The ABCs of STIs: Promoting Student Learning Using QR Codes

Oftentimes in a large classroom setting, the use of electronic devices is distracting and discouraged. However, when learning about sexually transmitted infections (STIs), students in an accelerated master of nursing pathway (AMNP) used quick response (QR) codes and their smartphones as part of an active learning strategy. This article describes this fun, interactive, student-centered activity.

The use of QR codes with classroom teaching has been shown to increase student engagement (Jamu et al., 2016) and facilitate increased curiosity (Shustack, 2018). A class of 60 AMNP students, on entering the classroom, self-selected into nine groups of approximately five to seven students in each group. Each group then received a different colored sheet of paper with a QR code representing one of the nine STIs and a tabular worksheet for taking notes.

The QR codes were generated prior to the class using a free QR code generator available online. Each QR code linked to a specific STI on the Centers for Disease Control and Prevention (CDC) website (CDC, 2019). The six columns on the tabular worksheet were labeled: identify the causative agent (bacterial, viral, or parasitic); risk factors; manifestations of signs and symptoms for men and women; diagnostic methods; and prevention and treatment. The nine rows of the worksheet identified each specific STI.

Using their smartphones, students scanned their QR code linked to the CDC website for their specific STI. Once linked to the CDC website, students were able to identify the causative agent (bacterial, viral, or parasitic); risk factors; manifestations of signs and symptoms for men and women; diagnostic methods; and prevention and treatment. Students then recorded their responses on a worksheet. During the first 50 minutes of this lively activity, the instructor circulated from table to table to answer questions, provide additional information, and describe clinical experiences that students would encounter with clients who have STIs.

During the second 50 minutes of class, non-colored QR codes were projected. Students again used their smartphones to identify the STI. When a group identified their STI, the first group stood and yelled, “We have gonorrhea!” After this, a second group stood and yelled, “We have trichomonas!” The remaining groups then followed by identifying their STI to the class.

All of the groups presented their findings to the class as classmates completed their worksheets. The instructor moderated the discussion, answered questions, and provided additional information when necessary. At the end of the class, each student had a complete study document. Students also received a copy of all QR codes used by the other groups to facilitate further inquiry.

This student-centered learning activity using QR codes provided a space for students to work together in a small group, explore the CDC website to identify accurate information, complete a guided inquiry-based worksheet, and finally present their findings to a larger cohort as the panel of experts for a specific STI. Student responses to this activity were overwhelmingly positive. Many reported that having the worksheet helped them study for the exam. Students appreciated using the time in class to create and complete the inquiry-based worksheet. Faculty were enthused with the level of participation and student engagement, and are discussing the use of this teaching strategy to enhance other lecture-based, didactic courses.

References


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