

The effects of music on clients with learning disabilities: a literature review

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The aim of this paper was to promote the use of musical interventions with clients with learning disabilities. Musical interventions with this group of clients were found to be effective in reducing self-injurious behaviour, aggression and other behaviour, which challenge the service providers. Music was also found to have the potential to improve the communication skills of clients and to maintain their psychological well being. A review of the literature shows that music, though not widely used in the field of learning disabilities, can be an effective medium through which the quality of life of clients can be enhanced.

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INTRODUCTION

Challenging behaviours such as aggression and self-injurious behaviour (SIB) are very common in people with severe and profound learning disabilities. Over the past few years researchers have studied these behaviours so that valuable information could be gathered to design interventions with the ultimate goal of reducing or eliminating them (Durand & Mapstone 1998, Withers 1995, Emberson 1990, Ferry 1992, Carson & Clare 1998, Morgan & Mackay 1998).

The main aim of this paper are firstly, to demonstrate that interventions using music can positively influence challenging behaviour (Gagner-Tjellesen et al. 2001) and secondly, to promote the implementation of musical activities with clients as part of a treatment package to improve their health.

People with learning disabilities are often viewed as devalued individuals and may be treated badly by society. Their physical and functional impairments might be partly responsible for them being conceived by some as 'deviant'. This can result in them being rejected by their community, society as a whole, and even relatives and health services (Osburn 1998).

The concept of social role valorisation (SRV) is mainly aimed at providing support for people with learning disabilities. This helps to empower them and to facilitate their integration into society as valued individuals. Paramount in this paper is the desire to demonstrate that musical activities can be one of the interventions, which can enhance the quality of life for people with learning disabilities (Trevanthen 1999, Nordoff & Robins 1992, Alvin & Warwick 1994). The experience gained by Bunnell in musical interventions with clients with learning disabilities is available in a published book (Bunnell 1997).

Music therapy

Podalsky (1954) claims that many centuries ago music was used to treat mental health problems. People treated included famous names such as King Philip V of Spain, King Ludwig II of Bavaria and King George of Great Britain. During the 18th century Pargiter published the first experiments involving music as a therapeutic intervention (Buckwalter et al. 1985). Following further research it was later recognised that music improves health by focusing on the

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different physical, psychological and emotional aspects of individuals. Music as a therapy is found to be very effective in the critical care environment, surgical settings, dental surgeries and mental health issues, as a control for pain, anxiety and promotion of relaxation (McClellan 1991, Biley 2000, Covington 2001). Stevens (1990), on the other hand, suggests that music has the power to drive away the feelings of fear and anxiety when facing the unknown alone.

Nordoff and Robins (1975) are regarded as the pioneers of music therapy. They used music interventions to treat children with developmental delay (Gilroy & Lee 1995). In the past, music therapy was considered to be an inspiration to evoke God, and to hold and express the greatness of the human spirit (Pavlicevic 1995). However, it was in the 1950s when music was seriously used as a therapeutic intervention and was characterised by the emphasis of 'music as healing' (Gilroy & Lee 1995). Layman (1999) states that music therapy is the controlled use of music with the objective of helping people to overcome their problems. Whereas Bruscia (1987), suggests that music therapy involves the use of organised music in the development of the client-therapist relationship to promote the physical, mental, social and emotional well-being of the client.

Today music has gained significant recognition in many different clinical settings and is playing an important part in the field of learning disabilities (Dimond 1998), especially with people who have severe and profound disabilities. However, the first group of clients treated with music therapy were children with autism or cerebral palsy. It is strongly believed that music facilitates language development, play, physical development and relationships with children with special needs (Streeter 1993). A wider range of conditions has been treated since music was first used as a therapeutic intervention (Gilroy & Lee 1995, Wigram & Skille 2000).

It can be argued that, despite the powerful influence of the medical world, where the care of clients is pivoted around their physical needs, music therapy is gradually becoming an important alternative in meeting the emotional, mental and psychological needs of clients (Trevanthen 1999, Hughes 2000). Based on Streeter's (1993) argument, the authors believe that since people with learning disabilities may be functioning at a mental age similar to that of a child, the use of music can be very useful in promoting the communication skills of the clients whilst focusing on their different developmental stages.

The essence of SRV is to allow people with learning disabilities to undergo life experiences that increase their personal fulfilment and self-determination without feeling stereotyped (Wolfensberger 1998, MacDonald et al. 1999). One of the difficulties in successfully implementing SRV

is finding ways of facilitating the integration of clients into the community and to combat social isolation (Osburn 1998, Wolfensberger 1998). This integration can be a very slow and difficult process, which can be delayed further due to a lack of availability of appropriate services within the community.

Clients with self-injurious behaviour and other challenging behaviour will need extra support if the principles of SRV are to be implemented. People who display challenging behaviour limit their chances of being accepted in community settings (Thompson & Gray 1994). The authors believe that by designing effective interventions to reduce their inappropriate behaviours, these individuals will have a better chance of being viewed positively within society.

Musical intervention is not guaranteed to always achieve SRV. However, based on the benefits it offers music therapy can be very useful in facilitating and improving social integration. It can offer people with learning disabilities an environment in which they can develop and expand their social, cognitive and physical skills and improve their life (MacDonald et al. 1999) and in which they can learn to build a sound rapport with others and enjoy healthy behaviour (Alvin & Warwick 1994).

Self-injurious behaviour and aggression

Lawes and Woodcock (2000) believe that music therapy is very effective in managing aggressive and self-injurious behaviour. Evidence suggests that music brings about a mental, emotional and physical calmness (Nordoff & Robins 1992, Biley 1992) with aggressive clients (Barber 1999, Gagner- Tjellesen et al. 2001). Aggressive and self-injurious behaviour can be very challenging and carers sometimes fail to deal with it in the correct manner such as failing to provide adequate stimulation (Morgan & Mackay 1998). Ritchie (1993) suggests that musical activities are an effective approach in any attempt used to try to reduce aggressive behaviour.

Experiments carried out in the past (Durand & Mapstone 1998) suggest that fast-beat music is useful in controlling challenging behaviour with aggressive clients. Slow-beat music, on the other hand, was associated with a higher rate of inappropriate behaviour in some clients. These results suggest that, depending on the conditions and behaviours, different types of music may be used with individuals with learning disabilities. Biley (1992) commented on the choice of music and suggested the following pieces of music:

- (1) Love Themes volumes 1 and 2 by Mantovani.
- (2) Reflections by the Moonlight Moods orchestra.

- (3) In the mood for love by Geoff and his orchestra.

Mozart is another name, which is well recommended, especially the trumpet and the horn concerts (Alvin & Warmick 1994). Biley (2001) mentioned classical music such as Pachelbel's 'Canon in D', Vaughan Williams' 'Lark Ascending' and Handel's 'Water Music' for helping people to relax. These suggestions were however, believed to be based on the choice and preferences of the general population. For clients with learning disabilities the choice of music can be a very different and difficult issue since there can be misinterpretations regarding their expressed choice. The authors therefore believe that the right or most appropriate type of music can only be selected after identifying the preference of the client. This can be determined by observing their behaviour and response to different types of music. Providing them with the right type of music to express themselves and improve their communication can be crucial when attempting to reduce SIB. Layman (1999) suggests that music therapy improves the communication skills of clients while focusing on their emotions and feelings.

All people, including those with learning disabilities, need defences to manage their anxiety and anger (Corrigan 1991, Lawrenson & Lindsay 1998). Clients need the skill and support to be able to manage anger and anxiety effectively and music can help them achieve this. Music intervention works as a non-invasive and non-threatening treatment and reduces anxiety by promoting the psychological, emotional and physiological well-being of the clients (Barber 1999, Covington 2001). Brewer (1998) argues that music therapy decreases aggressive behaviour by managing psycho-physiological stress, pain and anxiety. The beneficial effects are caused by the significant physiological and biochemical effects of sounds (particularly their pitch), volume and timbre on the body (Wigram & Skille 2000).

Musical activities can be implemented in three different ways namely, through records or cassettes, live music or vibrational sensations. Irrespective of the method used, music helps to reinforce appropriate behaviour. Background music is another form of musical intervention and is found to be very useful in creating an environment where clients can relax and feel better.

One of the authors (Savarimuthu, unpublished data) has been working with a person who was diagnosed with mental health problems in addition to other medical conditions. When the person's favourite CD's, specifically 'Pan Pipe Moods' and 'Gentle Moods' Volumes 3 and 4 by 'The Intimate Orchestra', were played in the

background, she acknowledged feeling very relaxed and happy.

Covington (2001) stated that when the ear perceives sound, sensory stimulation is produced which can physiologically produce mental images that promote relaxation. Our body is very sensitive to the action of music on the ears. Waves are produced by air molecules, which reach the porous skin on a molecular, atomic and subatomic level (McClellan 1988). Therefore, different music resonates differently with the physical body depending on the type of music.

Similarly perhaps, Barber (1999) described a study conducted on a client who exhibited challenging behaviour and became agitated if his needs were not met. Every time these behaviours were displayed, the client was encouraged to go into a room where taped relaxation music was played. This intervention was carried out for about 2 months and an evaluation at the end showed that the behaviour of the client improved considerably.

Holford (1999) presents a different point of view suggesting that health professionals usually impose music therapy on clients when tackling specific problems. She further argues that this sort of practice does not provide long-term solutions and believes that participatory music making should involve clients without forcing them. Music making, she argues, helps clients to express their needs in a more appropriate way. This argument is supported by Bunnell (1997), who encourages participatory music believing it allows clients communicate their emotions and feelings. Both the involvement of Bunnell (1997) and Holford (1999) with clients with learning disabilities suggests that active participation can make music therapy more interesting and successful. They believe that clients should be encouraged to participate in music making as it promotes self-esteem and confidence.

However, participation should not be restricted only to those people with the ability to play a musical instrument (Gillam 1996). The safety of clients is very important during musical activities, because music is a powerful tool and responses from clients can be very strong and difficult to control (Bracefield et al. 2000).

Intervention, using music, is still not viewed as a beneficial tool by some health professionals. This is due to misunderstandings and misconceptions especially regarding hearing impaired individuals and people who have problems with verbal communication (Bracefield et al. 2000). Fortunately, the literature suggests that clients, irrespective of their level of disability, can benefit from interventions using music (Gagner-Tjellesen et al. 2001). Clients with hearing impairment should not be assumed to be incapable of appreciating musical stimuli.

Table 1 Issues for consideration prior to musical intervention

- Assessment
- Means of gaining and maintaining attention and concentration
- Choice of music, age of client and culture
- Measurable aims and goals
- Gains may be very small

Music, being extremely flexible, can, nevertheless, be altered to suit the hearing level, language level and music preference of individual clients. Sight, smell and touch are the other senses, which allow sound to be perceived.

People with learning disabilities may be functioning at a very low level of intellectual ability and may therefore experience little, if any, music input. For this reason some issues should be considered prior to any musical intervention (Table 1).

To better appreciate the effects of music on people with learning disabilities, it is essential to devise a method whereby it is possible to measure small changes which can be tailored to each individual (Oldfield & Adams 1995). This would help to detect very small changes in behaviour. It is also important to bear in mind that changes may take a long time to occur so the facilitator must not lose hope and discontinue the intervention. Difficulty can also arise when observing and interpreting the response of clients to sound or music (Alvin & Warwick 1994). This exercise may become easier after a few sessions with the clients where the responses are identified and understood.

In 2001 the report 'Valuing People: A New Strategy For Learning Disabilities For the 21st Century' (Dott 2001) was published. This referred to people with learning disabilities and claimed that they were more susceptible to mental health problems than the general population. The government policy is that this group of people should be able to access services and be treated in the same way as anybody else. The causative factors of mental health problems have been studied in the past (Casey 1993, Vernon 1997, Smith 2000). In the field of learning disability, it has been found that frustration with communication is one of the main contributing factors for the prevalence of mental health problems (Moss 1995).

Music is recognised as a form of universal communication and helps to create an environment where clients can have meaningful interaction with their facilitator and other people (Schalkwijk 1994). By improving the communication skills of clients using music, there is the possibility of preventing and controlling mental health problems in some clients. Biley (2000) referred to studies, which claimed that music has the potential to treat long-term mental health

problems by decreasing psychotic symptoms (Hamer 1991). Optimising the mental health of clients sometimes allow them to reduce their intake of psychotic drugs.

Contra-indications

On the other hand, musical intervention may have a negative impact on clients. One example is when the client is attached to a particular piece of music and rejects what the facilitator offers. Another example is when a client displays inappropriate behaviour, which does not allow the aims and objectives of the musical intervention to be met, and which hinders therapeutic contact with the facilitator (Schalkwijk 1994). In these cases, interventions using music should be discontinued but reintroduced at a later stage when the client is more willing to concentrate and cooperate with the facilitator. The age and culture of clients are important issues, which need careful consideration since their choice of music may be different. Past experience can also be triggered by specific music where clients may feel upset and/or vulnerable. Evidence also suggests that music associated with violent lyrics such as 'heavy metal' can have a negative impact on clients (McCraty et al. 1998).

Expertise

It is open to speculation whether or not activities involving music become therapeutic when facilitated by a professional music therapist. Hooper (1991) argues that if there is a significant and positive impact on the quality of life of a client, then musical activities are therapeutic regardless of who is facilitating the musical activities. Certain aspects of music do not need the hands of the expert but can be facilitated by anyone who enjoys music (Covington 2001). Gillam (1996) suggests that therapists do not necessarily need to be experts as long as they are keen to experiment using musical interventions. Bunnell (1997) explains how music intervention can be organised and delivered in a systematic way to achieve specific objectives not necessitating the presence of a trained music therapist.

In the past, many people who have been professional therapist have successfully implemented interventions using music with clients. The success of music interventions depends partly upon the approach and attitude taken towards the activity and on the aims and objectives set. It is however, not in the interests of the client if the activity is not meaningful and does not have specified objectives. To successfully implement musical activities with clients with learning disabilities, Wood (1993) believes that there is the need for the facilitator to be able to relate with the clients. She also argues that neither great

expertise in the field of music therapy nor the availability of the best equipment for the intervention would be of use if the facilitator cannot relate to the clients at a therapeutic level.

CONCLUSION

This literature review has explored the benefits of music for people with learning disabilities and who display challenging behaviour such as SIB and aggressive behaviour. Music interventions are widely used in many clinical settings but this paper has looked into its effects on the emotional and psychological health of a particular group of clients. As discussed previously, musical activities are recognised as an effective means for modifying behaviour and are found to be very effective in decreasing aggression and self-injurious behaviour. In some cases, the effects of music therapy can go beyond to the prevention and management of mental health problems of clients. The White paper 'The Valuing People' (Dott 2001), expects the introduction of specialists' services for people with severe and profound learning disabilities who display challenging behaviour. Consequently, the role of nurses will nevertheless be to promote the health and well-being of clients wherever they go, if SRV is implemented. The introduction of new interventions within nursing practice can only serve to help the practitioner to fulfil their role as health facilitator.

RECOMMENDATIONS

The authors suggest that learning disability nurses should concentrate more on the aspects of health promotion when attempting to enhance the quality of life of clients. This can be done by developing the right attitude and approach to complementary therapies such as the introduction of music therapy in nursing practice. Nowadays, health care professionals are more aware of the benefits that music can have on their clients but, sadly, little use is made of this knowledge. To implement musical interventions no expertise is required but a music therapist is the appropriate person to implement music therapy. The ability to play a musical instrument can be beneficial in music interventions since the facilitator can better relate to the clients. Since musical interventions can take place in different forms, those who cannot play any musical instrument can still be fully involved in the activities.

SUMMARY

- Musical intervention reduces SIB and aggressive behaviour.

- Clients should be encouraged to participate in musical activities irrespective of the level of their disabilities.
- Nurses should not underestimate their capabilities as facilitators in the delivery of music sessions.
- Choice of music, culture and age of clients are essential issues when implementing musical interventions.
- Heavy metal music can have a negative effect on clients whereas classical music is found to induce relaxation.

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