SURVEY OF CONGENITAL CYTOMEGALOVIRUS KNOWLEDGE AMONG MEDICAL STUDENTS

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Purpose

To test the hypothesis that medical students have little awareness of congenital CMV (cCMV) infection, and to collect baseline data on medical students' knowledge about cCMV

Background

- Every year approximately 40,000 U.S. infants are born with cCMV
- 8,000-10,000 will develop permanent sequelae, including:
  - Intellectual disability
  - Sensorineural hearing loss
  - Seizures
  - Vision loss
  - Microcephaly
  - Motor disability
- The incidence of cCMV can be significantly reduced by specific behavior changes during pregnancy
- In contrast to how commonly it occurs, many healthcare providers have little knowledge of cCMV and its transmission

Methods

Medical students at one institution were sent an email survey to assess their knowledge and awareness of cCMV. Each student completing the survey was offered a gift card. The survey was approved by both the IRB and the medical school's administration. Responses were described, quantified, and compared between groups.

Results

- 751 surveys were sent out and 422 completed responses were received.
- A baseline lack of knowledge was documented in first year students (fig. 1).
- A sharp increase in knowledge of cCMV occurred between MS1 and MS2 years.
- All MS2-4 students who reported being "very familiar" with cCMV learned about it in medical school, 80% from lecture(s).
- MS2-4 students had greater knowledge of cCMV transmission and manifestations (fig. 2 and 3).

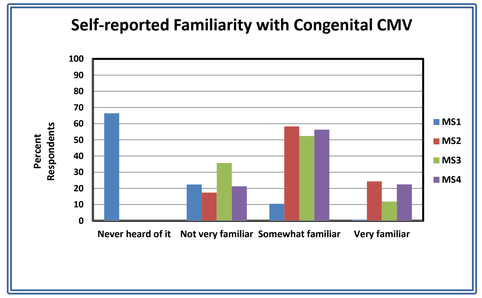


Fig. 1. 66% of MS1 students had never heard of cCMV; all MS2-4 students had heard of it. There was no significant difference between MS2-4 classes.

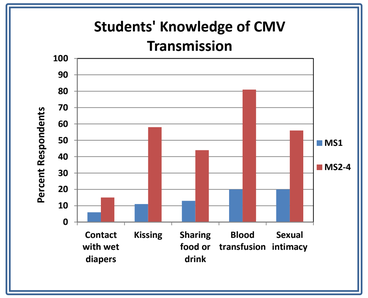


Fig. 2. MS2-4 students were significantly more knowledgeable about CMV transmission, but large knowledge gaps remain.

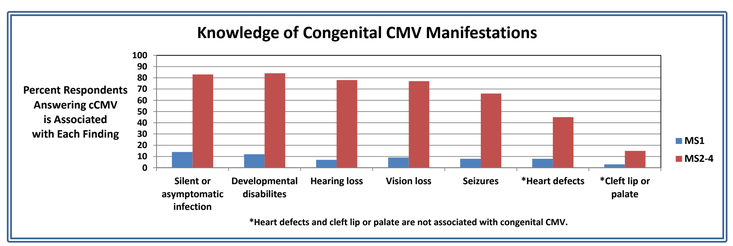


Fig. 3. MS2-4 students had significantly greater awareness of the manifestations of cCMV. However, 45% incorrectly thought cCMV is associated with heart defects, and 15% answered cCMV can lead to cleft lip or palate.

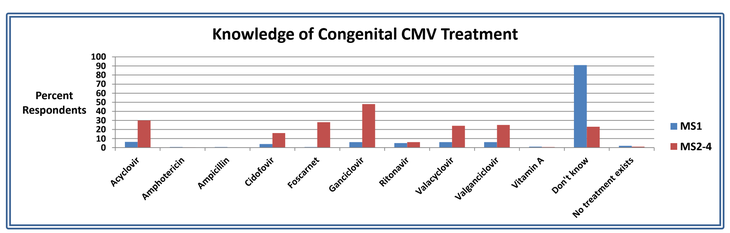
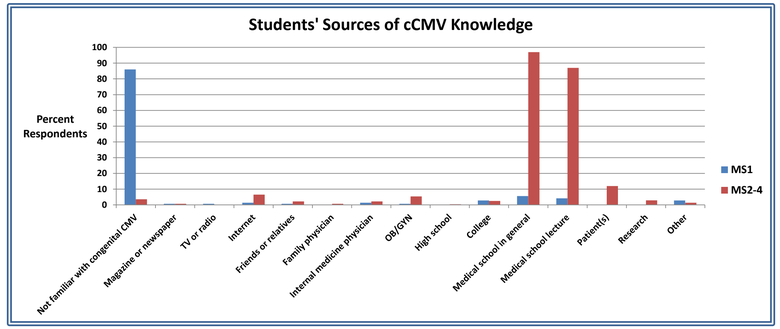


Fig. 4. 91% of MS1 students replied "don't know" vs. 23% MS2-4, but only 48% MS2-4 were able to correctly identify ganciclovir as a treatment option for cCMV.



Discussion

- The sharp increase in cCMV awareness between MS1 and MS2 years is likely due to preclinical medical student curriculum.
- Significant knowledge gaps regarding cCMV were observed, which represent opportunities for medical education.
- Increased awareness of the many methods of CMV transmission would have the greatest impact on prevention.

Acknowledgments

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