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ENGH 302-AM6

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DAP- Part 1

**1.**

**discourse community**- a group of people who share a set of discourses, and ways of communicating about those goals

e.g. healthcare professionals; health administration majors

**discipline-** a branch of knowledge studied in higher education

e.g. medicine

**field-** a concentrate within in the discipline; a branch within the profession

e.g. health administration

**professional organization-** an organization that focuses on professionals or disciplines in the related field

e.g. American Association of Healthcare Administrative Management; American Physical Therapy Association (APTA)

**peer review process-** review of scholarly work, research, or ideas by others that are experts in the same field before publication

e.g. peer review of journal or article (See submission guidelines on a peer reviewed journal)

**discipline specific database-** database containing subject specific scholarly articles within a discipline

e.g. *PubMed*, *Medline*

**academic journal-** a journal periodically published relating to a specific discipline or field

e.g. *JAMA,* *Obstetrics and Gynecology*

**trade publication-** magazines, journals, and newspapers written for a particular audience in a field or discipline

e.g. *Managed Healthcare Executive*

**gray literature-** literature produced by government agencies, universities, corporations, research centers, associations, societies, and professional organizations

e.g. The World Health Organization; U.S. Center for Disease Control

2.

Professional organization: American Association of Healthcare Administrative Management (AAHAM)

Mission Statement: “to provide education, certification, networking, and advocacy for healthcare revenue cycle professionals”

AAHAM actively represents the interests of healthcare administrative management professionals through a comprehensive program of legislative and regulatory monitoring and its participation in industry groups such as ANSI, DISA and NUBC. AAHAM is a major force in shaping the future of health care administrative management.

3. Research Question: What methods of testing are available when testing for Zika virus infection during pregnancy?

Keywords: Zika virus, infection, arbovirus

Pregnancy, prenatal, maternal

Tests, diagnostics, fluid tests, saliva, serum, urine, samples

4. Annotated Bibliography draft

References

**Bingham, A. M., Cone, M., Mock, V., Heberlein-Larson, L., Stanek, D., Blackmore, C., & Likos, A. (2016). *Comparison of test results for Zika virus RNA in urine, serum, and saliva specimens from persons with travel-associated Zika virus disease - Florida, 2016* (pp. 475–478). Atlanta, United States: U.S. Center for Disease Control. Retrieved from** http://search.proquest.com/docview/1790569180/abstract/D865D47B7A084A58PQ/1

The authors of this article, researchers of the Florida Department of Health Bureau of Public Health

Laboratories, reflect on research conducted on testing persons with Zika virus by urine, serum, and

saliva. This work examines the results of a study conducted in Florida in 2016 by comparing 70 fluid

samples of urine, serum, and saliva as early as 1 day after onset of symptoms to as late as 20 days

after onset of symptoms and testing accuracy. After reviewing evidence of negative and positive

results of urine, serum, and saliva in relation to Zika virus, the authors suggest urine to be the

preferred specimen type to identify acute Zika virus disease.

**Charrel, R. N., Leparc-Goffart, I., Pas, S., de Lamballerie, X., Koopmans, M., & Reusken, C. (2016). Background review for diagnostic test development for Zika virus infection. *Bulletin of the World Health Organization*, *94*(8), 574–584D.** <https://doi.org/10.2471/BLT.16.171207>

The authors, Remi Charrel professor at Aix-Marseille University, Isabelle Leparc-Goffart of Armed

Forces Biomedical Research Institute, Susan Pas professor at Erasmus MC, Xavier de Lamballerie of

Institut Pasteur, Marion Koopmans professor at Erasmus MC, and Chantal Reusken professor at

Erasmus MC, review knowledge of Zika virus and identify current knowledge gaps of Zika virus

up to January 21, 2016. Their work examines a review of published literature about Zika virus and

diagnostic tests, and capability of countries to detect Zika virus. They conclude international

laboratory response is needed including protocols for future studies to address most pressing

information needs of Zika virus.

**Dasgupta, S., Reagan-Steiner, S., Goodenough, D., Russell, K., Tanner, M., Lewis, L., … Gregory, C. (2016). *Patterns in Zika virus testing and infection, by report of symptoms and pregnancy status - United States, January 3-March 5, 2016* (pp. 395–399). Atlanta, United States: U.S. Center for Disease Control. Retrieved from** <http://search.proquest.com/docview/1788190057/abstract/26A87D2833484EA7PQ/1>

The authors, of the Zika Virus Response Epidemiology and Laboratory Team, review tests performed

at CDC’s Arboviral Diseases Branch during January 3-March 5, 2016, and CDC recommendations for

testing of symptomatic and asymptomatic pregnant women with possible exposure to Zika virus. They

report that the CDC recommends that persons with possible Zika virus exposure receive testing within

2 weeks of exposure with or without symptoms. The authors concluded that due to potential serious

adverse pregnancy and neonatal outcomes associated with maternal Zika virus infection, health care

providers should continue to offer testing to pregnant women with potential exposure to Zika virus

even if they do not have symptoms.

**Eppes, C., Rac, M., Dunn, J., Versalovic, J., Murray, K. O., Suter, M. A., … Aagaard, K. M. (2017). Testing for Zika virus infection in pregnancy: key concepts to deal with an emerging epidemic. *American Journal of Obstetrics and Gynecology*, *216*(3), 209–225.** <https://doi.org/10.1016/j.ajog.2017.01.020>

The authors review screening and diagnostic tools relative to Zika virus infection, the challenges of

estimating timing of exposure, risk of congenital Zika virus malformations based of trimester

exposure, and limitations of ultrasound based strategies on detection of malformations. They conclude

symptom reporting as an ineffective screening tool for Zika virus infection in the majority of patients,

and suggest a need for a preventative vaccine and therapeutic options, specific diagnostic testing, and

parallel sonographic screening which are currently not readily available.

**Kuehnert, M. J., & Epstein, J. S. (2016). Assuring blood safety and availability: Zika virus, the latest emerging infectious disease battlefront. *Transfusion*, *56*(7), 1669–1672.** <https://doi.org/10.1111/trf.13673>

The authors, Matthew Kuehnert the Director of the Office of Blood, Organ, and Other Tissue Safety

of the CDC, and Jay Epstein the Director of Office of Blood Research and Review of the FDA,

review the safety of blood donations of people infected with arboviruses such as Zika virus compared

to blood-borne viruses such as HIV and hepatitis. They conclude while arboviruses cause acute

infection as opposed to chronic infection, recipients of contaminated blood meet CDC criteria for

probable transmission and donor deferment is recommended. They suggest blood centers and health

departments be prepared to assure both blood safety and availability due to possible massive

disruption in blood supply.

**Meaney-Delman, D., Rasmussen, S. A., Staples, J. E., Oduyebo, T., Ellington, S. R., Petersen, E. E., … Jamieson, D. J. (2016). Zika virus and pregnancy: What obstetric health care providers need to know. *Obstetrics & Gynecology*, *127*(4), 642–648.** <https://doi.org/10.1097/AOG.0000000000001378>

The authors review current available data associated with maternal-fetal transmission of Zika virus

and increase in risk for congenital microcephaly and other abnormalities. They conclude that obstetric

health care providers need to be prepared to counsel pregnant women considering travel to areas with

ongoing Zika virus transmission. Furthermore, providers need to know the signs and symptoms,

laboratory testing available, and clinical guidelines for pregnant women potentially infected with Zika

virus.

**5.** (beginning of DAP draft) The values shared by people in health administration are in ethics, quality healthcare, patient relations, data management, professional practice and standards, education, and advocacy. The leading professional organization in this community is The American Association of Healthcare Administrative Management (AAHAM). Current topics of discussion include the Affordable Care Act and pre-existing conditions affecting coverage. The Zika virus is still being researched, and currently there is no vaccine to prevent or treat the infection. My research question touches on the availability of current testing for Zika virus infection during pregnancy. Currently, providers follow guidelines for testing pregnant women who travelled aboard to an affected area or has had sexual contact with someone who may have been infected with the Zika virus. There are different methods of testing available for the mother and fetus. In the future, how might these tests be reimbursed? Would they be covered by insurance 100%? How will Zika virus infections affect the public and what safety measures will need to be taken? There is still so much unknown, therefore, the first and most important order of business is to determine the most accurate methods of testing for Zika virus infection to provide quality care for the mother and fetus. The databases and grey literature most useful to discuss current and available testing methods for Zika virus are through PubMed, the CDC, WHO, and the *American Journal of Obstetrics and Gynecology*.