Can selected complementary and alternative medicines prolong remission of Crohn's Disease?

### **OVERVIEW**

- Crohn's Disease (CD) is a lifelong autoimmune condition which causes inf ammation along the gastrointestinal tract (Goodhand & Rampton, 2008).
- CD causes periods of active disease and periods of remission
- CD treatments often have severe side effects
- Many people see alternative medicine as a 'natural' choice over 'chemicals' (Hawthorne, 2010).
- 3 common alternative medicines used in CD are fish oil, boswellia serrata and probiotics (lactobacilli)

#### FISH OIL

- \* Contains eicosanoids which can reduce inf ammation (Hawthorne, 2010).
- \* A large, placebo controlled, multi-centred study showed no benef i in preventing relapse of CD (Feagan, 2008)
- \* An Italian study found slightly better outcomes for those taking fish oil, however this was a small, single-centred trial and validity should be questioned (Beluzzi et al., 1996)

### **BOSWELLIA SERRATA**

- \* AKA Frankincense, is a plant native to India
- \* Thought to inhibit TNF-a which signals proteins involved with systemic inf ammation (Dahmen et al., 2011)
- \* A double-blind, placebo controlled, randomised study concluded there was no difference in remission time between placebo and non-placebo groups (Holtmeier et al. 2011)

## LACTOBACILLI

- \* Thought to modify intestinal f bra to be more competitive against pathogens which could cause inf ammation in CD (Rolfe et al., 2006).
- \* Two small French studies both concluded that the probiotic did not have sufficient (if any) effect on prolonging remission in CD (Prantera et al., 2002), (Marteau et al., 2006).

"Once a treatment has been tested rigorously, it no longer matters whether it was considered alternative. If it is found to be safe and effective, it will be accepted."

- Marcia Angell, 1998, p. 839

## **IMPLICATIONS**

- More patients are using alternative medicines for CD
- Some alternative medicines could cause harm (Crohns & Colitis NZ, 2016)
- Nurses need to know how to manage these patients safely

## RECOMMENDATIONS

- Nurses should adhere to the Code of Conduct (Nursing Council of New Zealand 2012)
- Ask for assistance if care is compromised by lack of knowledge (Standard 4.5, Code of Conduct 2012)
- Ensure the use of alternative medicine is safe and in the best interests of care (Standard 4.11, Code of Conduct 2012)
- Continue research and review best practice evidence to strengthen knowledge



# CONCLUSION

From the literature review, it is doubtful whether the selected complementary and alternative medicines can prolong remission in Crohn's Disease. Nurses should stay informed and advocate for the safety of their patients.

I chose to create an academic poster to present findings from my literature review on alternative medicines in Crohn's Disease. Research shows that a visual appeal is more effective than written content and that imagery on a poster is more likely to draw a viewer's attention (Rowe & Ilic, 2009). Oral presentations often have detailed information in a didactic form, which can cause viewers to lose interest. By using a poster, I have created a small snap shot of my topic in the most straightforward way (Shelledy, 2004). I have used the colour purple, as this is the colour that represents Crohn's Disease. I have also simplified language into "user-friendly" reading, and summarised the most important points from my literature review, in order to facilitate the most transfer of knowledge.

References

 Angell, M. (1998). Alternative Medicine – The risks of untested and unregulated remedies. N Engl J Med 1998; 339:839-841. doi 10.1056/NEJM199809173391210

•Crohn's and Colitis New Zealand. (2016). What is inflammatory bowel disease? Retrieved from https://crohnsandcolitis.org.nz

\*Dahmen, U., Gu, Y.L., Dirsch, O., Fan, L.M., Li, J., Shen, K. & Broelsch, C.E. (2001). *Transplantation Proceedings* (33)1-2:539-41. Retrieved from PubMed www.ncbi.nlm.nih.gov/

\*Goodhand, J. & Rampton, D. (2008). Psychological stress and coping in IBD. *Gut.* 57(1):1345-1347. doi: 10.1136/gut.2008.154229

•Hawthorne, A.B. (2010). Complementary and alternative therapies in Crohn's disease and ulcerative colitis. *Gastrointestinal Nursing*, 8, 32-37. Retrieved from EBSCO Host database http://web.a.ebscohost.com.op.idm.oclc.org/

•Holtmeier, W., Zeuzem, S., Preiss, J., Kruis, W., Bohm, S., Maaser, C., Raedler, A., Schmidt, C., Schnitker, J., Schwarz, J., Zeitz, M. & Caspary, W. (2011). Randomised, placebo-controlled, double-blind trial of Boswellia serrata in maintaining remission of Crohn's Disease: good safety prof le but lack of eff cacy. *Inf lummatory Bowel Diseases* 17(2): 573-82. doi: 10.1002/ibd.21345

•Marteau, P., Lemann, M., Seksik, P., Laharie, D., Colombel, J. F., Bouhnik, Y., Cadiot, G., Soule, J. C., Bourreille, A., Metman, E., Lerebours, E., Carbonnel, F., Dupas, J. L., Veyrac, M., Coff in, B., Moreau, J., Abitbol, V., Blum-Sperison, S. & Mary, J. Y. Ineffectiveness of Lactobacillus johnsonii LA1 for prophylaxis of postoperative recurrence in Crohn's disease: a randomised, double blind, placebo controlled GETAID trial. *Gut.* 2006 June; 55(6):842-7. Retrieved from PubMed database www.ncbi.nlm.nih.gov/

•Nursing Council of New Zealand (2012). *Code of Conduct for nurses*. Retrieved from Nursing Council website www.nursingcouncil.org.nz

•Prantera, C., Scribano, M.L., Falasco, G., Andreoli, A. & Luzi, C. Ineffectiveness of probiotics in preventing recurrence after curative resection for Crohn's disease: a randomised controlled trial with lactobacillus. *Gut 2002 Sep;* 51(3):405-9. Retrieved from EBSCO Host database http://web.a.ebscohost.com.op.idm.oclc.org/

 Rolfe, V., Fortun, P. J., Hawkey, C. J., Bath-Hextall, F. J. (2006). Probiotics for maintenance of remission in Crohn's Disease. *Cochrane Database of Systematic Reviews*. Issue 4. Art. No.: CD004826. doi: 10.1002/14651858.CD004826.pub.2

• Rowe, N. & Ilic, D. What impact do posters have on academic knowledge transfer? BMC Med Educ. 2009; 9:71. doi: 10.1186/1472-6920-9-71

• Shelledy, D. How to make an effective poster. Respiratory Care. 2004;49:1213-1216. Retrieved from PubMed database www.nbci.nlm.nih.gov

PECOT	Question	Explanation
Population	Those individuals with Crohn's Disease who are currently in remission, over 18 and under 60 years of age.	The decision to exclude those with active Crohn's Disease was made due to the limited research on complementary and alternative medicine in those with active disease. The research that has been conducted focuses on prolonging periods of remission, rather than treating the symptoms of active disease. By excluding those patients over 60, distorted results from co-morbidities that come with ageing can be avoided. Patients over 18 years of age have been specified for the research due to the lack of paediatric studies of Crohn's Disease. This may also be due to the vast majority of Crohn's Disease patients being diagnosed in their early 20's.
Exposure (Intervention)	Fish oil, boswellia serrata, probiotics	These interventions were chosen due to the more valid studies about the eff cacy available. Comparing these three common and available treatments will be the most informative for nurses who will need to provide education to their patients.
Comparison Control	Those in remission who are either on no medication or taking Mesalazine.	The control group will help to compare effectiveness of using fish oil, boswellia serrata or probiotics to prolong remission compared to taking Mesalazine, or having no treatment at all.
Outcome	To identify the most effective way of extending the length of remission between active disease periods in patients with Crohn's Disease.	The outcome of this comparison will identify efficacy of the selected complementary and alternative medicines to lengthen periods of remission. Identifying any efficacy of complementary and alternative medicines will be able to provide nurses the with appropriate knowledge in discussing complementary and alternative medicines with their patients in order for them to make an informed decision about their care.
Γime	N/A	Every patient with Crohn's Disease is different, with various symptoms and severity of disease periods and remission. It is a lifelong illness with no cure, therefore, time is limitless.