

Osteoarthritis: Literature Review

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Osteoarthritis is the most common form of arthritis and affects both men and women, especially those who use an extraneous amount of work on their joints over time; osteoarthritis continues to be one of the leading chronic disabilities in the U.S. (Capriotti, 2020). The prevalence of osteoarthritis remains unchanged, and the best form of treatment remains unclear. A literature review for osteoarthritis is essential as it provides an in-depth examination of the subject and encourages future inquiries regarding the effective management of the disease process. As health care providers, it is crucial to have the relevant knowledge to promote effective patient-centered treatment.

Adherence to The Mediterranean Diet is Associated with Better Quality of Life: Data from The Osteoarthritis Initiative

The Mediterranean diet is known to improve the quality of life of those with various health conditions. This quantitative study analyzed the participant's adherence to the Mediterranean diet (aMED) and its relationship with quality of life (QOL). The Western Ontario and McMaster Universities Arthritis Index (WOMAC) was used to examine and measure the participant's pain, stiffness, depressive symptoms (Veronese et al., 2016). Findings show that those with higher adherence to the Mediterranean diet (aMED) had good quality of life (QOL) score resulting in a $P < 0.0001$ (Veronese et al., 2016) The sample result of 4470 participants suggests that higher adherence to the Mediterranean diet increased quality of life and decreased symptoms of osteoarthritis (Veronese et al., 2016)

Key Points

The association between Mediterranean diet and its improvement of quality of life within various health conditions have always been proposed. The study design measured adherence to the Mediterranean diet and quality of life through multiple assessments and scales to evaluate pain, stiffness, depressive symptoms (Veronese et al., 2016). The sample result of 4470 participants suggests that higher adherence to the Mediterranean diet increased quality of life and decreased symptoms of osteoarthritis (Veronese et al., 2016).

Assumptions

The underlying point that this author is considering is that osteoarthritis is a gradual disease process that, through lifestyle modifications, can be controlled. The author established a correlation between a Mediterranean diet and decreased pain symptoms concerning osteoarthritis through this study. They are further proposing that a Mediterranean diet may be beneficial in the treatment of osteoarthritis.

Deficit/Conclusion

The author's line of reasoning is deemed appropriate and concise with the following study. The evidence prompted that a positive correlation between the two variables exists. The nursing implications of this study suggest the significance of lifestyle modifications in controlling chronic diseases, further implying that patient outcomes are controlled through their adherence to lifestyle modifications. Nurses need to educate and stress the importance of health management in patients with chronic diseases such as osteoarthritis.

Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain

This quantitative study aims to compare the efficacy of nonopioid and opioid medications regarding chronic osteoarthritis pain. The clinical trial investigated pain-related function along with pain intensity and adverse effects. Findings suggest that there has been no improvement in pain-related function regarding the use of opioid therapy (Krebs et al., 2018)

Key Points

This randomized clinical trial followed 240 participants over 12 months. Interventions for the opioid group included the administration of morphine, oxycodone, or hydrocodone/acetaminophen (Krebs et al., 2018). The nonopioid group received acetaminophen or an NSAID (Krebs et al., 2018). Data collection for pain-related function and pain intensity measured by Brief Pain Inventory [BPI] interference and severity scale, ranking 0-10, 10 being the worse (Krebs et al., 2018). Results showed there was no significant difference between the two groups—the overall $p=.58$ (Krebs et al., 2018). The BPI interference between the two groups was 0.1 (Krebs et al., 2018). However, the opioid group's BPI pain severity ranked higher at 4.0 than the nonopioid at 3.5.

Assumptions

The underlying point that the author is proposing is that nonopioid pharmacotherapy is as effective as opioid therapy. The author assumed that opioids would perform better as a potent analgesic. However, this study demonstrated that it performed no significant difference from NSAIDs.

Deficit/Conclusion

The author's line of reasoning is appropriate. This journal article implies that they do not support opioid therapy concerning osteoarthritis pain. Regarding nursing implications, this study proposes that opioid therapy should be limited as it is not suitable for osteoarthritis patients as nonopioid medications are just as adequate in treating osteoarthritis pain. Effective medication administration is crucial in nursing. It is only beneficial to provide the best medicine that's suitable for their illness. Not only does nonopioid alternatives treat pain, but it is also a much safer and cheaper option safe than potent opioids.

Physical Therapy versus Glucocorticoid Injection for Osteoarthritis of the Knee

Physical therapy and glucocorticoid injections are popular forms of therapy in treating osteoarthritis. This study conducted a trial to compare the effectiveness of both glucocorticoid injections and physical therapy in relieving pain and improving physical function (Deyle et al., 2020). The participants tested for worsening pain, process, and stiffness for one year.

Key Points

This randomized trial had 156 osteoarthritis patients with a mean age of 56. The patients were assigned to receive glucocorticoid injections or undergo physical therapy (Deyle et al., 2020). Data collection examining pain, function, and stiffness conducted through the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), ranging from 0-240, 240 being the worse (Deyle et al., 2020). Findings favored physical therapy, as the mean between-group was 18.8 points with a 95% confidence interval (Deyle et al., 2020).

Assumptions

The underlying point that the author is suggesting is that physical therapy is better at treating pain-related symptoms of osteoarthritis. Assuming that physical therapy is an underestimated form of treatment, this study demonstrated its efficacy compared to other procedures. Conservative treatments are much more beneficial than most individuals believe them to be. Simple exercises such as walking, and swimming are easy to do for clients. They are also able to do this on their own. The importance of education and compliance should be emphasized to the client

Deficit/Conclusion

The author's judgment is deemed suitable. The journal article implies that conservative treatments such as physical therapy can be more effective than glucocorticoid injections. Concerning nursing implications, the study's favor in physical therapy is beneficial to patients, as it is less invasive than injections. Not only does physical therapy improve overall health, but the patient can practice exercise plans on their own time.

Conclusion

The best form of treatment for osteoarthritis is still unclear, and its prevalence as a deliberating chronic illness continues to increase. Osteoarthritis cannot be reversed, and treatment plans aim to minimize symptoms. Pharmacotherapy is often the first choice of treatment. The use of opioids to treat osteoarthritis pain has increased; however, its efficacy compared to nonopioids is lacking. Invasive procedures such as glucocorticoid injections for pain have also fallen short of physical therapy. Studies have suggested that lifestyle modifications such as following a Mediterranean diet can benefit those with osteoarthritis. Concerning patient outcomes, the results indicate that less invasive treatment plans and lifestyle modifications help treat symptoms associated with osteoarthritis. Clients can save money by

taking an over-the-counter NSAID rather than taking a potent opioid to treat their pain, as it does relieve pain to almost the same degree. Limiting the overuse of opioids can benefit healthcare as a whole as it decreases the possibility of misuse and addiction, including counteracting the opioid epidemic. Opting for more conservative treatments such as physical therapy can also improve the patient's overall wellbeing. Health management such as engaging in simple exercises and eating a healthier diet can decrease symptoms of osteoarthritis. Not only does it relieve symptoms, but these lifestyle modifications are cost-friendly, and patients can keep their autonomy as they have the power to manage their wellbeing on their own.

References

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