

Health Screening for Internationally Adopted Children: A Systematic Review

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Background

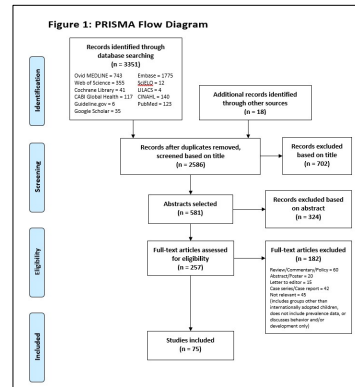
- From 2015-2020, United States citizens adopted 24,385 children from foreign countries. These internationally adopted children often move to high-income countries from resource-limited countries and institutional settings.
- They are at increased risk for inadequate prenatal nutrition and care, harmful prenatal exposures, and psychosocial neglect, as well as have an increased risk for infections, harmful environmental exposures, and nutritional deficiencies.
- Initial health screening is recommended, but no evidence-based health evaluation and screening guidelines exist. This is important for the health of the child as well as protecting their new community from infectious diseases.
- The aim of this study is to determine if current medical screening recommendations are the most evidence-based means of evaluation of the health and disease status.

Methods

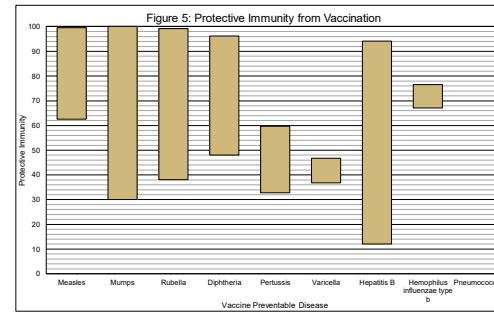
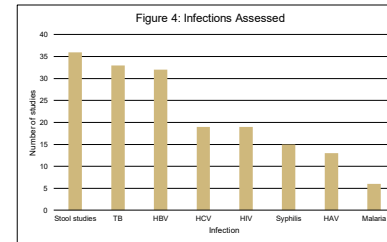
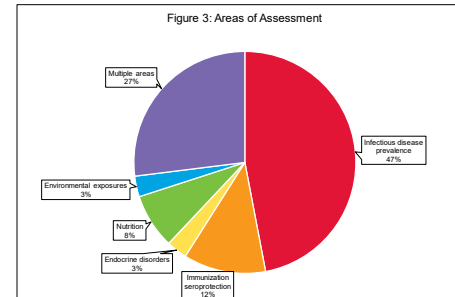
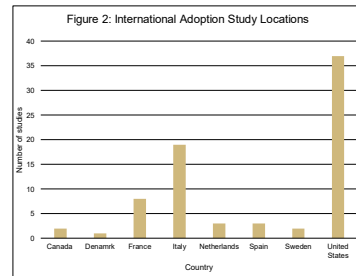
- 11 different electronic databases were searched, with no year limits, based on the concepts of "international", "child adoption", and "health screenings" with each concept involving multiple subject headings and text words.
- Prevalence studies assessing diseases related to environmental, nutritional, genetic, and infectious disease risks that can be medically screened at the time of adoption were reviewed.
- Non-English articles, clinical trials, case studies, abstracts, reviews, commentaries, editorials, and letters were excluded. Behavior, development, mental health, and disorders based on clinical characteristics (including anthropometrics, mental health, physical exam, vision, and hearing) were also excluded.
- Two independent reviewers followed PRISMA guidelines.

Results

- Our search identified 3,351 articles. We reviewed 581 abstracts and 257 full-text articles. A total of 75 articles met our inclusion criteria. (Figure 1)



- Eligible studies were conducted in 8 different countries where most international adoptions take place, including the United States (n=37), Italy (n=19), Spain (n=3), France (n=8), Canada (n=2), Sweden (n=2), Denmark (n=1), and the Netherlands (n=3).
- The included articles were published between 1987 and 2020, with 55% (n=41) published since 2010.



Conclusions

- General initial routine screening for IA children should include a newborn screen (if IA <12 months); complete blood cell count with differential count; total vitamin D; iron panel including ferritin with C-reactive protein; and thyrotropin and free thyroxine.
- Further work-up (lead level, G6PD level, hemoglobin electrophoresis, etc.) should be done if clinically indicated.
- Initial infectious disease work-up should include HIV, hepatitis A IgG, hepatitis B (SAb, SAbs, core Ab), hepatitis C Ab, syphilis (RPR or VDRL), TST (if IA <2 years), QuantiFERON (if IA >2 years), and a stool study.
- Further infectious work-up (malaria and other parasitic, protozoal, viral, and bacterial infections) should be done if clinically indicated.
- Immunization documentation was often found to be invalid, incomplete, or absent, suggesting a need for a shared decision-making approach to discuss the benefits and risks of seroprotective screening versus potential reimmunization.
- Additional research is needed to provide stronger evidence-based screening guidelines for nutritional, environmental, and endocrine disorders.
- Continual reevaluation of disease epidemiology in this population is necessary to keep health screening guidelines up to date as disease prevalence and IA children's countries of origin change.

Contact Information & Disclosures

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