Assessment of Online Sites Reliability, Accountability, Readability and Spanish Translation for Intravitreal Injections

Nadim Rayess, MD
Palo Alto, California

Angela Shan Li, BS, Diana V Do, MD, Ehsan Rahimy, MD

Purpose:
Patients increasingly use the internet to access health-related information to further understand their treatments and conditions. However, the information provided remains unregulated and heterogeneous. This study compares the quality, accountability, readability and presence of Spanish translation between private and academic online source material available to the public regarding intravitreal injections.

Methods:
Cross-sectional analysis of the top 20 sites on a google search between October 2019 and November 2019 for the terms eye injections, intravitreal injections and anti-VEGF injections. The sites were classified into one of two groups: private or academic group (which further consisted of academic medical centers and reference sources). Quality was assessed using both the internationally recognized DISCERN criteria and the Health on the Net code (HONcode). All 20 sites were independently graded by 2 retinal physicians and differences were adjudicated by a third experienced retinal physician. Readability was evaluated using an online tool that provides a consensus readability grade level. The presence of Spanish translation was also recorded.

Results:
Eleven academic and 9 private websites were included. The overall mean score using DISCERN criteria for the academic websites (3.11±0.46) was significantly higher than that of private websites (2.23±0.61; p<0.007). Similarly, out of a possible total 14 points for the HONcode, the average quality score for academic websites (10.91±2.66) was higher compared to private websites (6.44±3.36; p<0.009). Academic websites performed most weakly on the DISCERN question “What would happen if no treatment was used?” while private websites scored lowest on the DISCERN question “Is it clear what sources of information were used to compile the publication?” The mean consensus reading grade level was similar between the academic (11.73±1.68) and private websites (11.78±1.48; p=0.94). Spanish translation was offered by only 7 of the 20 websites (5 academic and 2 private websites).

Conclusions:
The overall quality and accountability of online content for academic sites was significantly higher compared to private websites. Spanish translation was rarely provided and the readability grade level was significantly higher for both groups than recommended. Improving the quality, accountability, readability and incorporating Spanish translation in websites can help improve patients’ health literacy regarding intravitreal injections, potentially leading to increased adherence to therapy plans and improved treatment outcomes.