

Question: Do adult patients diagnosed with depression taking alternative medicine supplements such as St. John's Wort in place of a traditional Selective Serotonin Reuptake Inhibitors (SSRIs) report increased improvement in management of symptoms of depression?

Summary:

Alternative medicine is of growing prevalence in managing chronic conditions. Specifically, St. John's Wort is claimed to treat depression and distressing mood symptoms experienced by patients. Although the Food and Drug Administration has not approved St. John's Wort for this usage, peer-reviewed evidence suggests that some patients experience improvement in depressive episodes and symptoms with St. John's Wort compared to SSRIs (Ng et al., 2017). Those suffering from depression who met the criteria for the DSM-5 diagnosis were cross-examined in a meta-analysis of 27 studies to compare self-reported claims about the management of their depression by way of St. John's Wort or a traditional SSRI. The analysis yields a non-statistically significant difference between the two treatments. Patients were just as likely to find successful management of depression while taking St. John's Wort as they were taking a traditional SSRI. Reaffirming this conclusion was the report of a 95% confidence interval, meaning that the researchers can predict that these results will remain consistent in a given population (Ng et al., 2017). This conclusion supports the usage of St. John's Wort as a viable alternative to traditional SSRIs in managing depression.

While considering the pathological effects of St. John's Wort in treating depression, the method of action is not yet fully understood. Evidence suggests that this herbal supplement is

beneficial in the treatment of depression due to reducing serotonin reuptake in the brain and prolonging dopamine and norepinephrine levels (Peterson & Nguyen, 2021). Combining these three neurotransmitters' availability for longer durations at the neural synapses produces similar effects to traditional SSRIs. Furthermore, St. John's Wort has been proven to bind to GABA receptors in the brain, thus lowering CNS depression and effectively managing depression symptoms (Peterson & Nguyen, 2021). For this reason, it is crucial that St. John's Wort is not taken in combination with SSRIs. Combining multiple agents that increase the amount of serotonin at the neural synapse places the patients at serious risk for developing serotonin toxicity. Functioning similarly to a traditional SSRI, this can conclude why patients report no significant difference in response to treatment using either method.

While St. John's Wort has proven to increase successful management of depression in many patients, many contraindications and drug interactions may prohibit a patient from using the supplement in their treatment plan. St. John's Wort has been proven to alter the pharmacokinetics and efficacy of common medications such as digoxin, simvastatin, warfarin, oral contraceptives and some Proton Pump Inhibitors (Drewe et al., 2019). Therefore, it is of utmost importance to thoroughly review home medication regimes, including dietary supplements and vitamins, to ensure patient safety and care plan effectiveness when considering the implementation of alternative medicine.

Conclusion:

In summation, St. John's Wort may be an effective treatment option in place of a traditional SSRI for patients suffering from depression. Meta-analysis has demonstrated that patients are equally as likely to report increased management of symptoms of depression by way of St. John's Wort compared to a traditional SSRI. However, nurses must warn patients about the

importance of disclosing information about herbal supplements to their healthcare providers to note any potential risk factors and drug interactions (Drewe et al., 2019). In addition, nurses must teach patients taking St. John's Wort the signs and symptoms of serotonin toxicity and educate them on the importance of not combining antidepressant medications with herbal supplements (Peterson & Nguyen, 2021). Furthermore, with the growing popularity and support of St. John's Wort as an antidepressant, facilities and healthcare workers should implement workshops and educational sessions to understand appropriate indications and eradicate misconceptions surrounding the topic. Finally, to help improve the overall quality of healthcare given to patients diagnosed with depression, the nurse needs to encourage patients to express their preferences regarding a plan of care and alternative medicine modalities.

Works Cited:

Primary Article:

Ng, Q. X., Venkatanarayanan, N., & Ho, C. Y. X. (2017). Clinical use of *Hypericum perforatum* (St John's wort) in depression: A meta-analysis. *Journal of affective disorders*, 210, 211-221.

Secondary Article:

Peterson, B., & Nguyen, H. (2021). St. John's Wort. *StatPearls*.

Tertiary Article:

Nicolussi, S., Drewe, J., Butterweck, V., & Meyer zu Schwabedissen, H. E. (2020). Clinical relevance of St. John's wort drug interactions revisited. *British journal of pharmacology*, 177(6), 1212-1226.