BACKGROUND

Incidence of 250 million cases per year and incur billions of dollars in healthcare costs (Chapman, 2014). Recurrent UTI (rUTI) is defined by 3 or more in one year and affects 20-30% of women. Microbiological research has associated healthy urogenital tracts with high levels of lactobacilli in vaginal flora. Those with recurrent UTI have lower levels of lactobacilli. Multi-strain probiotics have also been shown to inhibit the growth of E. coli, the pathogen responsible for a large number of UTIs (Chapman, 2014). Current guidelines for the treatment of rUTIs include the use of low dose antimicrobial agents. Pathogens are showing a rise in resistance to these antibiotics, supporting the need to develop a prevention strategy that does not include antibiotics.

PURPOSE

Review the literature and evaluate the effectiveness of lactobacillus in preventing rUTI in women. There is some evidence to suggest that use of lactobacillus may provide protective effects against bacteria commonly associated with urinary tract infections. Findings from a current literature review will be used to provide further support for this intervention and develop recommendations for its use in clinical practice.

METHODS

Process leading to high quality healthcare and best patient outcomes outlined by Ciliska, et al. (2011). Specifically, we 1) cultivated a spirit of inquiry, 2) asked a burning clinical question in PICOT format, 3) searched for the best evidence to answer the PICOT question, 4) conducted a rapid critical appraisal of the studies found from the search, 5) evaluated and synthesized the evidence, and 6) determined if there was enough valid and reliable evidence to make a recommended practice change in clinical practice.

RESULTS

After rapid critical appraisal to examine the reliability, validity, and usefulness of the sources, the following nine articles were kept for evaluation and synthesis.

The National Guideline Clearinghouse provides guidelines for management of rUTI.

Use of probiotics for prevention of rUTIs was considered but not recommended (National Guideline Clearinghouse, 2010). However, detailed information about guideline development is not available. While some results did not reveal significant benefits of use of probiotics, other studies show potential advantages. It is therefore difficult to determine whether evidence is congruent with current practice guidelines.

CONCLUSION

Lactobacilli probiotics are generally well tolerated among women despite mild adverse effects. While many studies indicate that probiotics may be effective in preventing recurrent UTIs in women, there were several studies that showed antimicrobials were more effective. More research is needed before probiotics can be included in prophylactic recurrent UTI guidelines.

REFERENCES


