Music Melody and Adequate Sleep by the Elderly

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ABSTRACT

This study was to assess the music melody and adequate sleep by the elderly. Music melody is a series of notes played in an order that is memorable and recognizable as a separate unit. Adequate sleep is one of the essential needs that elderly need to impact in the changes of the biological or psychological condition. Elderly need music melody and adequate sleep to protect their body functions and to sustain their quality of life. Music melody can relief adequate sleep by helping you feel relaxed and at ease. This study concluded that music melody has been the simplest way to improve adequate sleep hygiene, improving ability to fall asleep quickly and feel more rested. Adequate sleep is essential to good mental and physical health of the elderly. Deficiency of adequate sleep can have severe negative impacts on a series of elderly. However, music melody allows adequate sleep by helping you feel relaxed and at ease. One of the recommendations made was that music melody should be played to elderly at the evening hours to improve adequate sleep.

KEYWORDS: Music, Melody, Adequate, Sleep and Elderly

Introduction

The elderly population continues to increase throughout the world. According to Turkish Statistical Institute data, in 2013 the elderly population increased to 7.7%. Old age is a period when many physical and psychological problems can arise. Along with dysfunction of organs and systems, sleep, which has significance for life, is influenced by the aging process (Yücel 2009). Although the wider benefits of music melody for elderly are well documented (Hallam, 2010) less attention has been paid to the power of music in the lives of the elderly. Estes, Edosa and Okeke, (2008) stated that no matter the origin, music melody has proven to be an interesting medium not only in passing across social, cultural and political instructions, but it has also turned out to be a useful tool of adequate sleep to the elderly. Iwasaki, Coyle, and Shank (2010), music melody is one of several culturally meaningful and creative leisure activities that are 'spiritually refreshing' and promote self-expression, positive health, and adequate sleep. Listening to music melody at bedtime improved sleep quality in elderly, and music melody was much better at improving adequate sleep quality than rhythmic music. Hindustan Times (2020) stated music melody may improve adequate sleep by slowing your heart rate and breathing and lowering your blood pressure. This, in turn helps lower your levels of stress and anxiety. Adequate sleep in elderly may be significantly improved through music melody, particularly through slow-tempo, soft-volume, and smooth melodic music.

Concept of Music Melody

Music melody is a series of notes played in an order that is memorable and recognizable as a separate unit. Music melody is the aesthetic product of a given succession of pitches in musical time, implying rhythmically ordered movement from pitch to pitch (Encyclopaedia Britannica 2019). Music melody is perhaps the most identifiable element of a musical composition. It can be soulful vocal passage, a roaring guitar riff, or a rapid saxophone run. Melodies can be simple or intricate. They can stand alone, or work together with other melodies in a more complex composition (MASTERCLASS 2020). Music melody is a collection of musical tones that are grouped together as a single entity. Most compositions consist of multiple melodies working in conjunction with one another. Music melody is one of the most basic elements of music. A note is a sound with a particular pitch and duration. String a series of notes together, one after the other, and you have a melody. But the melody of a piece of music isn't just any string of notes. It's the notes that catch your ear as you listen; the line that sounds most important is the melody.

Melody is a timely arranged linear sequence of pitched sounds that the listener perceives as a single entity. Music melody in Western music by the late 19th century was considered to be the surface of a group of harmonies. The top tone of a chord became a melody tone; chords were chosen for their colour and sense of direction relative to each other and were spaced so that a desired succession of tones lay on top. Any melody, then, had underlying chords that could be deduced. Thus, a skilled guitarist, analyzing mentally, can apply chords to a melody (Encyclopaedia Britannica 2019). Music melody is one of the three main parameters that makes music out of a collection of sounds and beats, alongside harmony and rhythm. It is probably the most easily recognized aspect of music, and if someone randomly came up to you and asked you to make music, you would probably first produce a melody (Chase, 2021). Music melody is a sweet or agreeable succession or arrangement of sounds.

Concept of Adequate Sleep

Adequate sleep improved concentration, refreshes body, restores energy. According to the National Sleep Foundation, adequate sleep for adults is between 7 and 9 hours a night, and athletes may benefit from as many as 10 hours. Adequate sleep and getting enough of it at the right times, is as essential to survival as food and water. Without sleep you can't form or maintain the pathways in your brain that let you learn and create new memories, and it's harder to concentrate and respond quickly. Adequate sleep is important to a number of brain functions, including how nerve cells (neurons) communicate with each other. In fact, your brain and body stay remarkably active while you sleep. Adequate sleep plays a housekeeping role that removes toxins in your brain that build up while you are awake. Adequate sleep is a complex and dynamic process that affects how you function in ways scientists are now beginning to understand. Weatherspoon (2019), adequate sleep is essential for helping a person maintain optimal health and well-being. When it comes to their health, sleep is as vital as regular exercise and eating a balanced diet.

Adequate sleep is a critical factor for adolescent health and health-related behaviors. However, the relationships between adequate sleep and health status, e.g. frequency of doctor visits, non-obesity and health-related behaviors, are not well understood. Humans spend almost a third of

their lifetimes sleeping; quality sleep is essential to human health (Fox 2000). Sleep is a state of unconsciousness from which one can be aroused. More than a periodic rest condition for the body and nervous system, it is a phase during which the body and nervous system can recuperate. Notably, protein synthesis is more active during sleep than during waking hours. Berger, Zieve, & Conway, (2020), adequate sleep is an essential function that allows your body and mind to recharge, leaving you refreshed and alert when you wake up. Adequate sleep also helps the body remain healthy and stave off diseases. Without enough sleep, the brain cannot function properly. This can impair your abilities to concentrate, think clearly, and process memories (National Institutes of Health 2019). According to N.I.N.D.S (2019) Adequate sleep is an important part of your daily routine, you spend about one-third of your time doing it.

Stages of Sleep

Sleep has been traditionally divided into 4 categories: awake, light, deep, and REM sleep. Each one plays an essential role in maintaining your mental and physical health (OURA 2021).

Rapid Eye Movement Sleep (REM): Rapid eye movement sleep (REM sleep or REMS) is a unique phase of sleep in mammals and birds, characterized by random rapid movement of the eyes, accompanied by low muscle tone throughout the body, and the propensity of the sleeper to dream vividly (Wikipedia 2021). REM sleep happens 90 minutes after you fall asleep. The first period of REM typically lasts 10 minutes. Each of your later REM stages gets longer, and the final one may last up to an hour. Your heart rate and breathing quickens (Felson, 2020). Rapid eye movement sleep is one of the four stages that the brain goes through during the sleep cycle (Stibich, & Poor, 2020). This period of the sleep cycle usually takes place about 90 minutes after a person first falls asleep. It is marked by a number of physiological changes that include muscle relaxation, eye movement, faster respiration, and increased brain activity.

Deep Sleep: Deep sleep is especially important for brain health and function. Deep sleep helps the brain create and store new memories and improves its ability to collect and recall information (Weatherspoon, 2019). Deep sleep plays a role in memory, the body may have difficulty making new memories or retaining information if it does not get adequate sleep. Deep sleep plays a role in keeping the hormones balanced. The pituitary gland secretes human growth hormone during this stage, which helps tissues in the body grow and regenerate cells. Deep sleep is the sleep stage that is associated with the slowest brain waves during sleep (ASA 2021). Deep sleep is responsible for helping process the information you encounter each day. Without adequate sleep, the brain can't convert information to your memory.

Awake Time and Light Sleep: Awake time is the time spent in bed before and after falling asleep. It also includes brief awakening during sleep. Lee (2018) stated that this stage is the transition between awake and sleeping where we experience light sleep and can be easily awoken. We experience eye. Body and muscle movement and this lasts for approximately 5 minutes. Some people experience 'Hypnic Jerks' (where a person experiences a falling sensation or jumps violently in bed) as a result of the body going to sleep too quickly. We then enter a 'Hypnagogic State' and experience our first dream of the night.

Concept of Elderly

Conventionally, "elderly" has been defined as a chronological age of 65 years old or older, while those from 65 through 74 years old are referred to as "early elderly" and those over 75 years old as "late elderly" (Orimo, Ito, Suzuki, Araki, Hosoi and Sawabe, 2006). Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person, but like many westernized concepts, this does not adapt well to the situation in Africa. Today, people are living longer than ever before due to advances in education, technology, medicine, food distribution, and sanitary conditions. Chalise, (2019) noted that aging is classified as biological aging, psychological aging social aging, chronological aging and functional aging. He also stated that in the western and developed countries chronologically 65 years is considered as beginning of aging and accordingly the aging can be classified as: (a) Young old (65 to 74); (b) Middle old (75 to 84); (c) Old-old (85+) and Centenarians (100+).

Elderly people often have limited regenerative abilities and are more susceptible to disease, syndromes, injuries and sickness than younger adults. Aging is a lifelong process of growing up and growing old. It begins at conception and ends with death. So, in this sense, we are all aging from the time of birth (Chalise, 2019). The ageing process is of course a biological reality which has its own dynamic, largely beyond human control. However, it is also subject to the constructions by which each society makes sense of old age. Old age refers to ages nearing or surpassing the life expectancy of human beings, and is thus the end of the human life cycle.

Effect of Music Melody on Adequate Sleep

Music melody is a powerful art form. While it may get more credit for inspiring people to dance, it also offers a simple way to improve adequate sleep hygiene, improving ability to fall asleep quickly and feel more rested (Newsom, & Rehman, 2021). Music melody can aid adequate sleep by helping you feel relaxed and at ease. Loewy, Stewart, Dassler, Telsey, & Homel, (2013), stated that parents know from experience that lullabies and gentle rhythms can help babies to fall asleep. Tan (2004) supports this common observation, showing that children of all ages, from premature infants to elementary school children, sleep better after listening to soothing melodies. Fortunately, children aren't the only ones who can benefit from lullabies before bedtime. People across age groups report better sleep quality after listening to music melody. Parents know from experience that lullabies and gentle rhythms can help babies to fall asleep. Science also supports this common observation, showing that children of all ages, from premature infants to elementary school children, sleep better after listening to soothing melodies (Newsom and Rehman 2021).

In the same vain also, in one study, adults who listened to 45 minutes of music before going to sleep reported having better sleep quality beginning on the very first night. Even more encouraging is that this benefit appears to have a cumulative effect with study participants reporting better sleep the more often they incorporated music into their nightly routine. Attempts to remedy poor sleep include the pervasive use of pharmaceutical sleep aids, which come with a list of negative side effects. Again, music has many promising neurological and physiological effects that may be indicative of its effective use in the fight against sleep loss. In some clinical populations listening to music has been suggested to reduce anxiety (Koelsch et al 2016; Fancourt et al 2016) and the subjectively negative effects of physical pain (Nilsson 2008). Potential mechanisms for effect are ascribed to the modulation of sympathetic nervous system

activity (Fancourt 2014) and levels of the stress hormone cortisol (Linnemann et al 2015; Thoma 2013).

Conclusion

This study concluded that music melody has been the simplest way to improve adequate sleep hygiene, improving ability to fall asleep quickly and feel more rested. Adequate sleep is essential to good mental and physical health of the elderly. Deficiency of adequate sleep can have severe negative impacts on a series of elderly. However, music melody allows adequate sleep by helping you feel relaxed and at ease.

Recommendations

1. Music melody should be played to elderly at the evening hours to improve adequate sleep.
2. Elderly should listen to music for more than four weeks to see the most benefit from listening to music melody.
3. Elderly should make music melody compulsory so that it can promote the high quality of adequate sleep throughout their life-course

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