Cytomegalovirus Awareness amongst Child Care Providers in the United States

Olivia DeWald and Casey Turovac

Discipline Coordinator: Dr. Kathleen Cienkowski
Creation of this Study

- Interdisciplinary
- Family-centered

Governor Malloy signing Public Act 15-10 into law with families affected by CMV
Outline

• Cytomegalovirus (CMV) vs. congenital cytomegalovirus (cCMV)
• Child care services and CMV
• Awareness, education and prevention of cCMV
• Current literature
• Our study
Cytomegalovirus (CMV) is a variant of the herpes virus that is transmitted from one individual to another through various bodily fluids, mainly through contact of urine and saliva (Joseph et al., 2006).
Once mother contracts CMV from another, vertical transmission from pregnant mother to their unborn child occurs.
US CHILDREN BORN WITH OR DEVELOPING LONG-TERM MEDICAL CONDITIONS EACH YEAR

Source: http://www.cdc.gov

WOMEN’S AWARENESS OF CONDITIONS AFFECTING CHILDREN

Source: http://www.cdc.gov
Prevalence

• CMV rates are high in young children due to exposure:
  • During childbirth
  • In infancy from breast-feeding from seropositive mothers
  • Throughout childhood through contact with other children (Joseph et al. 2006).
Child care providers & CMV

• Joseph et al. (2006) found that transmission of CMV from children carrying the virus to pregnant daycare providers put them at the greatest occupational health risk of transmitting cCMV to their child.

• However, awareness of CMV and cCMV is relatively low despite its prevalence and potential health consequences, ranging from 13 - 20% worldwide (Thackeray & Magnusson 2016).
Research question

Overall there is little research determining child care provider knowledge and awareness of CMV.

PURPOSE: Given CMV’s high prevalence and low awareness rate, our goal is to determine what education is currently provided to child care providers about CMV across the United States, and what preventive measures are in place to reduce the transmission of cCMV to pregnant child care educators.
Current literature

• Thackeray & Magnusson (2016)
• Our study:
  • Larger child care centers with more than 12 children, either related or unrelated
  • Surveys sent to all 50 states
• By sending the survey to states across the country, we hope to gain more information on national awareness and prevention of cytomegalovirus and other infectious diseases amongst child care providers.
Methods

• Anonymous survey sent through Qualtrics

• Inclusion criteria: any child care center director or manager.
  
  • Child care is defined in Connecticut as “facilities that provide care to more than twelve children, either related or unrelated.”

  • Currently determining how other states define a “child care center” in order to get an estimate of how many of these centers are in the United States

• No direct risks or benefits to completing study, may be an inconvenience
Questionnaire

• **Demographic information:**
  - Location/state, number of children, average age of education of child care workers, part of a national organization or private, how many female employees they have, age of female employees, how many years they have worked as a child care provider

• **Questions:**
  - **Awareness:** know about CMV/cCMV, the difference between the two, how it is transmitted, what symptoms may be present
  - **Education:** specific training on CMV (manager or employees), training on CMV in their state, do they inform families, intake form
Expected results

• Overall return rate may be low, given that there is no compensation for completing our survey
  • Thackery & Magnusson had an overall high return rate, but sent surveys through the mail with compensation in the envelope

• Given past research, overall awareness of CMV will be low

• Child care centers will likely have training on general hygiene or well known infectious diseases, but not specifically concerning CMV prevention
Future Implications

Survey Results

- Pediatricians
- Child Care Centers
- EHDI
- Families
Questions?

CMV can be prevented by avoiding contact with saliva when kissing a child.

June is National CMV Awareness Month

www.CMVawareness.org

#cmvawareness
References


