

Abstract

Due to the loss of a labor and delivery unit, prenatal classes were no longer available to pregnant women in three rural Appalachian communities. Using Facebook® social media platform, nursing students from the May School of Nursing and Health Sciences used evidence-based social marketing practices to deliver primary, secondary, and tertiary health promotion. Content is directed to improve health literacy on topics related to a healthy pregnancy and newborn. Use of evidence-based practices for health promotion has demonstrated an increase in readership and engagement.

Literature Review

A labor and delivery unit closed in a rural, local hospital in the Appalachian Mountains, resulting in the loss of prenatal classes. To provide access to information on healthy pregnancies and newborns, a Facebook® page was created for women from three rural counties. Examined through this nursing project is the use of social networking to provide the promotion of health as well as support of expectant women and women with infants living in a rural Western North Carolina Appalachian area. Although there is a current lack in the literature regarding the use of social networking in rural areas within the United States, various current studies have been conducted on the topic outside of the United States (Amoah, Edusei, & Amuzu, 2018; Powell-Jackson, & Ansah, 2015).

For women with limited resources, possessing a strong network may be critical to a livelihood and coping with life's problems and difficulties (Adams, Nababan, & Hanifi, 2015)

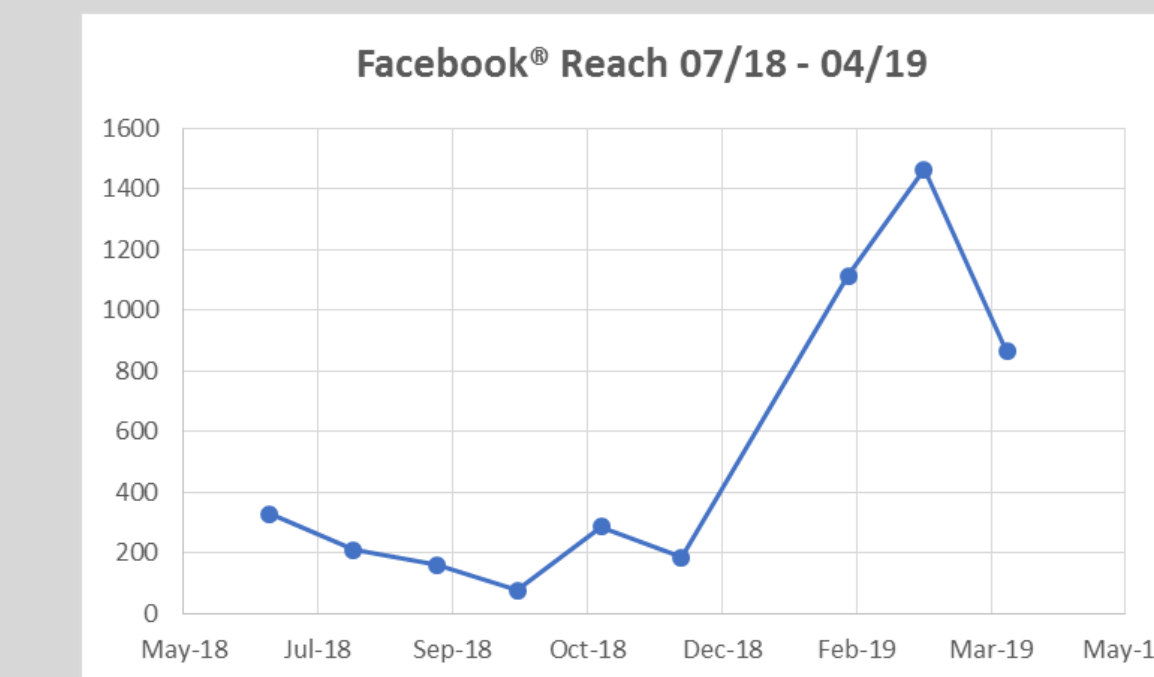
The provision of successful web-based support should include facilities for reliable information, interactive support, and social networking (Sparud-Lundin, Ranerup, & Berg, 2011). Rural geographic location presents multiple complications in regard to receiving adequate health care (Amoah et al., 2018). The risk for abortion, preterm delivery, preeclampsia, eclampsia, obstetric hemorrhage, stillbirth, and gestational diabetes increases with both inadequate prenatal care and low socioeconomic status (SES; Kim et al., 2018). Because inadequate prenatal care is associated with poor obstetric outcome, strategies and best practices for reaching pregnant women are essential.

It is recommended that the national health policy should avoid solely concentrating on the enhancement of adequate prenatal care, but rather focus on the need for social interventions aimed at determinants of health to improve pregnancy outcomes in mothers of low SES (Kim et al., 2018). With the use of the internet and social media, new opportunities are created for clients and families to actively participate in their care, self-manage their medical problems, learn from those with similar conditions, and improve overall communication with their healthcare providers. Social media users who perceive social networking ads (SNA) as vividness, information, and entertainment generally have direct influence on consumer's participation and engagement. Social media markers should focus on videos, images, and status to draw attention of social media users to view the SNA, but avoid flashy practices such as too many links or graphs (Kujur & Singh, 2017).

Health Promotion Project

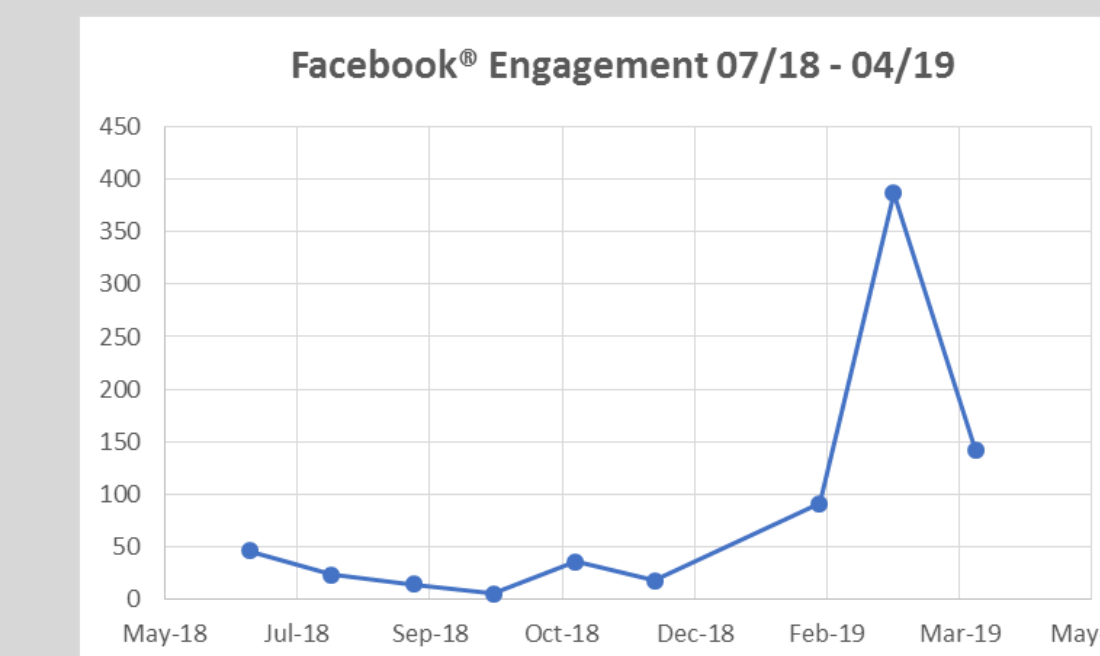
A community collaboration of Yancey Alliance for Young Children (YAY-C), Toe River Health District, and faculty from Lees-McRae College, May School of Nursing and Health Sciences were looking for a method to reach pregnant women, women with newborns, and their families to improve information on healthy pregnancies and newborns. As Yancey, Mitchell, and Avery counties are rural Appalachian areas and residents have lack of access to insurance, health care providers, transportation, and have poor health literacy for healthy food choices for pregnant and lactating women, it was important to find a health promotion method that would meet the needs of this population group. As many of the targeted population are Millennials, it was determined that a social media site would be most appropriate to reach these women (Rodriguez, Chaco, Contreras, & Ramgoolam, 2017).

AMY's Baby Bunch Facebook® page was created in July 2018. Using a snowball technique, the YAY-C Health Group (including members of Toe River Health District and Lees-McRae College May School of Nursing) asked women to share the page to generate awareness and interest in the page contents. Information posted, while focusing on pregnancy and newborns, was not generating a great deal of interest. In October 2018, the Lees-McRae College faculty member engaged nursing students to research evidence-based practice using social media for health promotion. Based on that literature review, the nursing students developed a plan to revise the page content to drive readership through the promotion of primary, secondary, and tertiary prevention strategies. Starting November 2018, students began to see an improvement in the number of individuals reached (see Graph 1).



Graph 1 Facebook Reach

The nursing students then began to develop strategies to engage readers into the page content. A poll on *Common Myths* was begun in February 2019. For those poll participants who answer the question correctly, a draw is held at the end of every month for a prize. This has increased the engagement of the readers on primary, secondary, and tertiary prevention and improve health literacy (see Graph 2).



Graph 2 Facebook Engagement

Limitations

As nursing students are tasked with many other academic requirements and eventually leave the program, the number of posts on the AMY's Baby Bunch page each month is inconsistent. Without regular new information, it is difficult to keep the readership engaged with the Facebook® page. Starting the fall 2019 academic year, junior nursing students will be recruited to work with the senior nursing student to promote continuity and ownership

of the page, as well as spread the administration tasks of uploading content onto more students. It is anticipated that by engaging incoming nursing students into clinical and community based research, the Community Health course, and opportunities for presenting their work at nursing conferences will motivate nursing students into more regular postings on the page.

References

- Adams, A. M., Nababan, H. Y., & Hanifi, S. M. (2015). Building social networks for maternal and newborn health in poor urban settlements: A cross-sectional study in Bangladesh. *Plos One*, 10(4), e0123817. doi:10.1371/journal.pone.0123817
- Amoah, P., Edusei, J., & Amuzu, D. (2018). Social networks and health: Understanding the nuances of healthcare access between urban and rural populations. *International Journal of Environmental Research and Public Health*, 15(9)73. doi:10.3390/ijerph15050973
- Kim, M. K., Lee, S. M., Bae, S., Kim, H. J., Lim, N. G., Yoon, S., . . . Jo, M. (2018). Socioeconomic status can affect pregnancy outcomes and complications, even with a universal healthcare system. *International Journal for Equity in Health*, 17(2). doi:10.1186/s12939-017-0715-7
- Kujur, F., & Singh, S. (2017). Engaging customers through online participation in social networking sites. *Asia Pacific Management Review*, 22, 16-24. doi:10.1016/j.apmr. 2016.10.006
- Powell-Jackson, T., & Ansah, E. K. (2015). The indirect effects of subsidised healthcare in rural Ghana. *Social Science & Medicine*, 144, 96-103. doi:10.1016/j.socscimed.2015.09.021
- Rodriguez, J. L., Chaco, J., Contreras, C., & Ramgoolam, D. (2017). Exploring the role of social media in the information seeking behavior of Millennials in search of safe sex and sexual health information. In *iConference 2017 Proceedings*, 794-797. doi: 10.9776/17343
- Sparud-Lundin, C., Ranerup, A., & Berg, M. (2011). Internet use, needs and expectations of web-based information and communication in childbearing women with type 1 diabetes. *BMC Medical Informatics and Decision Making*, 11(49). doi:10.1186/1472-6947-11-49

Contact information

Hannah Gortney, BSN gorneyhannah@yahoo.com
Dakota Cornett, BSN dakotacornett11@gmail.com
Patterson Jones pj0194095@lmc.edu
Dr. Teresa Darnall darnallt@lmc.edu