

Pregnancy Care Provider Knowledge and Educational Practices on Cytomegalovirus (CMV)

Stephanie Browning McVicar, Au.D, CCC-A; Mary Whitaker, Au.D, CCC-A; Sarah Lamb, Cassidy White, Jessica Brooke, Jenna Petersen, Ann Beste-Guldborg

ABSTRACT

Cytomegalovirus (CMV) is a common cause of congenital infection that can lead to permanent disability or death in infants and children. Pregnant women can reduce their risk of infection through prevention techniques, though education for these women regarding CMV in pregnancy is not optimal.

Johnson et al concluded in their 2012 "Prevention of Maternal and Congenital Cytomegalovirus Infection" article*, "...it appears that currently the best option for prevention of congenital CMV is through education of patients regarding sources of maternal infection and methods of hygiene aimed at preventing maternal exposure to CMV."

Our project aims to assess the knowledge of healthcare professionals, as it pertains to CMV, and to determine what CMV education, if any, they provide to their patients. This will be evaluated through surveying health professionals that treat women who are pregnant or are trying to become pregnant.

The data generated from these surveys will be used to determine the educational needs of these providers. Additionally, data will be used to develop a strategy to increase provider knowledge regarding CMV, as well as enhance efficacy in educating women about their risk of contracting CMV during pregnancy.

CONTACT

Stephanie Browning McVicar, Au.D., CCC-A, FAAA
Utah Department of Health
Email: smcvicar@utah.edu

Mary Whitaker, Au.D., CCC-A, FAAA
Idaho State University
Email: whitmary@isu.edu

BACKGROUND

Cytomegalovirus (CMV) is a virus that infects people of all ages; however, it is one of the most common causes of congenital infections in newborns.

In the United States, there are approximately 40,000 cases annually of children born with congenital CMV, or about one in every 150 children born. Of these children born with CMV, one in five babies will become sick from the virus and may experience long-term health problems or developmental disabilities, or may even die; in fact, almost 400 children die and nearly 8,000 children develop permanent disabilities, annually.*

Due to the serious sequelae of congenital CMV infection, educating pregnant women about transmission, signs and symptoms, and prevention could greatly reduce these numbers. However, healthcare professionals such as obstetricians, midwives, primary care doctors, nurses, pediatricians, and other professionals who interact with pregnant women and young children are failing to recognize the importance of educating their patients, resulting in little to no awareness of congenital CMV.

OBJECTIVES:

1. Assess pregnancy care provider knowledge and their educational practices on CMV
2. Summarize the project findings in regard to the amount of provider knowledge about CMV
3. Develop a plan to increase awareness of CMV in pregnancy care providers in various communities and states
4. Ultimately, Increase CMV patient education by pregnancy care providers

METHODS AND MATERIALS

A survey was created, which contained questions that assessed providers' knowledge of CMV, as well as the practices used when educating women about CMV. This survey was sent to providers who treat women who are currently pregnant or planning to become pregnant primarily in Utah and Idaho.

The survey was created with SurveyMonkey, piloted by 5 professionals, and then sent out to health providers via email. Participation in the study was voluntary and participants were not required to answer any or all of the questions.

As an incentive for completing the survey, participants are offered a CMV package, which includes educational resources for themselves and their patients.

RESULTS

The data shown is a sample of the initial results, as data is still being collected.

The subject size was 128 health professionals. Of these, 59.63% reported not educating their patients on the transmission of CMV, though an average of 67.6% of providers stated they knew how women could reduce their risk of contracting CMV while pregnant.

Of the 40.37% of providers who do educate their patients, only 13% educate every patient they see, 14% educate most of their patients, and 7% only educate when time permits. Of those providers that do educate their patients, 33.69% provide CMV information at the first prenatal visit, 9.43% before the woman is pregnant, 9.43% when they remember, and 2.83% at every visit.

Factors that impact professionals' decision to not educate their patients were as follows: 30.28% do not feel informed enough about the topic, 27.52% do not have enough time, 17.43% say it is not part of their professional guidelines, and 15.6% do not see the benefit.

Figure 1. Portion of health provider survey.

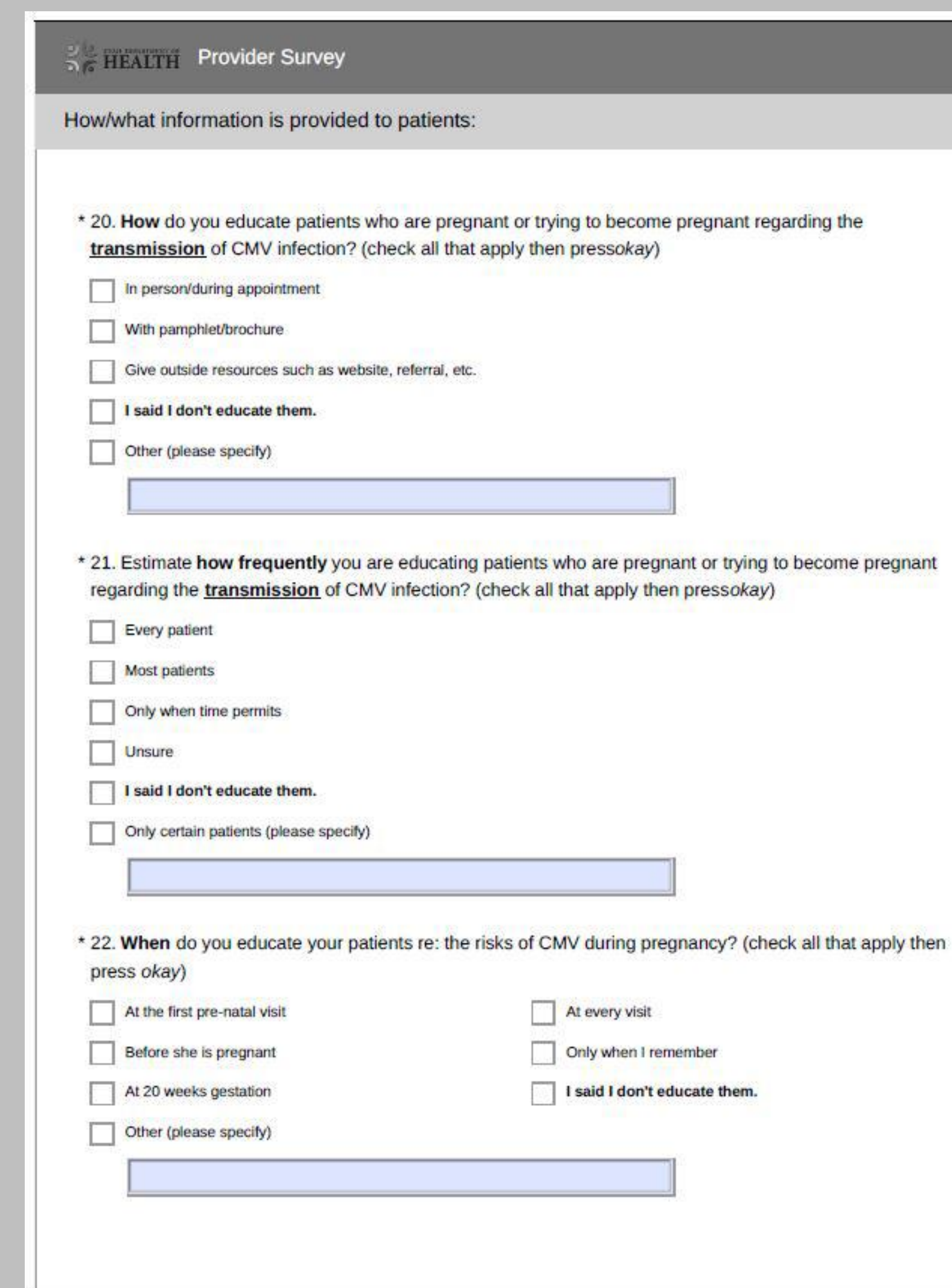
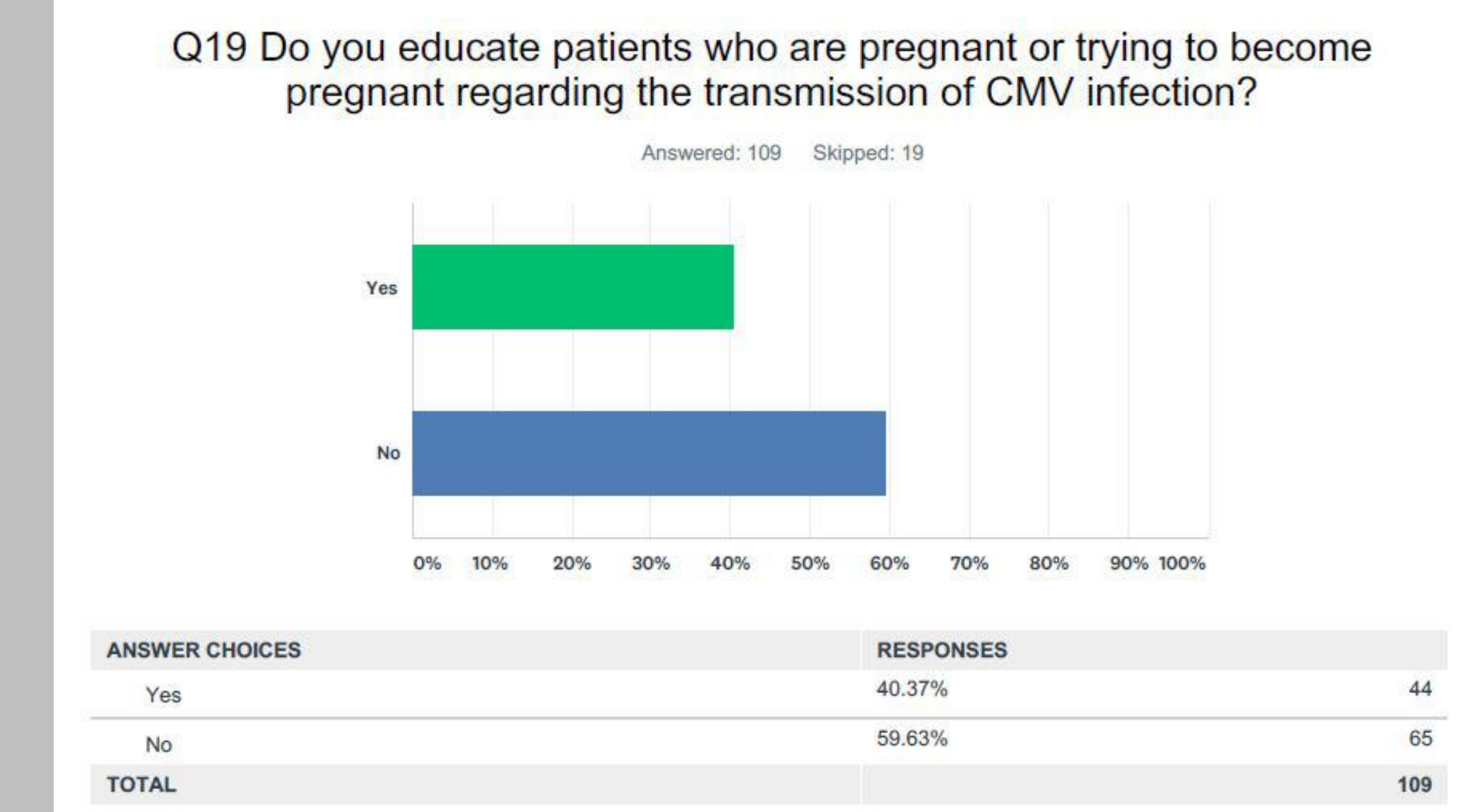


Figure 2. Results calculated from one question in survey.



DISCUSSION

From this data sample, the majority of health care providers indicated that they are not educating their patients about CMV, even though they have an understanding of its route of transmission and the risk factors involved.

This survey was completed by a variety of providers, primarily in Utah. Utah is a state with legislation that requires CMV screening and education, yet patient educational practices on CMV are not consistent; therefore, the question arises: how do we increase the number of providers that regularly educate their patients about CMV?

CONCLUSIONS

CMV is one of the most common causes of congenital infection in newborns, yet it is an infection whose risk could be lessened through patient education about the transmission and effects of CMV during pregnancy.

Through this preliminary research, it was concluded that the majority of pregnancy providers do not routinely educate their patients with regard to CMV. This may directly relate to the incidence and prevalence rates of CMV, and implementation of a universal practice may help address this issue.

REFERENCES

*Johnson, J., Anderson, B., & Pass, R. F. (2012). Prevention of Maternal and Congenital Cytomegalovirus Infection. *Clinical Obstetrics and Gynecology*, 55(2), 521-530. doi:10.1097/GRF.0b013e3182510b7b