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Abstract

The COVID-19 pandemic meant that people's lives and work changed significantly across the world. Governments took measures such as social distancing, lockdowns and quarantine protocols to stem the spread of the pandemic. This had a significant impact on music therapy clinical practice, generating reflections and adaptations among the worldwide music therapy community, with several studies still underway. A number of professional music therapy organisations have explored methods for carrying out remote interventions. MusicTeamCare is an approach developed by three Italian Certified Music Therapists that could offer access to support in emergency and crisis situations. This approach is rooted in receptive music therapy theory, with particular reference to Guided Imagery and Music (GIM). MusicTeamCare was used for the first time in March-April 2020, with healthcare workers in Italy who were treating Covid 19 patients. This paper outlines theoretical framework, development and evaluation phases of MusicTeamCare. Detailed explanations are given of the theoretical framework, methods of musical analysis, assessment and evaluation strategies, criteria for constructing the playlists, and interactive triangulation between the Music Therapists in the research team.

Introduction

In March 2020, Italy became the European epicentre of the SARS-CoV-2 pandemic (Salute, 2021). The Italian Government resorted to a nationwide lockdown. Social distancing, lockdowns, and quarantine protocols were put in place to slow the spread of the pandemic and reduce the burden on health institutions. These protocols had a devastating social and economic impact (Motta Zanin et al., 2020). The pandemic also increased stress and poor mental health (Mucci et al., 2020), especially for healthcare workers (HCWs) (Moazzami et al., 2020).

This situation required Italian Certified Music Therapists (IC-MTs) to quickly take decisive action. MusicTeamCare, a receptive clinical intervention for remote support was developed to reduce stress

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and improve well-being in HCWs who were involved in assisting COVID-19 patients (Giordano et al., 2020). The Music Therapists conducted a needs analysis and referred to public data, which both highlighted the main challenges of the work environment and the physical-emotional distress experienced by HCWs during the COVID-19 crisis ((Difesa, M. della (2020, March 18). Available at:

http://www.difesa.it/Primo_Piano/Pagine/emergenza_covid19_arruolamento_straordinario_personale_sanitario.aspx (accessed 30 March 2020)., n.d.). During the preparation of the MusicTeamCare project, this daily published data reported the need to recruit new HCWs for the wards affected by COVID, the increase in positive cases in Italy and the list of sick HCWs, which increased from 2,629 (March 17, 2020) to 8,956 (March 30, 2020).

Three Music Therapists applied MusicTeamCare to offer support to healthcare workers in a hospital in Southern Italy (Giordano et al., 2020) and in a hospice in Northern Italy (data as yet unpublished) as the pandemic began to spread. The project ran from March 12th, 2020 until June 2020, when it ended due to lack of funding. The work team graduated from the same music therapy training programme in Italy, at different times. This training was characterised by an international approach thanks to the presence of Professor Leslie Bunt, who made an important contribution to the development of music therapy in Italy, establishing in 2008 the first GIM training programme for Music therapists (Scarlata, 2015). One of the three Music Therapists with experience in receptive music therapy is a GIM Advanced Trainee and the other two are Fellows of the Association for Music and Imagery (FAMI).

This common background was the starting point for creating support services for 47 HCWs (19 doctors, 28 nurses) who were involved in the management of clients and/or COVID units at their respective institutions. The research team undertook a needs analysis over the course of a week: March 20-27th, 2020. It was carried out through informal talks with colleagues and institutional meetings to collect information on participants' psychological and physical health. The needs

analysis was also informed by available literature on psychological distress in HCWs. A literature review conducted by the research team at that time evidenced that few research projects had been conducted about remote music therapy provision.

Given the COVID-19 pandemic and the risks involved in working face to face, the three Music Therapists concluded that receptive music therapy was a pragmatic and appropriate way to offer support. In order to establish a successful remote relationship with the HCWs, it was necessary to ensure their security, their privacy regarding the collection of personal data, and regularity in exchanging of relevant information. During this process Music Therapists sometimes encountered difficulties planning a weekly phone feedback. Whatsapp messages offered a way to solve this issue.

The main purpose of this article is to describe in detail the theoretical framework, the development of the protocol, development of tailored musical selections (Playlists), together with discussion and conclusions, which could offer suggestions for the future application of remote support to clients during emergencies. In this article clients are considered to be service users and staff (such as health care workers) and carers. The findings of the MusicTeamCare clinical application with HCWs are reported in another publication (Giordano et al., 2020).

Literature on Remote Music Therapy Practice

Due to social distancing regulations, several professional music therapy associations began to pay closer attention to remote clinical practice. The British Association of Music Therapy (BAMT) has provided updated guidelines to support Music Therapists' (MTs) clinical practice during the pandemic (*BAMT - British Association of Music Therapy*, n.d.). The Italian Association of Professional Music Therapists (AIM) has regularly informed its members of measures to take in clinical practice, in order to comply with government COVID-19 regulations (COVID19 – Informazioni per Musicoterapeuti – AIM Musicoterapia, 2021). On April 16 2020, the American Music Therapy Association (AMTA) announced the transition towards remote clinical practice as a

useful means of providing services for clients (AMTA, 2022). The AMTA website has been updated to include resources, such as a guide for the provision of virtual services, with suggestions for care and information about telehealth (Knott and Block, 2020). Board Certified Music Therapists (MT-BCs) have been directed towards relevant resources regarding telehealth and regulatory issues, copyright, music licensing and technical problems (Knott & Block, 2020). The AMTA COVID-19 Resources for Music Therapists and Students webpage (AMTA, 2020c) contains an aggregated and regularly updated list of resources to assist MTs in developing telehealth approaches (AMTA, 2020d), including guidance on how to comply with current copyright law (AMTA, 2020e).

Studies have shown that many MTs experienced changes in their work, including a decrease in client contact hours and an increase in using alternative approaches, such as working remotely (Gaddy et al., 2020), to provide safe and relevant services (Knott and Block, 2020). Both in private meetings and in those organised by professional associations, MTs began to discuss and hypothesise about different ways of developing their professional practice in order to safely provide services as the pandemic continued and clients' needs emerged.

Other methods have also been explored, such as the use of pre-recorded materials to facilitate music-making for music therapy clients in the absence of the therapist. Organisations such as Chiltern Music Therapy and North London Music Therapy, alongside the British Association of Music Therapy (BAMT), have been instrumental in disseminating practice in the UK (Annesley and Haire 2021).

North London Music Therapy (Rizkallah, n.d.) set up a phone service to alleviate anxiety and stress for medical staff involved in the management of COVID-19 patients. This phone service provided a form of psychological first aid for staff through telephone support rather than therapy (Everly, 2020). Additionally, a COVID-19 Guided Imagery and Music (GIM) self-help resource was developed to support the body's healing process in patients with mild to moderate COVID-19 and to provide psychological and emotional support (Lawes, 2020). Unlike other telehealth approaches

which involve the use of music, the main innovation of MusicTeamCare intervention lies in the deep listening by the MTs during the phone calls and the profound sharing by participants, as it will be presented further in the article.

Theoretical Framework

At the beginning of the pandemic in March 2020, the most recent and relevant studies were taken into consideration to launch the MusicTeamCare project. Psychological and neurophysiological researchers have demonstrated how music impacts an individual's psychological condition and vital functions (MacDonald et al., 2012). As early as 1966, Juliette Alvin stated the importance of Music Therapists studying physiology in order to understand the effect of music on the human body (Alvin, 1966). Studies show that constant, repeated, and predictable musical parameters positively affect the autonomic nervous system (Kunikullaya et al., 2015) (Chang et al., 2011). The paragraphs that follow summarise some of the research and knowledge in this area to contextualise the work of MusicTeamCare.

Breathing and emotions

Autonomic breathing is determined not only by metabolic demands, but also by emotions (Homma and Masaoka, 2008). There is debate whether each emotion has its own specific influence on autonomic functions (Kreibig, 2010), although research has stated that there is some physiological specificity across the emotional spectrum (Nummenmaa et al., 2014) and breathing rhythm is frequently indicated as an index of emotional state (Noguchi et al., 2012). A change in breathing rhythm can signal relaxation. The heart rate slows and the vagus nerve is stimulated (Koelsch, 2014) (Koelsch and Jäncke, 2015) a part of the parasympathetic nervous system responsible for resting and

digestion (in contrast to the sympathetic nervous system, which regulates many fight or flight responses) (Jänig, 2008). Activating the parasympathetic nervous system helps regulation, and the ability to think rationally returns (Gerritsen and Band, 2018).

Increasing numbers of studies show that emotional states not only influence respiratory patterns, but that respiratory patterns influence and stimulate emotional states, even when one is not aware of the process (Philippot et al., 2002). Different emotions are associated with different forms of breathing: when experiencing joy, breathing is regular, deep and slow; with anxiety or anger, breathing is irregular, short, fast, and shallow. Consequently, authors have suggested that by following breathing patterns associated with different emotions, it is possible to feel the corresponding emotions (Nummenmaa et al., 2014).

Altering breathing can change how a person is feeling, so breathing techniques are considered a powerful and effective method for emotional regulation on a psychological and physiological level, as well as for voluntary control of body rhythm (Jerath and Beveridge, 2020).

Music and vital functions

Specific music phrases at a rhythm of six cycles per minute can not only influence higher functions such as attention, but also synchronize with cardiovascular and respiratory rhythms (Bernardi et al., 2006). Music modulates brain stem mediated measures including heart rate, pulse, blood pressure, body temperature, skin conductance and muscle tension (Chapados and Levitin, 2008). Stimulating music produces an increase in cardiovascular measurements, especially in heart rate, respiration and blood pressure (Bernardi et al., 2009): this occurs because the brain stem neurons tend to fire synchronously with the tempo (Griffiths et al., 2001). The brain stem interprets stimulating music as survival signals, activating noradrenergic neurons, which regulate the autonomic response of heart rate, blood pressure and respiration (Griffiths et al., 2001).

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Music therapy and "musicking"

From a sociological point of view, there is a gap between the clinical use of music by MTs and the "musicking" performed by people outside music therapy clinical practice (Ruud, 2013). Ruud writes of "musicking" as an activity, a verb, something that takes on its meaning depending on the context, which can be seen as a way to regulate the relationships between a person and their situation, and between their own psychological state and the demands that stem from their surroundings (Ruud, 2013). The effect of any given music depends on that person's relationship with music, their own listening history, musical identity, associations and memories and the social context within which listening takes place (Ruud, 2013).

In relation to Ruud's theory, it is possible to find a meeting point between the clinical practice of music therapy and "musicking" activities used by individuals for self-care, by adapting existing receptive music therapy methodologies which have previously been used to support clients during emergency situations. Several projects conducted by MTs involving social action are labelled as Community Music Therapy (Pavlicevic and Ansdell, 2004). They are characterised by collaborative and context-sensitive music-making with communities who are experiencing challenges (Stige, 2017).

Music therapy methodologies have been applied in the field of international humanitarian aid to support trauma survivors of conflict (Sierra Leone, Gaza Palestine, Mostar, Bosnia-Herzegovina). Specific projects such as psychosocial, recreational or psychotherapeutic interventions (Beck et al., 2018) were used to meet mental health, well-being and cultural needs. Projects were implemented to provide music therapy within local structures (Heidenreich, 2005).

Receptive Music Therapy

In contemporary practice, receptive music therapy encompasses techniques in which the client listens to music and responds to the experience silently, verbally, or in another modality

(Bruscia, 2014). Guided Imagery and Music (GIM) is a receptive music therapy method developed by Dr Helen Bonny in the 1970s, and is a music-centred, consciousness-expanding therapy (AMI, 2022). "Therapists trained in the Bonny Method choose classical music sequences that stimulate journeys of the imagination. Experiencing imagery in this way facilitates clients' integration of mental, emotional, physical and spiritual aspects of well-being" (AMI, 2022). Some GIM practitioners are developing new music programmes incorporating non-classical music and culturally specific programmes (Grocke and Moe, 2015). The GIM literature prompted the authors of this article to develop the receptive method proposed for HCWs involved in the COVID-19 pandemic.

Receptive interventions for people with PTSD (Korlin, 2008) and for people with work stress (Beck, 2012) were adapted and modified by MTs (Muller and McShane, 2014). An adaptation of a receptive Music and Imagery intervention (MI) (Montgomery, 2012) for individual therapy provides the client with a relaxation induction, short music listening, and verbal processing (Story and Beck, 2017).

Protocol Development

For the HCWs clinical intervention, the MTs created questionnaires and interviews in accordance with their approach and theoretical MT background rather than use existing published interview protocols (Jacobsen et al., 2019a). The pre-post self-administered questionnaire MusicTeamCare-Q1 (MTC-Q1) and weekly phone feedback sessions were structured to take into consideration the limited time each HCW had to complete them. MTC-Q1 was designed to be quick and easy to fill in. Instructions were provided with MTC-Q1, so that each HCW could complete it independently, in their own time.

The questionnaire focused on four common themes to target the most challenging experiences faced by HCWs in their different work environments. These themes were generated by a literature review relating to psychological distress in HCWs involved in the management of COVID-19 patients (Anelli et al. 2020, Kang et al. 2020) and EpiCentro n.d.).(EpiCentro, n.d.).

The themes were: 1. physical fatigue, **tiredness**, due to long and stressful shifts and the psychological burden of their work; 2. **sadness** as a "deflated/low mood" due to an uncertain future, influenced by mainly negative news and information disseminated by the mass media; 3. **worry** for oneself, and for loved ones, made worse by loneliness and distance from them; 4. **fear**, due to a lack of equipment, exposure to the virus, the risk of infection at work, all exacerbated by information regarding the deaths of colleagues. The four themes were summarised in four keywords (**tiredness, sadness, worry and fear**), which formed the basis for the pre-post questionnaire on participants' musical listening and the first playlists.

Data collected from MTC-Q1 showed the ways in which participants reported the use of the playlists to be helpful for them around these four key themes (tiredness, sadness, worry and fear). The data included themes of the recovery of energy; unloading and decompressing the mind; relaxing from tension; using short, structured moments to take care of oneself; facilitating team spirit and a sense of belonging; evoking a feeling of gratitude for the HCWs taking care of patients. Data relating to this clinical intervention carried out in the COVID Unit of the University Hospital of Bari has previously been published (Giordano et al., 2020). The contents of the questionnaires and their analysis will be presented in detail in another paper.

The process for monitoring the progress of the intervention and collecting information about the clients' music listening was:

1. The MTC-Q1 questionnaire, focused on the themes previously reported and deemed essential for investigation and adding the circumstances of the client when undertaking the

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intervention, was sent via link/platform at the same time as the playlist. The completion of the questionnaire was required pre- and post-listening.

2. A few days later, the playlists designed to invigorate and relax were sent with a Listening Guide attached. One of the MTs contacted each client via WhatsApp in order to monitor the current experience, propose listening to the playlist again and answer any questions.

3. A weekly phone feedback session took place seven days after the playlists were sent, where the MT checked the psychological and physical health of the client. During this phone call the MT also discussed the listening experience with the HCW, employing the deep listening technique used in clinical practice, to create a long-distance relationship. Based on the data gathered, the MT tailored the next playlists.

4. At the end of the project two final playlists, structured with musical holding and closing features, were sent with the final questionnaire (Figure 1).

The weekly discussion of HCWs listening experience (point 3 above) involved a 5-10 minute interview with the MT researcher which included asking: how the listening experience was going; if one or both of the playlists were used and if there was a preference for one of the two; how, why and when the HCW listened, in relation to work shifts; if the HCW wanted to continue the project with other playlists; if they had any preferences for certain musical genres, or specific requests; any other spontaneous comments from the HCW (see Appendix 1). The information collected from the questionnaire and phone feedback was organised in a database and subsequently discussed by the three MTs as a starting point to design new tailored playlists. This process of discussion and comparison (Waldon, 2013) between the three MTs took place on a daily basis for the duration of the project: approximately 15-20 minutes were dedicated to evaluating the numerous salient features which emerged from MTC-Q1 and the weekly feedback for each HCW (Jacobsen et al., 2019b).

During this comparison the three MTs took the following factors into consideration: the results of data collection; the impact of listening as perceived by HCWs; public information regarding the state of the pandemic and the impact of the pandemic on a collective and personal level for each HCW.

The three MTs were working on the wards with the participants and thus shared aspects of the same experience. Reflection upon this shared experience was used to create the clinical intervention and produce the first playlists. The three MTs took on different roles, according to which institution was involved. The MT who usually worked with the participating HCWs had the role of MT analyser, to avoid any personal involvement. The second MT carried out the weekly phone feedback sessions, shared the collected data with the other two MTs and designed the tailored playlists. The third MT listened to the playlists and gave feedback to the other MTs, expressing opinions and any doubts in order to improve the playlist (Figure 2).

The participants, HCWs in two different healthcare institutions, were enrolled in the study at different times between April 1- May 29 2020 for five weeks. They received two playlists per week. During the eight weeks of the clinical intervention the following playlists were produced: 11 *Breathing* playlists, 11 *Energy* playlists, 2 *Serenity* playlists, and 3 *Caress* playlists.

The security and privacy of participants was safeguarded by sensitive data being kept in accordance with the European General Data Protection Regulation (GDPR) (Garante per la protezione dei dati personali, 2021). The MusicTeamCare service was free of charge for the participants and no additional funds were sought, since immediate and rapid intervention was required. At the end of the project, the MTs noted that additional financial support would be

required if this work were to continue long-term, given the amount of time and resources needed.

Playlists development

Each playlist was prepared by the MTs who carried out the phone feedback interview, adapting the musical analysis methodology from Grocke's Structural Model of Music Analysis (SMMA) (Wosch and Wigram, 2007). Devised specifically for research, SMMA can also evaluate and compare musical selections for receptive music therapy experiences in clinical contexts. The process for SMMA is as follows.

The Music Therapist who is analysing their own clinical work collects the recordings and scores of the music programmes and transcripts of the relevant GIM sessions. It is important to note that during a Bonny Method GIM session, the client is speaking out loud, describing their experience of the music in real time, while the GIM therapist writes the details of the client's experience. Therefore, the music and the transcripts of the client's verbal sharing form the core of the analysis. In this study the phone feedback interviews replaced client's verbal sharing.

After the collection phase, there are four further phases to be followed.

1) Phase one requires the Music Therapist analyser to listen to the whole programme and describe the musical characteristics, before listening again whilst following the scores and identifying music meaning units (MMUs). MMUs are musical passages that contain important events and changes, such as the introduction of a theme or variations in tempo or orchestration.

2) In the second phase the analyser studies the imagery transcripts from the sessions where the relevant programme was used, identifying and classifying imagery meaning units (IMUs).

3) The third phase consists of the analyser making a general description of the MMUs and the IMUs, which are put side by side so that they can be compared.

4) In the fourth and final phase, the analyser observes the important musical elements in several categories. This analysis is verified by asking a colleague to carry out the same procedure.

In the current study, the 4 steps protocol described above was applied by the research team, who observed important musical elements included in the selected pieces before they were administered to the Doctors, Nurses and Health care Assistants involved in the pilot project. Due to the urgent nature of the work, SMMA was carried out by two MTs at the same time, working remotely from each other. After the sessions, the MT analyser met the two MTs, who shared imagery and musical elements in a group discussion.

In accordance with the SMMA's fourth phase procedure, as a pilot process, the playlists were listened to by two of the three MTs before being sent to the HCWs. In the event of any difference of opinion between the two MTs, further discussion took place with the MT analyser about the pieces chosen and the structure of the playlist, in order to produce playlists mutually agreed between all three MTs.

The playlists were constructed in such a way that the music would not take HCWs into a deep emotional place, meaning that they could safely listen alone. This denotes a significant difference between the MusicTeamCare intervention protocol and GIM, which promotes a deep musical experience for the listener. GIM individual sessions are guided in person, in four stages: pre-music discussion; relaxation and focus; music and imagery in dialogue with the therapist; processing and integration of the experience (Grocke and Moe, 2015). In contrast, the main goal in designing this protocol was to propose time for conscious self-care rather than stimulating deeper self-work. If serious difficulties or discomfort had emerged during the weekly feedback phone session, the MT would have referred the client to the resident psychologist for support.

When choosing the pieces the MTs took the following into consideration. 1) preferred musical genre, 2) requests from the participant, 3) age of the participant, 4) musical experiences

(e.g., playing an instrument, attending live concerts), 5) drawing pieces from the previous playlist into the new playlist to create a link between listening experiences, 6) the use of songs that could support and strengthen the HCW's sense of self, whilst avoiding excessive personalisation of the playlists. The impact of the COVID-19 pandemic in Italy at that time (March-May 2020) was also taken into consideration in relation to the psychological influences on the MTs wellbeing. The following paragraphs presents in details two examples of different category of playlists and related Listening Guide.

Two Playlists: Breathing and Energy

The principal purpose of the *Breathing* playlists was to connect the listener to their breathing, to promote relaxation and/or facilitate rest or sleep, based on Music Breathing (MB) by Korlin, who developed a specific method for GIM clients with post-traumatic stress disorder (PTSD). This method supports the self-regulation of autonomic states of activation through the integration of music listening, imagery and meditative breathing (Korlin, 2008).

The *Breathing* playlists used classical and pop music, selected according to specific GIM criteria: a steady BPM range; a predictable melodic line; a tonal harmonic structure with predictable sequences of suspended chords or harmonies that resolve; orchestration consisting mostly of string and wind instruments; subtle changes in dynamics; consistent texture; a bass line which supports the melody; general predictability on the melodic, rhythmic and harmonic level (Grocke and Wigram, 2007).

The sequence of the pieces was constructed to promote relaxation and holding, like a gentle embrace, leading the client towards rest and sleeping. For example, in *Breathing 1* (see Table 1) Morricone's piece "Brothers" from "The Mission" soundtrack opens up a space for rest with a full texture with winds and strings and a soaring melody. This sense of relaxation develops during

Mozart's Andantino (Flute and Harp concerto in C major, K 299), in which the flute and harp hold the listener in a soft embrace, sustaining the breathing begun in the previous piece. Hisaishi's piece "One Summer's Day" with piano and a variety of instrumental timbres leads the listener towards a still-deeper state of relaxation and, finally, to Pat Metheny's piece "The moon is a harsh mistress" with guitar solo, which supports deep breathing.

Another playlist example was *Breathing CN6* (see Table 2) which alternates between pieces from the classical repertoire and the pop/new age genre. The *Intermezzo* from Bizet's "Carmen" establishes a calm and supportive mood that is confirmed by the two pieces that follow (Bach, *Suite n.3*, 'Air', arranged for a jazz trio– of piano, double-bass and drums; Sakamoto, *Amore*). The playlist provides a diminuendo, both in terms of dynamic level and use of instruments, moving from an orchestra to a jazz trio with synthesised sounds and, finally, to natural sounds. The gradual decrease in pulse and the sense of calmness helps to sustain a relaxing mood and deep breathing, encouraging the listener to drift off to sleep.

The principal purpose of the *Energy* playlists was to offer invigorating support and stimulating imagery when facing moments of great fatigue, and/or in preparation for an event that required a significant investment of energy (e.g., a tiring work shift, an emotionally stressful goal). These playlists used classical, pop and jazz pieces, selected according to specific criteria: variable tempo; unpredictability in rhythmic, melodic and harmonic features; sudden changes in volume; a melodic line which may include wide intervals; a dissonant harmonic structure which may contain unexpected intervals; the inclusion of brass and percussion; a musical texture which may vary from thin to thick; pauses and sudden accelerando, ritardando, diminuendo and crescendo (Grocke and Wigram, 2007).

In *Energy 1* (see Table 1) the order of the songs was designed to build to a crescendo on the harmonic and rhythmic level, to invigorate the listener. The peak of the playlist is the fourth piece (Dire Straits' "Money for Nothing"), while the last two pieces prepare for the conclusion of the

listening process. Pop/rock genres were preferred for two main reasons. In our cultural context, many listeners enjoy these styles of music and these genres use instruments like electric guitar, bass, and drums, which are charged with energy and help the listener to quickly draw on their reserves of strength. It was a deliberate choice to use songs from different eras in this musical selection, to reflect the listeners' musical and cultural histories.

Another example was *Energy 2* (see Table 2). This playlist, consisting of film soundtracks, offered several strong images. The melody of the first piece by Hans Zimmer (*Simba is alive* from The Lion King soundtrack) begins in a classical style and gently takes the listener to open spaces, sustained by a symphonic orchestra. The second piece by Steve Jablonsky (*Arrival to earth* from the Transformers soundtrack) introduces a different type of energy in a crescendo, which reaches a peak in the following three pieces (*Microbots*, *Test Drive* and *End Titles of Fantastic Beasts*). The last piece (*Arlo makes his mark*) leaves the listener invigorated, quiet and calm.

During the production of the tailored playlists the three MTs realised that some requests were common to several participants and referred to the same themes: sleep, recovery, charge, and energy before starting a shift. Therefore, some playlists were designed to fulfil a particular request, and offered to participants who expressed similar needs (*Energy 2, Breathing CN6*). Some playlists used more vocal music than instrumental music. At the end of the intervention (Week 5) the HCWs received two identical final playlists (*Energy 3* and *Serenity 3*) with musical holding and closing features. These playlists were compiled by collating the themes that had emerged from the weekly phone feedback session with HCWs. The MTs intended to offer a synthesis of previous listening experiences, with less evocative force. The pieces were selected from participants' preferred musical genres and included some previously used pieces in different arrangements, to maintain a connection with previous experiences. During the last phone call the participants were informed that they would receive the final questionnaire.

Listening Guide

A Listening Guide for the client was attached to the relevant playlist. In relation to the *Breathing* playlist, the healthcare worker was directed to follow these steps:

1) Find a space away from noise and/or external distractions.

2) Sit in a comfortable position and close your eyes if possible.

3) Put your hands on your chest for 30 seconds, breathing in and breathing out, listening the movement of your breath.

4) Focus your attention on a pleasant place.

5) Start the playlist.

The same conditions are suggested for the *Energy* playlist, but here the client is invited to concentrate on their perceived energy level and to focus their attention on a chosen colour, as during the GIM centring induction (Bonny, 2002).

In receptive MT methods, and specifically in GIM, induction towards the relaxation process is a fundamental part of the session. It can stimulate the client to perceive and focus attention on their body (Grocke and Moe, 2015), encouraging them to connect with the proposed listening experience and with the first piece of the selected playlist. It is important to state that during an in-person session the induction is chosen by the MT on the basis of information collected through observing verbal/nonverbal language, the bodily attitude of the client and the musical selection offered for the session. Given the impossibility of conducting individual sessions in person, the Listening Guide reflected the client's general parameters as defined during assessment, offering a playlist selected by MTs working remotely.

Discussion

The MusicTeamCare experience presented above could be applied to several contexts, to meet the needs of different population in clinical practice for future application. MusicTeamCare entails the use of a tailored playlist for specific clients. The preparation, transmission, and administration has been designed to meet the particular goals of each client. The clinical intervention was carried out by three MTs, following clearly-defined steps. Their roles were interchangeable, so there would be two MTs clinical practitioners and one MT analyser for each client, depending on the MTs existing relationship with that client.

During standard receptive clinical practice, MTs evaluate the client's overall situation by analysing musical parameters and verbal/non-verbal language revealed during in-person sessions. Working remotely requires different strategies to carry out this kind of evaluation. So, clients' psychological and physical health were assessed using tools and methods taken from specific contexts: team meetings, managerial/institutional meetings, and informal discussions with colleagues. Data collected from specific contexts were used to identify and develop thematic areas centring around the common and recurring needs of the participants, to create a first questionnaire (pre-post) to monitor the clients' music listening. The MusicTeamCare intervention included a weekly feedback session via a phone call in order to prepare tailored playlists. This allowed further evaluation of participants' wellbeing.

In the project's final phase, a second questionnaire, structured in a Likert form scale, was administered to evaluate the client's experience. This questionnaire was constructed around the thematic areas and common/recurring needs which emerged during the initial information gathering phase. The MT analyser, who had no previous contact with the client, sent this questionnaire. In any future clinical interventions, the construction of and methods for administering questionnaires would be a key factor in conducting the remote intervention safely. To develop the intervention further, it would be necessary to carry out a pilot study which focuses on qualitative (rather than quantitative) aspects of the questionnaire applied in different contexts.

The presence of three MTs allowed for evaluation and discussion, which may increase the impact the musical selections have on the clients. As a peer supervision group, the MTs team offered a safe space to share "resonances" regarding the internal musical coherence of the selected pieces, and to reflect on this in relation to the client's personal journey. Stern (Stern, 2010) affirms that MTs are primarily musicians who are extremely sensitive to the vitality forms that they meet in the client's approach, working specifically on the dynamics of experience. Being in touch with music activates a field of vital energy in the shared therapist-client relationship within the musical experience. In clinical practice, a triadic relationship is activated between a MT, their client and the music (Bunt and Hoskyns, 2002). In the MusicTeamCare project the dynamics generated from the presence of three MTs amplifies the potential of the vital and relational energy contained in music sharing, even when taking place remotely (Figure 3).

The weekly phone feedback session further strengthened the long-distance therapist-client relationship, which had been activated and supported by listening to the playlists. HCWs were able to talk with one of the two MTs from outside their own institutional team about their traumatic experience during a crisis situation, sharing the feelings and imagery that arose during the music listening experience. As stated in the Introduction, unlike other telehealth approaches which involve the use of music, the main innovation of this intervention lies in the deep listening by the MTs during the phone calls and the profound sharing by participants. These interactions may be described as a different form of GIM Prelude and Postlude (Bruscia and Grocke, 2002). In addition, completing the MTC-Q1 questionnaire after listening allowed the HCWs to devote time to listening to their inner selves, breaking up their work routine and their long, intense shifts.

The weekly feedback call gave the HCWs an opportunity to listen to themselves and then communicate their feelings, counteracting the strong perception of depersonalisation experienced on the wards due to the use of personal protective equipment. Experience has highlighted the importance of voice quality and modulation during phone conversations. This is an aspect which

certainly needs to be explored further. The phone interviews created strong, profound contact between HCWs and MTs, especially as they occurred while the country was in total lockdown. HCWs could experience the potential of music therapy even within a long-distance therapeutic relationship, using music as a resource to take care of themselves and talk about their experience. HCWs stated their wish to continue the MTC project in a future second phase, through their spontaneous comments to the MTs.

It was important to offer the healthcare workers at least two types of MusicTeamCare playlists, with different musical qualities, like *Breathing* and *Energy*. Experience gained from this intervention suggests that criteria for playlists could be as follows:

1. avoiding connections between the selected music and films, advertisements, or personal issues;

2. using clients' musical preferences, to make the selected music more approachable and relevant to them;

3. a playlist length of approximately 15-20 minutes, in order to avoid inducing a deep state of experience as usually occurs during an in-person receptive MT session;

4. greater use of instrumental music than vocal music, which could provoke projections and/or identification processes in the listener;

5. a standard playlist structure with introduction, *crescendo,* and conclusion.

As the MTs were involved with both the Italian health system during COVID-19 and the Italian musical scene, they were able to use their knowledge of Italian musical styles, tastes and sensitivities, when choosing pieces for the playlists. The MTs had direct experience of the limitations imposed by the pandemic, as well as the strength and resources that music may provide: if properly focused on an explicit need, music can offer valuable support. The daily online meeting between the MTs was an additional opportunity for mutual support during a time when the typical rhythms of

everyday life had been obliterated by the lockdown. As the effects of the pandemic continue to be felt in both personal and professional life, the MTs have become more convinced that self-care is a fundamental aspect for both HCWs and MTs (Giordano et al., 2020).

In managing the emotional load of the project, peer supervision was essential as a means of reflection, to understand the content communicated by each HCW during weekly feedback, and as a resource for monitoring the MTs well-being. The emotional impact of the pandemic was alleviated by the awareness that the participants benefited from having playlists conceived, tested, and discussed within the MTs' team.

Conclusions

It is the authors' hope that the clinical intervention presented here could be helpful to other MTs, both in Italy and abroad, who may consider setting up a similar service. At the time of writing, it appears that the restrictions imposed during the pandemic will gradually be lifted, although there is still much uncertainty and the possibility of future anti-COVID-19 measures.

The MusicTeamCare project had a high financial cost, due to the human resources and time required for development and it is noted that this could be a limitation for further applications of the protocol. The unexpected end of the project, brought about by lack of funds, brought an abrupt end to any further application and data collection. Nevertheless, its cost effectiveness was highlighted by the results achieved during the pilot study in Italy (Giordano et al., 2020). The three MTs received spontaneous comments from HCWs participating in the intervention, who expressed how important it was for them to be supported and listened to by their MT: "It has been a precious resource to rebalance the emotions accumulated during the work shift and to relieve the physical and psychological fatigue"; "It has been the only real support offered during these difficult moments." They thanked the MTs for the service offered and expressed their recognition of professional music

therapy as an essential resource not only for their personal well-being, but also for service users who were suffering from stress due to the effects of the pandemic.

There is scope for further development of this pilot, which could measure the participants' physiological parameters during the listening experience, the psychological implications of giving voice to emotions during an intervention delivered by MTs and the implementation of a platform dedicated to the exclusive use of MusicTeamCare, exploring the creation of a specific app. When conditions allow, it would be valuable to increase the size of the research group to expand the scope of the MusicTeamCare project and carry out interventions both remotely and in person. Despite some limitations, MusicTeamCare appeared to be helpful for the people who participated experiencing high levels of stress, as demonstrated by the data collected in the pilot project (Giordano et al., 2020). We hope it may become a resource which can be adapted to emergency and crisis situations, reducing feelings of loneliness, fear and worry and enabling clients to share their lived experience whilst in traumatic conditions.

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