

Maternal and Neonatal Sialic Acid Status and Infant Neural Development

Yongwei Lin ¹, Na Zhang ^{1,2}, Shuyi Zhou ¹, Guansheng Ma ^{1,2}

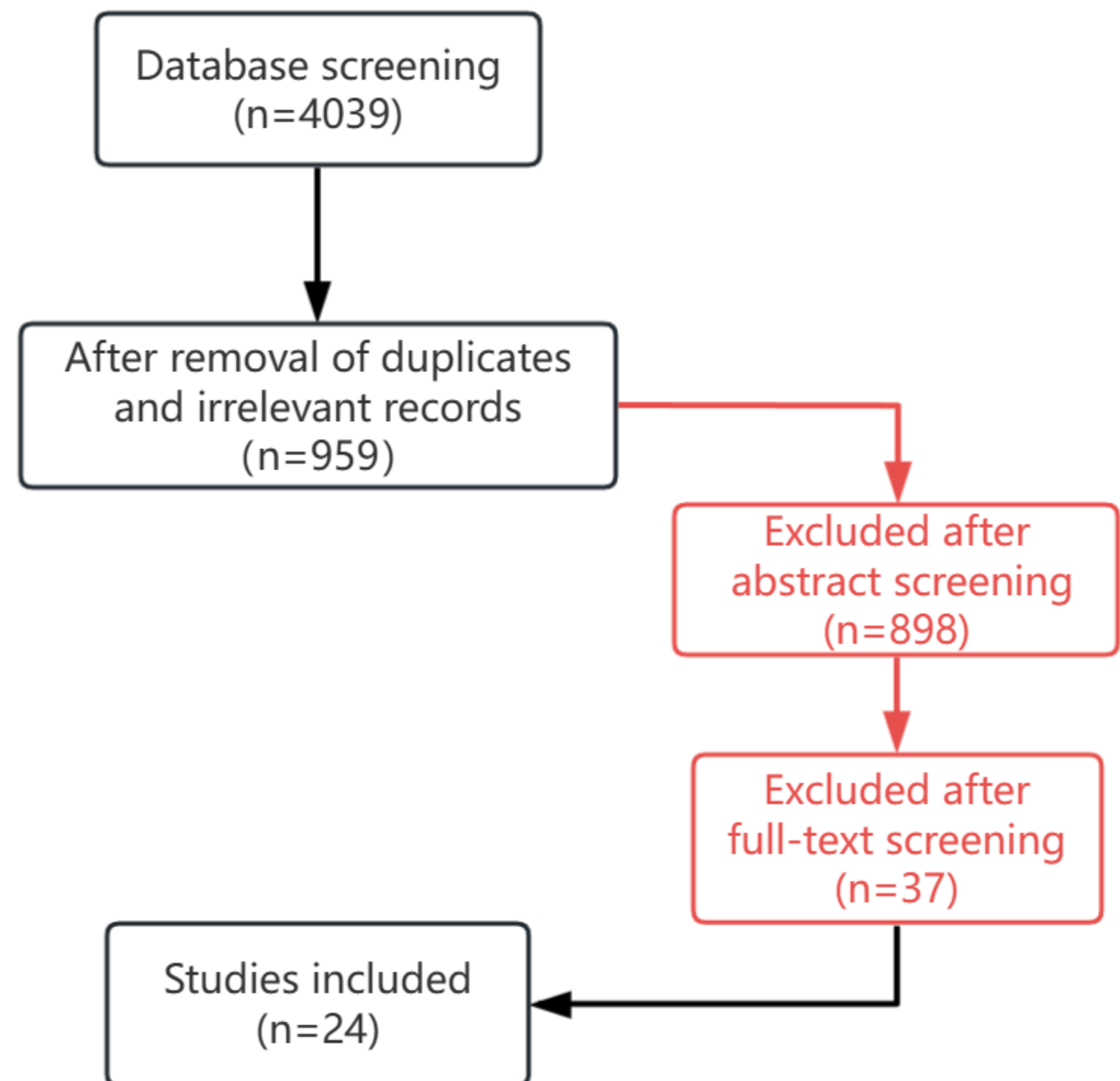
Department of Nutrition and Food Hygiene, School of Public Health, Peking University, Beijing, 100191, China
Laboratory of Toxicological Research and Risk Assessment for Food Safety, Beijing, 100191, China

INTRODUCTION & AIM

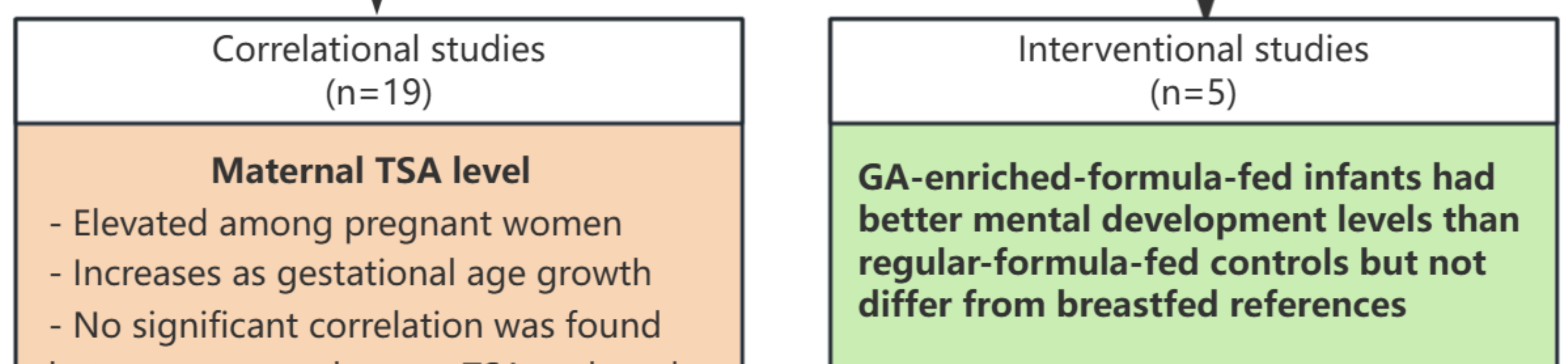
Sialic acids and sialoconjugates such as gangliosides (GA) are crucial in early neural development and could further impact cognitive function. The current review summarizes the nutritional status and variation trend of sialic acid during pregnancy and the perinatal period, explores sialic acid status's potential impact on neonatal growth and development, especially neurocognitive function, and concludes the existing evidence of relevant interventional studies.

METHOD

We searched and collected relevant publications in English and Chinese published from January 2000 to September 2022 from mainstream databases, including PubMed, Embase, CNKI, WanFang, VIP, etc. The current review included five interventional studies and 19 correlational studies.



RESULTS & DISCUSSION



CONCLUSION

Based on the current evidence body, it is necessary to emphasize the importance of maternal sialic acid status and further investigate its influencing factors.

REFERENCES

The reference list can be downloaded at:
<https://file.io/ISTISDpX3j2A>