**Explanation of Prevalence Critical Appraisal**

Munn Z, Moola S, Lisy K, Riitano D, Tufanaru C. (2015) Methodological guidance for systematic reviews of observational epidemiological studies reporting prevalence and incidence data. Int J Evid Based Healthc. 2015; 13:147–153.

**Detailed interpretation for this systematic review**

Answers: Yes, No, or Unclear

1. **Was the sample frame appropriate to address the target population?**

Score yes if all answers were yes: boys and girls were included; age range was between 4 to 17 years (inclusive); there were no inappropriate inclusions or exclusions for example exclusion because of behavioral problems

1. **Were study participants recruited in an appropriate way?**

Score yes if: the study invited an appropriate random sample or all patients from a community i.e. multiple schools or the study included consecutive or random sample or all of patients from a clinic

1. **Was the sample size adequate?**

Variables used to define the sample size: Z=1.96; P= (proportion calculated in the included article); d=0.05 unless P < 10% or P >90% then d = 0.5P.

1. **Were the study subjects and setting described in detail?**

Score yes if all answers were yes: description of boy/girl ratio; description of age characteristics; description of number of children with functional constipation; description of the setting; description of geographic region of the study or name of the hospital; in/exclusion criteria described

1. **Was data analysis conducted with sufficient coverage of the identified sample?**

Score yes if: there was a 100% response rate or if there were no differences in characteristics between responders/non-responders, inclusions/refusers i.e. boy/girl ratio, mean age

1. **Were valid methods used for the identification of the condition?**

The question was separately answered for the condition LUTS and UTI.

Score yes if: there was an appropriate definition reported of the LUTS, which means definitions according the ICCS terminology document,1 for UTI this means a diagnosis by urinalysis and culture

1. **Was the condition measured in a standard, reliable way for all participants?**

The question was separately answered for the condition LUTS and UTI.

Score yes if: the same questionnaire or instrument was used for all patients. In the case when LUTS was based on the diagnosis of the physician. There was one physician that made all the diagnosis or if there were more physicians making the diagnosis, there were no differences in experience between the physicians.

1. **Was there appropriate statistical analysis?**

The question was separately answered for the condition LUTS and UTI.

Score yes if: the authors reported the percentage of children with LUTS or UTI in children with functional constipation or the authors reported the numerator and denominator i.e. number of patients with LUTS or UTI and functional constipation and the total number of patients with functional constipation.

1. **Was the response rate adequate, and if not, was the low response rate managed appropriately?**

Score yes if: the response rate was above 70%2 or when the response rate was between 50% and 70% (modest response rate), the reasons for non-response appear to be unrelated to the LUTS or UTI and the non-responders were comparable with the responders?2

**References**

1. Austin PF, Bauer SB, Bower W, et al. The standardization of terminology of lower urinary tract function in children and adolescents: Update report from the standardization committee of the international children's continence society. *Neurourol Urodyn*. 2016;35(4):471-481.

2. Gordon N. A question of response rate. *Science*. 2002;25(1):25.