GLOBAL RESPONSE TO CONGENITAL CMV AWARENESS THROUGH A PEDIATRIC HOSPITAL BLOG WEBSITE

Gail J. Harrison, M.D., Cara C. Lyons, Michael Reina, Holly McBride MPH, Marily Flores, M.S., Cindy de los Santos, Jill Williams

Baylor College of Medicine and Texas Children's Hospital, Houston, Texas, United States

<u>Background:</u> Texas Children's Hospital launched a blog website in December 2010, allowing their physicians and medical professionals to communicate perspectives on pediatric health and medicine. The first blog focusing on congenital CMV prevention and awareness, "CMV: Every Pregnant Woman Should Know About This Virus," was created January 10, 2011 and has received steady viewing and posting activity to this date. Cytomegalovirus (CMV) is the most common congenital infection, yet many people have never heard about this virus. Global CMV awareness may be at our doorstep with the popular growth of social media as a health resource.

<u>Objective:</u> To evaluate the global response to CMV awareness through a pediatric hospital blog website.

<u>Methods:</u> Between January 10, 2011 and May 9, 2014, website usage data were obtained from the Texas Children's Hospital blog website using Google Analytics. Analyses were obtained for page views, average time on page, sources of page entry, operating system usage, searched keywords, and the demographics of page viewer by country and global region.

Results: 32,294 total page views, and 26,559 unique page views were recorded during the study period with an average time of 4:33 minutes on the blog page. A large majority of unique page views are from the Americas (61.55%), followed by Asia (19.58%), Europe (10.8%), Oceania (3.74%), Africa (1.90%), and viewers with no set tracking location (3.06%). Within the global regions, 129 (66.49%) out of 194 world countries viewed the blog: 24/35 countries within the Americas (69%), 43/44 within Asia (98%), 39/47 within Europe (82%), 2/14 within Oceania (14%), and 21/54 within Africa (39%) accessed the blog page. The main sources were through Google (65.97%), direct URL entry (19.56%), Facebook (4.15%), and texaschildrens.org (1.56%); and used Windows (47.82%), Apple IOS (21.87%), Android (14.09%), Macintosh (6.97%), Blackberry (1/19%) and total mobile (43.430%) operating systems. Devices used to access the blog were visited by desktop (56.70%), mobile (34.50%) as well as tablets (8.80%). Mobile (16.07% to 51.46%) and tablet (.37% to 11.51%) usage increased from 2011 to 2014 while desktop usage had decreased (83.56% to 37.03%). Majority of page views (18,132) are not set with searched keywords, however among 3,750 keywords searched, the most common are "CMV pregnancy" (241) and "CMV and pregnancy" (209), "How do I know I had CMV when pregnant" (190) and "Cytomegalovirus CMV IGG precaution during pregnancy" (112). As of May 9, 2014 our blog had a total of 506 responses and/or comments.

<u>Conclusion:</u> Compared to all blogs on the website, the CMV blog has a 80% greater average viewing time. The blog and thus CMV awareness has reached almost 67% of the world's countries based on blog views, with the Asian continent displaying the largest CMV outreach

among 98% of it's countries. The use of mobile devices and applications are apparent among blog viewers, which could be an important route for future health awareness and global accessibility. Just as well, blog traffic can be increased through social media links, popular sources, and creating mobile applications. Future key word analyses can point bloggers in the right direction to viewer demands, interests, and common communication gaps. Although the blog has been viewed by every corner of the globe, large regions remain uninformed about CMV.