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Probiotic Use and Their Effect on IBS Symptoms: A Review of Literature

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PATIENT CARE ISSUE

Background & Significance

- IBS stands for Irritable Bowel Syndrome and is defined as " a group of symptoms that occur together... without any visible signs of damage or disease in your digestive tract."[1]
- IBS symptoms include: abdominal pain, frequent loose stools, bloating, constipation, cramping, and flatulence.
- IBS has a prevalence rate of 11.2% worldwide.[2]
- The financial impact of IBS in the United States ranges from $742 and $7547.[3]

EVIDENCE-BASED PRACTICE QUESTION

PICO Question: In adults with IBS, how does supplemental probiotic use compared to no probiotic use affect IBS symptoms.

Population= Adults with IBS
Intervention= Probiotics
Comparison= No probiotic use
Outcomes= IBS symptoms

REGISTERED NURSE INTERVIEW

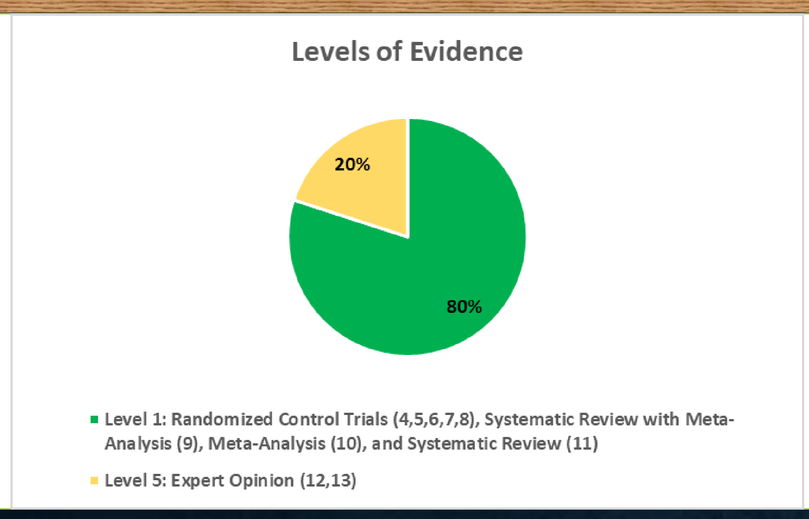
The RN interviewed was an ortho/neuro nurse working in a county Hospital.

- There was no direct standard of practice addressing the use of probiotics as a treatment for IBS.
- In the RN's hospital policy it requires that all patients put on antibiotics are automatically prescribed a probiotic as well.
- Rationale: Probiotics act as a preventative against C. Diff, which can result from overuse of antibiotics, and alleviates IBS symptoms that can occur.

METHODS

- **Databases searched:** CINAHL, MEDLINE, Cochrane, PubMed, Google Scholar, and OneSearch
- **Key words:** Irritable Bowel Syndrome, Probiotics, Efficacy, IBS Management, and Treatment
- **Date range:** 2008-2018
- **Inclusion:** Adults with IBS symptoms, Full text, Scholarly sources, Probiotic intervention, English
- **Exclusion:** Irrelevancy to PICO question, Published greater than 10 years ago

RESULTS



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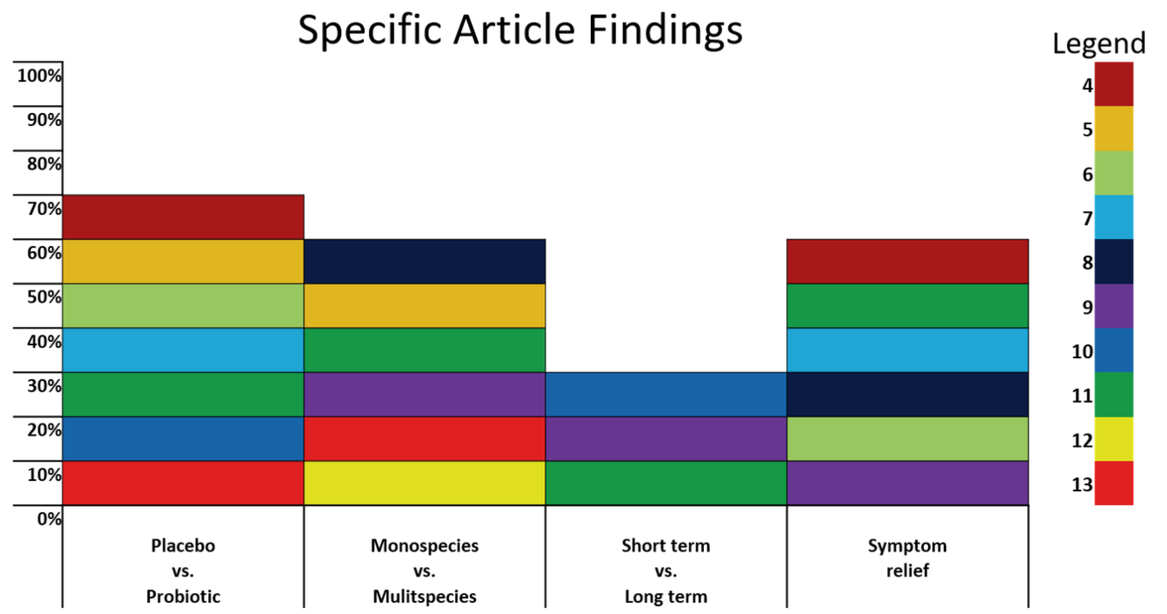
SYNTHESIS OF EVIDENCE



70% identified that both the probiotic (experimental) and placebo (control) groups showed equal improvement in the management of IBS symptoms.[4,5,6,7,10,11,13]
60% concluded that multispecies were more effective than monospecies.[5,8,9,11,12,13]
30% stated that short-term regimens were more effective than long-term.[9,10,11]
60% observed a therapeutic response in the reduction of flatulence, bloating, abdominal pain, constipation and cramps, with an emphasis on bloating.[4,6,7.8,9,11]

EVIDENCE-BASED PRACTICE RECOMMENDATIONS

- A pilot of change in practice regarding the use of probiotics as a treatment for IBS should be considered since probiotics significantly improved symptoms of IBS, though not significantly more than the placebo.[5, 6, 7, 11]
- There is need for further investigation into the efficacy of probiotics and supporting evidence for their use in alleviating symptoms of IBS before a change of practice should occur.[5, 6, 7, 8, 9, 10, 11]

LIMITATIONS

- Only ten articles were reviewed and 20% were expert opinions which may be biased by personal opinion.
- It is possible that relevant studies were not identified or included in this review of literature.
- None of the included studies were conducted in the setting of the U.S. which may affect the generalizability of results to the American population.

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