

CHRD 2024: Abstract Submission Form

Presenter Name

Jennifer Simone

Presenter Status

Undergraduate Students

Role in the project

Design
Analyze Data
Write Abstract
literature review

Research Category

Clinical

Title

A comprehensive review of the evidence informing the standard of care treatment of congenital syphilis

Background

In 2022, the rate of confirmed early congenital syphilis in Manitoba was 122.7 cases per 100,000 live births, significantly surpassing the national average rate of 31.7. The present standard of care treatment of congenital syphilis involves a 10-day hospitalization for intravenous penicillin; an intensive investment imposed on our healthcare system and families.

Objective

Considering these costs and their increasing use, the purpose of this study was to determine the evidence behind the standard of care for congenital syphilis and to assess its quality.

Methods

A literature search of Embase and MEDLINE was conducted and a total of 225 publications were evaluated for inclusion into the study. Quality of the 58 publications satisfying inclusion criteria was appraised using the Oxford Centre for Evidence-Based Medicine (OCEBM) 2011 Levels of Evidence and the American Academy of Family Physicians Strength of Recommendation Taxonomy (SORT).

Results

The most abundant publication types were: 15 (25.9%) non-randomized clinical trials, 16 (27.6%) literature reviews, and 7 (12.1%) letters. Only 2 studies were randomized controlled trials. The most abundant OCEBM level of evidence was the lowest quality Level 5, accounting for 27 (46.6%) of the publications and there were zero highest quality Level 1 publications. There were zero SORT Grade A (strongest) recommendations, while Grades B and C (weakest) comprised 30 (51.7%) and 28 (48.3%) publications respectively. Statistical analyses could not be applied due to poor research design and implementation practices among constituent results of this study.

Conclusion

Data demonstrates that the treatment of congenital syphilis lacks support from high-quality evidence. Supporting literature is based on expert opinion, consensus, non-randomized studies, and extrapolation from adult studies. Future randomized controlled trials are warranted to justify the current treatment of congenital syphilis and understand its limitations.

Do you have a table/figure to upload?

Yes

Authors

Name	Email	Role	Profession
Jennifer Simone	simonej@myumanitoba.ca	Presenting Author	Medical Student
Dr. Santana Lee	santina.j.lee@gmail.com	Co Author	Professor
Dr. Jared Bullard	jared.bullard@phac-aspc.gc.ca	Co Author	Assistant Professor

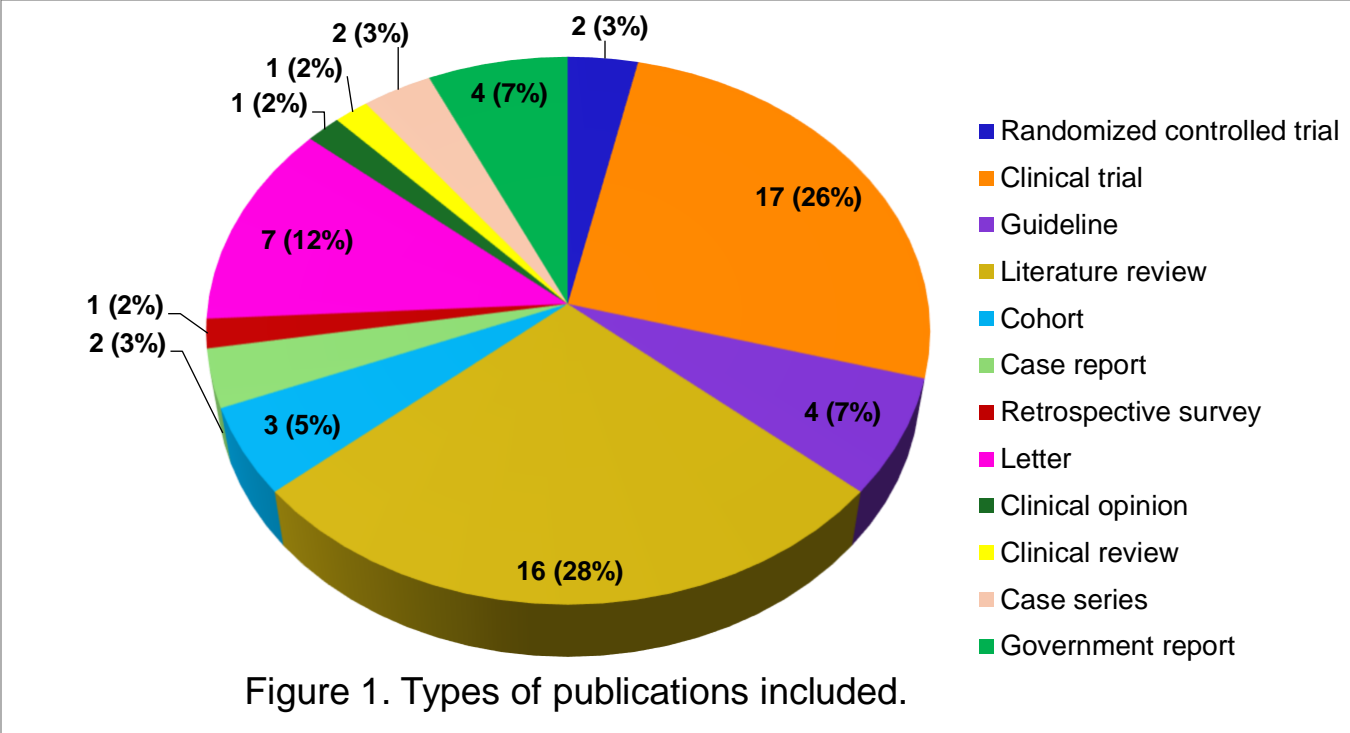


Table 1. Classification of evidence quality (OCEBM) and strength of recommendation (SORT).

OCEBM Level	Quantity
Level 1	0
Level 2	2
Level 3	19
Level 4	10
Level 5	27
SORT Grade	Quantity
A	0
B	30
C	28