**Chapter 21**

**Aromas, Music**

Altier, N., & Stewart, J. (1999). The role of dopamine in the nucleus accumbens in analgesia. *Life Sci, 65*(22), 2269-2287.

Bernatzky, G., Presch, M., Anderson, M., & Panksepp, J. (2011). Emotional foundations of music as a non-pharmacological pain management tool in modern medicine. *Neurosci Biobehav Rev, 35*(9), 1989-1999. doi:10.1016/j.neubiorev.2011.06.005

Blood, A. J., & Zatorre, R. J. (2001). Intensely pleasurable responses to music correlate with activity in brain regions implicated in reward and emotion. *Proc Natl Acad Sci U S A, 98*(20), 11818-11823. doi:10.1073/pnas.191355898

Boehm, K., Büssing, A., & Ostermann, T. (2012). Aromatherapy as an adjuvant treatment in cancer care--a descriptive systematic review. *Afr J Tradit Complement Altern Med, 9*(4), 503-518.

Bradt, J., Dileo, C., Grocke, D., & Magill, L. (2011). Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database Syst Rev*(8), CD006911. doi:10.1002/14651858.CD006911.pub2

Bruckenthal, P., Marino, M. A., & Snelling, L. (2016). Complementary and Integrative Therapies for Persistent Pain Management in Older Adults: A Review. *J Gerontol Nurs, 42*(12), 40-48. doi:10.3928/00989134-20161110-08

Buckle, J. (1999). Use of aromatherapy as a complementary treatment for chronic pain. *Altern Ther Health Med, 5*(5), 42-51.

Buckle, J. (2001). The role of aromatherapy in nursing care. *Nurs Clin North Am, 36*(1), 57-72.

Buckle, J. (2002). Clinical aromatherapy and AIDS. *J Assoc Nurses AIDS Care, 13*(3), 81-99. doi:10.1177/10529002013003006

Busch, V., Magerl, W., Kern, U., Haas, J., Hajak, G., & Eichhammer, P. (2012). The effect of deep and slow breathing on pain perception, autonomic activity, and mood processing--an experimental study. *Pain Med, 13*(2), 215-228. doi:10.1111/j.1526-4637.2011.01243.x

Cepeda, M. S., Carr, D. B., Lau, J., & Alvarez, H. (2006). Music for pain relief. *Cochrane Database Syst Rev*(2), CD004843. doi:10.1002/14651858.CD004843.pub2

Chanda, M. L., & Levitin, D. J. (2013). The neurochemistry of music. *Trends Cogn Sci, 17*(4), 179-193. doi:10.1016/j.tics.2013.02.007

de Tommaso, M., Sardaro, M., & Livrea, P. (2008). Aesthetic value of paintings affects pain thresholds. *Conscious Cogn, 17*(4), 1152-1162. doi:10.1016/j.concog.2008.07.002

Dhany, A. L., Mitchell, T., & Foy, C. (2012). Aromatherapy and massage intrapartum service impact on use of analgesia and anesthesia in women in labor: a retrospective case note analysis. *J Altern Complement Med, 18*(10), 932-938. doi:10.1089/acm.2011.0254

Dileo, C., Bradt, J., & Grocke, D. (2008). Music interventions for mechanically ventilated patients. *The Cochrane Library*.

Ertas, M., Sagduyu, A., Arac, N., Uludag, B., & Ertekin, C. (1998). Use of levodopa to relieve pain from painful symmetrical diabetic polyneuropathy. *Pain, 75*(2-3), 257-259.

Fancourt, D., Ockelford, A., & Belai, A. (2014). The psychoneuroimmunological effects of music: a systematic review and a new model. *Brain Behav Immun, 36*, 15-26. doi:10.1016/j.bbi.2013.10.014

Fritz, T., Jentschke, S., Gosselin, N., Sammler, D., Peretz, I., Turner, R., Koelsch, S. (2009). Universal recognition of three basic emotions in music. *Curr Biol, 19*(7), 573-576. doi:10.1016/j.cub.2009.02.058

Gardner, W. J., Licklider, J. C., & Weisz, A. Z. (1960). Suppression of pain by sound. *Science, 132*(3418), 32-33.

Garza-Villarreal, E. A., Wilson, A. D., Vase, L., Brattico, E., Barrios, F. A., Jensen, T. S., Vuust, P. (2014). Music reduces pain and increases functional mobility in fibromyalgia. *Front Psychol, 5*, 90. doi:10.3389/fpsyg.2014.00090

Gedney, J. J., Glover, T. L., & Fillingim, R. B. (2004). Sensory and affective pain discrimination after inhalation of essential oils. *Psychosom Med, 66*(4), 599-606. doi:10.1097/01.psy.0000132875.01986.47

Goldstein, A. (1980). Thrills in response to music and other stimuli. *Physiological Psychology*, *8*(1), 126-129.

Guétin, S., Coudeyre, E., Picot, M. C., Ginies, P., Graber-Duvernay, B., Ratsimba, D., Hérisson, C. (2005). [Effect of music therapy among hospitalized patients with chronic low back pain: a controlled, randomized trial]. *Ann Readapt Med Phys, 48*(5), 217-224. doi:10.1016/j.annrmp.2005.02.003

Guétin, S., Giniès, P., Siou, D. K., Picot, M. C., Pommié, C., Guldner, E., Touchon, J. (2012). The effects of music intervention in the management of chronic pain: a single-blind, randomized, controlled trial. *Clin J Pain, 28*(4), 329-337. doi:10.1097/AJP.0b013e31822be973

Gutgsell, K. J., Schluchter, M., Margevicius, S., DeGolia, P. A., McLaughlin, B., Harris, M., Wiencek, C. (2013). Music therapy reduces pain in palliative care patients: a randomized controlled trial. *J Pain Symptom Manage, 45*(5), 822-831. doi:10.1016/j.jpainsymman.2012.05.008

Hole, J., Hirsch, M., Ball, E., & Meads, C. (2015). Music as an aid for postoperative recovery in adults: a systematic review and meta-analysis. *Lancet, 386*(10004), 1659-1671. doi:10.1016/S0140-6736(15)60169-6

Huang, S. T., Good, M., & Zauszniewski, J. A. (2010). The effectiveness of music in relieving pain in cancer patients: a randomized controlled trial. *Int J Nurs Stud, 47*(11), 1354-1362. doi:10.1016/j.ijnurstu.2010.03.008

Jaber, S., Bahloul, H., Guétin, S., Chanques, G., Sebbane, M., & Eledjam, J. J. (2007). [Effects of music therapy in intensive care unit without sedation in weaning patients versus non-ventilated patients]. *Ann Fr Anesth Reanim, 26*(1), 30-38. doi:10.1016/j.annfar.2006.09.002

Jacobson, A. F. (1999). Intradermal normal saline solution, self-selected music, and insertion difficulty effects on intravenous insertion pain. *Heart Lung, 28*(2), 114-122. doi:10.1053/hl.1999.v28.a95256

Juslin, P. N., & Västfjäll, D. (2008). Emotional responses to music: the need to consider underlying mechanisms. *Behav Brain Sci, 31*(5), 559-575; discussion 575-621. doi:10.1017/S0140525X08005293

Kim, J. T., Wajda, M., Cuff, G., Serota, D., Schlame, M., Axelrod, D. M., Bekker, A. Y. (2006). Evaluation of aromatherapy in treating postoperative pain: pilot study. *Pain Pract, 6*(4), 273-277. doi:10.1111/j.1533-2500.2006.00095.x

Korhan, E. A., Uyar, M., Eyigör, C., Hakverdioğlu Yönt, G., Çelik, S., & Khorshıd, L. (2014). The effects of music therapy on pain in patients with neuropathic pain. *Pain Manag Nurs, 15*(1), 306-314. doi:10.1016/j.pmn.2012.10.006

Koyanagi, S., Himukashi, S., Mukaida, K., Shichino, T., & Fukuda, K. (2008). Dopamine D2-like receptor in the nucleus accumbens is involved in the antinociceptive effect of nitrous oxide. *Anesth Analg, 106*(6), 1904-1909. doi:10.1213/ane.0b013e318172b15b

Krall, B., & Krause, W. (1993, July). Efficacy and tolerance of Mentha arvensis aetheroleum. In *24th International Symposium on Essential Oils*.

Kullich, W., Bernatzky, G., Hesse, H. P., Wendtner, F., Likar, R., & Klein, G. (2003). [Music therapy--effect on pain, sleep and quality of life in low back pain]. *Wien Med Wochenschr, 153*(9-10), 217-221.

Lakhan, S. E., Sheafer, H., & Tepper, D. (2016). The Effectiveness of Aromatherapy in Reducing Pain: A Systematic Review and Meta-Analysis. *Pain Res Treat, 2016*, 8158693. doi:10.1155/2016/8158693

Manning, B. H., Morgan, M. J., & Franklin, K. B. (1994). Morphine analgesia in the formalin test: evidence for forebrain and midbrain sites of action. *Neuroscience, 63*(1), 289-294.

Masaoka, Y., Takayama, M., Yajima, H., Kawase, A., Takakura, N., & Homma, I. (2013). Analgesia is enhanced by providing information regarding good outcomes associated with an odor: Placebo effects in aromatherapy? *Evid Based Complement Alternat Med, 2013*, 921802. doi:10.1155/2013/921802

Masaoka, Y., Yajima, H., Takayama, M., Kawase, A., Takakura, N., & Homma, I. (2010). Olfactory stimuli modifies pain and unpleasantness investigating respiration and brain areas estimated by dipole tracing method. *Journal of Japanese Society of Aromatherapy*, vol. 9, no. 1, pp.23-29.

McCaffrey, R., & Freeman, E. (2003). Effect of music on chronic osteoarthritis pain in older people. *J Adv Nurs, 44*(5), 517-524.

Mitchell, L. A., & MacDonald, R. A. (2006). An experimental investigation of the effects of preferred and relaxing music listening on pain perception. *J Music Ther, 43*(4), 295-316.

Onieva-Zafra, M. D., Castro-Sánchez, A. M., Matarán-Peñarrocha, G. A., & Moreno-Lorenzo, C. (2013). Effect of music as nursing intervention for people diagnosed with fibromyalgia. *Pain Manag Nurs, 14*(2), e39-46. doi:10.1016/j.pmn.2010.09.004

Paalzow, G. H. (1992). L-dopa induces opposing effects on pain in intact rats: (-)-sulpiride, SCH 23390 or alpha-methyl-DL-p-tyrosine methylester hydrochloride reveals profound hyperalgesia in large antinociceptive doses. *J Pharmacol Exp Ther, 263*(2), 470-479.

Rouwette, T., Vanelderen, P., Roubos, E. W., Kozicz, T., & Vissers, K. (2012). The amygdala, a relay station for switching on and off pain. *Eur J Pain, 16*(6), 782-792. doi:10.1002/j.1532-2149.2011.00071.x

Roy, M., Mailhot, J. P., Gosselin, N., Paquette, S., & Peretz, I. (2009). Modulation of the startle reflex by pleasant and unpleasant music. *Int J Psychophysiol, 71*(1), 37-42. doi:10.1016/j.ijpsycho.2008.07.010

Salimpoor, V. N., van den Bosch, I., Kovacevic, N., McIntosh, A. R., Dagher, A., & Zatorre, R. J. (2013). Interactions between the nucleus accumbens and auditory cortices predict music reward value. *Science, 340*(6129), 216-219. doi:10.1126/science.1231059

Shin, B. C., & Lee, M. S. (2007). Effects of aromatherapy acupressure on hemiplegic shoulder pain and motor power in stroke patients: a pilot study. *J Altern Complement Med, 13*(2), 247-251. doi:10.1089/acm.2006.6189

Stefano, G. B., Zhu, W., Cadet, P., Salamon, E., & Mantione, K. J. (2004). Music alters constitutively expressed opiate and cytokine processes in listeners. *Med Sci Monit, 10*(6), MS18-27.

Sunitha Suresh, B. S., De Oliveira, G. S., & Suresh, S. (2015). The effect of audio therapy to treat postoperative pain in children undergoing major surgery: a randomized controlled trial. *Pediatr Surg Int, 31*(2), 197-201. doi:10.1007/s00383-014-3649-9

Valnet, J. (1980). The practice of aromatherapy. Saffron Waldon, U.K.: C. W. Daniel

Villemure, C., & Bushnell, M. C. (2009). Mood influences supraspinal pain processing separately from attention. *J Neurosci, 29*(3), 705-715. doi:10.1523/JNEUROSCI.3822-08.2009

Williams, D. G. (1996). The chemistry of essential oils. *England: Micelle*.