autonomy. The type of music must be carefully selected according to the age and state of the person, their tastes and the objectives aimed at.<sup>17</sup>

### Music and its effects on pain

Strictly speaking, music is not an analgesic, but its calming action on the anxiety which accompanies pain and often increases it, procures a favourable state for the action of our natural endorphins or those of analgesics. However, certain research results tend to

demonstrate that over and above its effect of distraction and stress reduction, it has a real influence on disagreeable physical sensations and even on the process of pain transmission.<sup>18</sup> Image.<sup>19</sup>

#### Arthritic pain

Its positive effect on arthritic pain was demonstrated, among others, by a study in nursing care carried out on sixty patients suffering from osteoarthritis, rheumatoid arthritis or problems of



the spinal cord who had been suffering from chronic pain for at least six and a half years. After listening to music for an hour a day for one week, they reported up to a 21% decrease in pain. The symptoms of depression, associated with this pain also regressed by about 25% compared to the control group.  $^{20}$ 

http://www.usherbrooke.ca/handicap/fr/nouvelles/Roy M Influence musique douleur.pdf

<sup>&</sup>lt;sup>16</sup>. Rollin, McCraty, MA, Bob Barrios-Choplin, PhD, Mike Atkinson, BA et Dana Tomasino, BA. *The effects of different types of music on mood, tension and mental clarity*, January 1998.

<sup>&</sup>lt;sup>17</sup>. Image. Duty-free. *Violin*: http://www.fotosearch.fr/UNW274/u24131395/

<sup>18 .</sup> Mathieu Roy. La musique atténue la douleur.

<sup>&</sup>lt;sup>19</sup>. Image. Duty-free. Relaxation. Young girl with earphones. Fotosearch : <a href="http://www.fotosearch.fr/photos-images/musique\_40.html">http://www.fotosearch.fr/photos-images/musique\_40.html</a>

<sup>&</sup>lt;sup>20</sup>. *Journal of Advanced Nursing, May 2006*: http://www.journalofadvancednursing.com/default.asp?File=pressdetail&id=173v

#### **Post-operative pain**



Other studies have shown the effects of music on post-operative pain where they noted a slight decrease in pain (a decrease of only 0.09 on a scale of 10) as well as a reduction in the amount of painkillers taken. The group Cepeda esteemed that music had about the same effect as 325 milligram's of the analgesic adjuvant acetaminophen (Tylenol) which is not negligible. The researchers noted, among other things, that the use of music reduced anxiety while patients waited for an analgesic.<sup>21</sup>

#### Pregnancy, labour and music

As in any situation where stress can create undue tension, pregnancy is a period where the expectant mother should seek means of relaxation. Music is an excellent way to achieve this. The beneficial effect of harmonious music has also been shown during labour where the decrease in stress reduced anxiety and pain. Some obstetric wards now permit couples to bring their favourite cassettes and CDs to listen to during labour. Others even offer them. Music acts on the state of everyone involved and creates a climate of tenderness and good humour which all wish for. Image. <sup>22</sup>

## The difficulty of demonstrating an analgesic effect

However, despite these considerations, a meta-analysis by the Cochrane Institute did not reveal any convincing arguments on this subject.<sup>23</sup> Apparently it is difficult to distinguish the effect of music on anxiety and on the fear that pain will increase, from those of the effect of the process of pain transmission itself. It appears that although music can act as a useful aid in relieving pain, its action alone is difficult to demonstrate.

But having said that, this conclusion should not prevent us from using music to accompany our patients.<sup>24</sup> Unfortunately, our departments do not always have what we need to be able to do so, but if we wish to offer this complementary treatment, the families and friends of the patient can readily contribute. We only need to do some planning and procure a simple device adapted to the needs of the person and what we want to achieve.

# Music as a mood regulator in psychiatry

The person who suffers from anxiety or a decreased will to live, finds in music moments of calm and quiet stimulation. In situations of moderate stress, music can even replace certain tranquillizers or at least help to diminish the required dose. <sup>25</sup>Music also has a favourable effect on sleep. <sup>26</sup> Listening to music has the advantage of not creating dependence and can be

http://www3.interscience.wiley.com/journal/118563210/abstract?CRETRY=1&SRETRY=0

<sup>&</sup>lt;sup>21</sup> *Music for pain relief. On* Find-health-articles.com: <a href="http://www.find-health-articles.com/rec\_pub\_16625614-music-pain-relief.htm">http://www.find-health-articles.com/rec\_pub\_16625614-music-pain-relief.htm</a>.

<sup>&</sup>lt;sup>22</sup>. Image. Duty-free. Pregnant women. Fotosearch: <a href="http://www.fotosearch.fr/photos-images/grossesse\_3.html">http://www.fotosearch.fr/photos-images/grossesse\_3.html</a>

<sup>&</sup>lt;sup>23</sup>. Taunya English. *Music Quiets Pain After Surgery*. Sur *Center for advancement of health:* <a href="http://hbns.org/getDocument.cfm?documentID=1253">http://hbns.org/getDocument.cfm?documentID=1253</a>.

<sup>&</sup>lt;sup>24</sup>. MS. Cepeda, DB. Carr, et al. *Music for pain relief*, *The Cochrane Database of Systematic Reviews*, 2006 *Issue 2*: <a href="http://www.cochrane.org/reviews/en/ab004843.html">http://www.cochrane.org/reviews/en/ab004843.html</a>

<sup>&</sup>lt;sup>26</sup>. Hui-Ling Lai PhD RN and Marion Good. PhD, FAAN. *Music improves sleep quality in older adults*. J. Adv. Nurs., 2006 Jan;53(1):134-44.

used without fear at work and while driving.<sup>27</sup> The same can be said for those who feel lost, who feel that life has no meaning. Listening to music can bring them moments of pleasure which soothe and bring them comfort.

#### More serious psychological situations



In psychiatric departments where symptoms of anxiety and depression are more evident, music alone cannot constitute a major treatment. But it can become an optional activity to offer the patient as a distraction or even as an additional means of reducing their tension and their lack of psychological tonus. The positive effect of music has also been reported with patients suffering from schizophrenia and autism where it can constitute a beneficial means of communication. Research to this effect shows an overall amelioration of the social functioning of patients who listened to music regularly, for a period of one to three months.<sup>28</sup>

Music listening sessions should be well planned according to the psychological state of the patients, and structured by precise individual objectives, with a follow-up of the observation of the reactions of the patient during the listening session. Were they calmer? More agitated? Did they seem more anxious? Did they appear to hallucinate? It is important to note these details and follow the evolution from one session to another. Moreover, following a music session, the person is often more open and communication becomes easier. It is thus interesting to take advantage of these moments to incite patients to express themselves. Image

#### Music and accompanying those at the end of life

It is probably in the departments of palliative care that music is most often used as a regular intervention. The serenity and spiritual elevation which characterize certain kinds of music are particularly well-adapted to this critical moment of our lives. The person who is conscious finds in music a time and place of calmness, an occasion to go inwards and contact emotions and memories, as well as an aid to relieve pain and discomfort. Through its calming effect, listening to music also contributes to reducing agitation.

With unconscious patients, it is difficult to measure the advantages, but when one takes into consideration that hearing is the last of our senses to disappear, it is not inconceivable that music may also be beneficial. The climate of harmonious tranquillity which bathes the atmosphere of the sickroom also influences their loved ones. Musical harmonics are thus a language of gentleness and support surrounding caregivers, patients and their loved ones.

One can simply choose soft melodies or ask the families what kind of music the person loved and offer them this last gift before their death. Music has an important evocative power regarding associated memories regardless of whether these memories are happy or sad.

Music brings soul to our hearts and wings to our thoughts.
Plato. Extract from the

poem: Music.

<sup>&</sup>lt;sup>27</sup>. Aseya Me, Music the convenient anxiety relief: <a href="http://www.isnare.com/">http://www.isnare.com/</a>

<sup>&</sup>lt;sup>28</sup>. . C. Gold, T. O. Heldal, T. Dahle, T. Wigram. Cochrane Database Syst Rev. 2005;:CD004025 15846692 (P,S,E,B) Cited:1 Music therapy for schizophrenia or schizophrenia-like illnesses.

<sup>&</sup>lt;sup>29</sup>. Image. Duty-free. Young girl in bed. Fotosearch: <a href="http://www.fotosearch.fr/photos-images/musique\_20.html">http://www.fotosearch.fr/photos-images/musique\_20.html</a>

The dying person reviews their life, revisiting the people and places which are familiar to them and reliving the emotions which enrich this crucial moment.

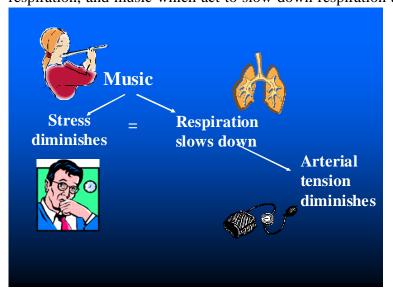
# The effects of music on patients having suffered a stroke

The person who has suffered a stroke traverses a decisive period when their brain, because of its momentary "plasticity", seeks to adapt itself to the damage (problems of speech, attention, movement) caused by the cerebral attack. According to a Finnish study<sup>30</sup>, stroke victims who listen to music daily for one to two hours recover their verbal memory as well as their capacity of attention more satisfactorily. They are also in a more positive mood, and less depressed, than those who did not have this advantage.

Music may also contribute to stimulate patients during the period immediately following the crisis. It is a simple intervention and not complicated to put in place, and which could complement other therapies, especially as stroke patients often stay inactive for long periods of time at the hospital and are confined to their rooms. As for other patients, music might also bring them a bit of pleasure and comfort them in moments of intense distress. According to this research carried out in Helsinki, Finland, it is important to have them listen to music as soon as possible after admission to the hospital since the brain can undergo spectacular modification during the first weeks. The data indicate that it is preferable to listen to a combination of songs and instrumental music.

#### Music and its effect on respiration and arterial pressure

Certain physiological responses, such as respiration and arterial tension, are strongly influenced by music.<sup>31</sup> Indeed, an intimate link has been established between stress, respiration, and music which act to slow down respiration and diminish arterial tension. But



it is the rhythm rather than the kind of music which influences respiration and the cardiac system. A slow rhythm promotes deeper breathing diminishing at the same time the cardiac rhythm consequently, pressure. A more rapid musical rhythm provokes the opposite effect. It has thus demonstrated that listening to calming melodies coupled with abdominal slow respiration provokes, with practice, reduction in arterial tension. Again, this is an easy measure to

put into practice which can be advantageously added to antihypertensive treatments. The addition of this intervention would also enrich the therapeutic nursing plan.

<sup>&</sup>lt;sup>30</sup>. « BRAIN ». a Journal of neurology. *Music listening enhances cognitive recovery and mood after middle cerebral artery stroke*. March 2008; 131: 866 - 876.

<sup>&</sup>lt;sup>31</sup>. A study by Dr Peter Sleight et al., Oxford university, in **Psychomédia**: http://www.psychomedia.gc.ca/pn/modules.php?name=News&file=article&sid=3857

### Music and the cancer patient

The cancer patient traverses a particularly difficult period in their life. The difficulties associated with their illness, chemotherapy or radiotherapy treatments, concern for the future and often also post-operative pain, all combine to make this a particularly trying moment. Whether it is during treatment or subsequently, it is important that the nurse help the patient find a

# Cancer and lifestyle

#### Recommended interventions:

- Nutrition (5-10 portions of fruit and vegetables)
- Physical exercice according to their capacities
- Relaxation to combat stress
- Stimulating social life, without too much fatigue
- Listening to music which is peaceful and recharges their batteries
- Avoiding tobacco and excessive alcohol
- Following the instructions for screening complications.

Inspiré de : <a href="http://www.servicevie.com/02sante/E">http://www.servicevie.com/02sante/E</a> de\_la\_Societe\_canadienne\_du\_cancer\_c.html

lifestyle which will favour well-being and if possible, a return to health. Amongst the measures which one can propose to them, other than eating well, exercising and relaxation, listening to calming music which lowers their stress and facilitates sleep, should be a part of the panoply of beneficial interventions which should be recommended.

#### Music and its effect on those who are losing their cognitive autonomy

The person who is slowly becoming disoriented and progressively confused because of a process of cerebral degeneration also lives moments of stress and fear especially at the beginning of the illness. Since they can no longer decipher their environment, they do not understand what is happening to them and thus live in insecurity. Moreover, it is important to stimulate their memory of the past by using strategies of remembering faces, places and even songs and music of their time.<sup>3</sup>

#### Calming or emotional stimulation and social benefits

Listening to calming music is especially beneficial for those suffering from Alzheimer's disease for they often experience profound anxiety and fear. Moreover, music stimulates their emotions which have often been buried for a long time thus enabling them to come to the surface. It frequently happens that the person who no longer talks or gives any signs of emotion will be touched and will react to music which they like.

At the beginning, the person may manifest coarse behaviour, a different way of looking, more attentive, a fleeting attitude of listening, then, with time, signs of reaction become more evident. They may keep the measure, smile, try to make some sounds or sing or even try a few dance steps. Some persons, who are generally uncommunicative, manage to express themselves when they hear music whereas others become more active. But those whose illness is advanced no longer react to music in this way. However, many of them become calmer and more relaxed when they hear certain melodies. It has been noticed that music facilitates orientation and favours social interactions in a group.

#### **Beneficial effects on memory**

<sup>&</sup>lt;sup>32</sup>. Margot Phaneuf (2007) *le vieillissement perturbé. La maladie d'Alzheimer*. Montréal. Chenelière Éducation, p.148-152.

For these people, music not only brings beneficial pleasure and calm but also has a non negligible therapeutic effect on memory. Melodies are often associated with moments of happiness or with various experiences of our lives. For example, music may make us remember a trip or a country vacation, or be associated with meeting our spouse, the ceremony of marriage, the birth of a child, etc. Hearing it enables us to relive these moments and their associated emotions. Music is thus beneficial for those whose memory is evanescent. They thus manage to revisit the past, to remember faces and forgotten details. It is easy to ask their kin what melodies they loved and to have them listen to these in order to stimulate their memories of the past and remember experiences which have for a long time been buried in the meanders of their dimming memory.

#### Music to facilitate treatment

Music is particularly useful when washing the patient who is agitated and is making life difficult for themselves and their caregivers. At times the person whose comprehension is altered by illness reacts violently to the care that the nurse wants to give them. In the face of this behaviour of pathologic agitation, the calming effect of music diminishes the reaction of panic caused by a defence reflex in the face of treatments which are perceived as an aggression. Attracting their attention by a photo of a loved one, speaking to them gently and having them listen to familiar music calms them and helps them to better accept hygiene measures.

#### The child, the adolescent and music

The sick child feels particularly defenceless, especially in the hospital. Deprived of the stimuli necessary for his development, confined to bed, the child becomes prey to idleness, boredom and discouragement. Music, appropriate for their age and taste, becomes a leisure time activity and opens a window on the world. Children

Soak yourself in music, once or twice a week for several years, and you will see that music is to the soul as water is to the body.

Olivier Wendell Holmes.

come to life on hearing it, their eyes become brighter, they smile while their body or hands mark the rhythm. Amusing, rhythmic, and stimulating musical pieces help them forget, for a while, their trying experience. Here again, parents can orient us as to the choice of melodies

or furnish the required equipment if necessary.



As for other patients, listening to music can become for the child an help in soothing pain, calming fear or agitation, as well as helping them to sleep. With adolescents, it is always important to consult them on their musical tastes before suggesting something. Moreover, we should not be astonished by their musical choices. What to us may seem like noise may have an agreeable effect on them. There is no accounting for taste ... Image. 33

# Throughout the ages, a long tradition of the therapeutic use of music

Nowadays, the use of music in the healthcare system is seen from the point of view of music therapy. This is both a good and a bad thing. It is good where music therapists exist, but at

http://www.fotosearch.fr/results.asp?step=&pattern=&adv=0&ds=&searchformof=&pub=all&category=1&imagedesc\_only=&orient=&pixelh=&pixelw=&keyword=child+headphones&start=3

<sup>33.</sup> Image. Duty-free. Child with earphones. Fotosearch:

the same time they are not found everywhere and because of this, one does not make use of its beneficial effects very much. But music has been used for a long time with those who are ill.



Indeed, archaeological digs have shown that since time immemorial, music has been used to help recover emotional equilibrium and physical health. We find signs of this in all human groups. Shamanic songs and dances where magic and spirituality were mixed together were probably the first therapeutic uses of music. Later, in the 5<sup>th</sup> century before Christ, under the influence of Hippocrates, music expanded rapidly with the Greeks and became associated with medicine. Pythagorus was one of those who valued its therapeutic use and his influence went on for many centuries.<sup>34</sup>. <sup>35</sup>

The Greeks attributed all sorts of virtues to music. Plato

and Aristotle developed the theory of the influence of music on equilibrium, on the passions and on morals.<sup>36</sup> One also finds the use of music in the Bible where David plays the cithara to relieve King Saul of his headaches.<sup>37</sup> Image <sup>38</sup>. Thus, as a therapeutic aid, music has known a glorious past. However, today, we most often seek it out for its powers of distraction.

### An example of a music session

Listening to music is an interesting intervention in the therapeutic nursing plan for patients suffering from various problems of physical or mental health. Although it has become a field of intervention of specialized therapists, for our current needs, and especially in those health centres or departments where these services are not offered, nurses can find many occasions to use its beneficial effects for their patients. However, we should not confuse the therapeutic use of music with listening to music solely for recreation.

For a therapeutic music session, one must first ask what kind of people are we working with? For example, are they confused, suffering or depressive? How old are they? What are their musical tastes and what do we want to accomplish by this means? The answers to these questions will then enable us to establish our objectives, decide on the choice of the musical pieces, the information to give the patient, how the session will take place and establish the criteria to evaluate the results.

#### Planning the sequence of events of a music session

The music session is a planned strategy of care giving which requires preparation. One must first define the objectives, discuss them with the patient and explain the procedure.

<sup>&</sup>lt;sup>34</sup>. D. Anzieu (1987). *Les enveloppes psychiques*, Paris, éd. Dunod, pp. 199-222.

<sup>&</sup>lt;sup>35</sup>. Image: *Achiles caring for Patrocle*. Berlin museum. Inspired by Homer's Iliad, a tale of the Trojan war. <a href="http://fr.wikipedia.org/wiki/Musicoth%C3%A9rapie">http://fr.wikipedia.org/wiki/Musicoth%C3%A9rapie</a>.

<sup>&</sup>lt;sup>36</sup>. *Musicothérapie*: http://fr.wikipedia.org/wiki/Musicoth%C3%A9rapie

<sup>&</sup>lt;sup>37</sup>. *Cithare* : instrument de musique à cordes pincées, dérivé de la lyre

Image : *Achiles caring for Patrocle*. Berlin museum : <a href="http://fr.wikipedia.org/wiki/Musicoth%C3%A9rapie">http://fr.wikipedia.org/wiki/Musicoth%C3%A9rapie</a>
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#### Aims and objectives

A music session may have different objectives depending on the person, their health problem and their age. It can aim at:

- helping the confused person to recall the past thanks to a known melody;
- diminishing stress and anxiety;
- enabling the person to rediscover their hidden emotions;
- favouring the expression of feelings and emotions;
- creating reactions in the person who has become apathetic and silent;
- helping cerebral evolution during the period of plasticity following a stroke;
- cheering the sad or nostalgic person, stimulating those who are bored, bringing them moments of pleasure;
- helping the child and the adolescent to better accept their treatment;
- helping the patient to sleep;
- calming agitation, fear and hostility;
- helping the suffering person to relax which diminishes the pain which is augmented by anxiety;
- favouring the action of analgesics;
- slowing respiration and lowering arterial tension;
- establishing communication with the autistic or schizophrenic patient;
- contributing to a healthier lifestyle for the cancer patient;
- assisting those at the end of life.

# Plan to evaluate the patient's reaction and the results

We must remember that the music session is a serious intervention which goes beyond mere distraction and which should not only be prepared, but also evaluated. The objectives

established for the experience can be attained in one session or over the long term. In the latter case, it is still important to determine the objectives for each session, for example, to get the person to talk or to stimulate their mood, and to verify, by observation or with the help of the patient, what happened and what was attained. If the person gets agitated or starts to hallucinate, one must immediately stop the session.

# The practice of an individual music session

Listening to music can be done in an individual manner with a single patient or

Classical music Sacred Classical music music Music Oriental Singing types music Traditional Music music therapy New age

with a group having the same objectives. The process includes several steps.

- If one is not available in the department, ask the person to get a walkman or a CD player, headphones and a set of cassettes or compact disks which cover a wide range of music (gay, tender, soft, energetic, rhythmic, songs, military marches, etc.) Image.<sup>39</sup> One can also use the radio or a televised concert but the conversations and publicity can be annoying. Whenever possible, if the music session is carried out on a regular basis, it is interesting to procure the necessary equipment and a small repertoire of CD's.
- If need be, ask their loved ones to procure the material.
- Question the person as to their musical tastes or ask their loved ones.
- Suggest that the person urinate before the session.
- Determine the duration of the activity according to the attention capacity of the person. The first sessions can be shorter. Otherwise, they should last about 30 minutes.
- Discuss with the patient the pursued objectives.
- Help the patient to install themselves in a comfortable position and dim the lights.
- Make sure that the volume is not too loud which could be annoying. Be sure that the person does not modify the volume.
- In the beginning, one can make a test by proposing that they choose their own music if they have a preference.
- Observe the reactions of the person: what kind of music seems to make them happy, stimulates them or makes them sad?
- Afterwards, select musical pieces in accordance with the objectives pursued; establish the sequence of musical pieces in advance.
- To start with, choose music which agrees with the person in their present state, then go on to music which favours the desired state.

# **Examples**

• If the person is sad, start with slow, soft music and then move to something more gay,

more stimulating, like some ballads.



- If the person is depressive, they should first listen to soft music, then something more gay. Finally finish with some energetic rhythmic music such as a military march.
- If the person is agitated, start with rhythmic music then go on to something more mellow.
- If the person is hostile, choose something relatively neutral than go

on to something serene.

- If the person is anxious, start the session with some relaxation exercises, then put on soft music.
- If they are distracted, bring their attention to the music. If need be, hold their hand to calm them or ask a loved one to do so.
- Take advantage of a moment of calmness procured by the music to help them bring to mind certain memories or to get them to express their feelings or desires.
- If the aim is to favour sleep, precede the session with a preparation for bed and a light massage.

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<sup>&</sup>lt;sup>39</sup>. Image: www.eklectic-librairie.com

- At the end of the session thank the person for their collaboration.
- After the activity, evaluate their satisfaction and the degree to which the objective was attained. Are they calmer? Do they seem more serene, happier? Do they sleep better?

#### **Group sessions**

In health care establishments, it is possible to organize regular music sessions. These are the steps to follow:

- Constitute a group not exceeding 10 persons sharing common objectives (for example, stress reduction).
- Reserve a peaceful room with comfortable chairs or which can accommodate wheelchairs.
- Explain the procedure and the objectives.
- Determine the duration of the activity (usually about 30 minutes or less).
- Make sure that all the participants are comfortably installed.
- Turn down the lights.
- Start the session with a short period of relaxation.
- Have them listen to the chosen music. Vary the musical pieces and avoid those which are too long which can become boring.
- After the activity, get the participants to comment with respect to the attainment of the
  objectives, the expression of what they felt during the session, the evocation of
  memories.
- Finish the discussion by talking about the feelings of well-being which music brought them. Do not unduly draw out the discussion in order not to stimulate them too much thus negating the beneficial effect of the music.
- Reframe negative or pessimistic impressions.
- Evaluate the activity with the participants at a subsequent meeting; ask them if they appreciated it and how they felt.

#### **Variations**

Specific workshops can be organised for variety, for example, organize a workshop in choral singing or playing music with simple instruments such as the percussion instruments: drums, maracas, bells, triangles. One can also suggest a workshop in listening to ancient music, sacred music or waltzes. The more the people participates, the better will be the effects of this strategy.

#### Conclusion

Music is an interesting therapeutic method which can easily take place in the panoply of nursing interventions. It may seem extravagant in our hyper technical care institutions where there is only place for interventions of a medical nature. But music, like other activities such as writing and the exercise of creativity can bring important advantages to our patients. 41, 42

<sup>&</sup>lt;sup>40</sup>. Image. Duty-free. Young man with earphones. Fotosearch.: <a href="http://www.fotosearch.fr/CSK010/pr90168/">http://www.fotosearch.fr/CSK010/pr90168/</a>

<sup>&</sup>lt;sup>41</sup>. Margot Phaneuf, 2008. *Writing, a formative activity for the patient* Infiressources, http://www.infiressources.ca/fer/Depotdocument anglais/Writing a formative activity for the patient.pdf

These activities are generally inexpensive and require little training to put into place. We only need nurses who will be interested in doing so and who believe in their ability to act. In his novel "Immortality", Milan Kundera wrote that music is a pump which expands the soul. Why not use it with our patients, who, for one reason or another, feel down in the dumps. Why not offer them this moment to let go of their tensions and their defences, a moment of peace in the heart of a trying experience...?

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