Creating a Sexual and Reproductive Health Social Media Campaign for Adolescents A Pilot Project

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Abstract

The Reproductive Health Equity Act (RHEA) works to increase access to sexual and reproductive health services for all Oregonians by expanding coverage to include comprehensive contraceptive counseling, voluntary sterilization, screenings for pregnancy, sexually transmitted infections (STIs), breast and cervical cancers, counseling on STIs and relationship safety, and abortion (Oregon Health Authority, n.d.). Adolescents in particular are a population that face decreased access to recommended preventative health services while also accounting for half of the STI cases reported each year (CDC, 2018; CDC, 2019). In partnership with Multnomah County Health Department and Multnomah County Student Health Centers, this pilot project was created to educate and advertise sexual and reproductive health services to adolescents through a social media campaign. The social media campaign included 12 weekly posts, addressing 3 monthly topics, published onto the Student Health Centers Instagram account. Next steps may include assessing impact through adolescent feedback, addressing further sexual and reproductive health topics, or using other social media platforms such as Facebook or TikTok to expand reach and audience.

Introduction

Problem Description

Reproductive health is an important component of overall health, including complete physical, mental, and social wellbeing in all matters relating to the reproductive system and its functions and processes (World Health Organization, n.d.). Despite the integral role in overall health, accessing comprehensive reproductive health services remains a challenge. Although the United Sates spends more on health care than any other country, more than one-third of women report skipping needed medical care because of cost, a rate far higher than other high-income countries (Gunja et al., 2018). In the United States, young adult women, ages 18-25 years, have lower rates of health care access and utilization compared to other age groups (Murray Horwitz et al., 2018). Furthermore, racial disparities exist within this age group, with young Black women being half as likely to have received the HPV vaccination and Black and Latinx women being half as likely to effectively use contraception compared to their white counterparts (Murray Horwitz et al., 2018).

Locally, according to the 2015 Multnomah County Community Health Assessment, access to health care was among the most prioritized health issues, with women's health and reproductive health noted as important emerging health issues. This community assessment found similar health disparities relating to reproductive health among minority adolescent groups including Latinx and Black teens that were also seen nationally. In Multnomah County, Black teens are two and a half times more likely to give birth than their white counterparts and Latinx teens give birth at rates six times higher than Whites (Multnomah County Health Department, 2015).

To address this disparity and improve health care access and outcomes, Governor Kate Brown signed the Reproductive Health Equity Act (RHEA) in 2017. This legislation works to comprehensively address systemic barriers to accessing reproductive health care, expanding coverage to thousands of Oregonians throughout the state – regardless of income, citizenship status, or gender identity. Expanded coverage includes reproductive health services such as comprehensive contraceptive counseling, voluntary sterilization, screenings for pregnancy, STIs, breast and cervical cancers, counseling on STIs and relationship safety, and abortion (Oregon Health Authority, n.d.). As of January 1st, 2018, reproductive health services became available for all Oregonians, but the question remains as to whether these services are being accessed and outcomes improved.

Although the Reproductive Health Equity Act expands coverage and increases access for Oregonians to receive reproductive health services, there is still an issue of knowledge of and engagement with these services. As social media is an increasingly important component of everyday life for adolescents and adults, opportunities exist for dissemination of reproductive health promotion, education, and advertising of services through these channels with social media campaigns. This project is a pilot social media campaign in collaboration with Multnomah County Health Department and Student Health Centers. The health promotion campaign focused on reproductive and sexual health education and services. Photos, posts, and stories were published on the Multnomah County Student Health Centers Instagram page.

Available Knowledge

A literature search was conducted in August 2020 to explore the structure and efficacy of health promotion campaigns through social media outlets. Two electronic literature searches were performed using PubMed Legacy and Scopus databases. Search terms included "social"

media," "social media campaign," "health promotion," "reproductive health," and "reproductive health services". Search results were limited to articles published in English from January 2010 to August 2020. Additionally, a manual review of bibliographies was conducted to identify other relevant primary articles.

When considering the development of a social media campaigns, studies show that the most important component is choosing a target audience (Friedman, Kachur, Noar, & McFarlane, 2016; Neiger, Thackeray, Burton, Giraud-Carrier, & Fagen, 2013; Veale et al., 2015). Next, the online platform should match the audience. Facebook is the most widely used social media platform with 69% of U.S. adults engaging on Facebook. Alternatively, Instagram and Snapchat are especially popular among 18-24-year-olds, with respective rates of use at 67% and 62% (Perrin & Anderson, 2019). Thus, choosing the appropriate platform depends on the demographics of the desired audience.

Another key component in a health promotion social media campaign is the chosen level of engagement. Low engagement includes the creation of a social media presence, recruiting and retaining followers, and usually one-way messaging. Medium engagement builds upon low engagement to then create conversations with users. Finally, high engagement is online or off-line audience member involvement with health promotion programming and participation (Neiger et al., 2013). The goal of a sexual and reproductive health social media campaign is to reach high engagement that will then encourage users to utilize services and programs that can improve their health.

Successful campaigns include a variety of components, most of which fall under medium and high engagement. Primarily, a successful campaign will have numerous and varied posts.

More exposure to a campaign through posts and messaging is associated with increased behavior

change (Friedman et al., 2016). One study found that top profiles on Facebook and Twitter that were regularly posting had a median of 46 posts per month or 125 tweets per month (Veale et al., 2015). Furthermore, the variety of posts is crucial in encouraging interaction between host and audience. Twitter may be used to post updates, while Facebook may allow for conversation and sharing of photos, stories, and links. It is important to use platforms and posts that will engage the audience and encourage their interaction with the content (Friedman et al., 2016; Gold et al., 2012; Veale et al., 2015). Using this medium to high level of engagement may go a step further to post questions that would then encourage interaction and strike conversation. Overall, it is this engagement and conversation that ultimately leads audience investment and changes in behavior.

In addition to numerous and varied posts, successful campaigns also include collaboration with a multidisciplinary team and regular evaluation and assessment of the exposure and outcomes. Numerous articles recommended the utilization of social-marketing and media experts, public health researchers, experts in user technology, and community organizations with experience in sexual health promotion (Friedman et al., 2016; Gold et al., 2012). An interdisciplinary team with this knowledge and expertise helps to create a well-informed, well-designed final product.

Nevertheless, despite having a well-informed, well-designed final product, it can still be difficult to measure outcomes and determine the success of a social media campaign. Most studies investigating these campaigns do not have experimental comparison groups and have difficulty determining user exposure levels (Crutzen et al., 2011). Exposure may be measured through number, frequency, and duration of profile or site visits, but it is difficult to assess an assumed linkage between campaign and site visits.

Overall, social media campaigns can be a helpful tool for advertising reproductive and sexual health programs and services as they relate to RHEA. However, due to the various types of platforms and outreach, it is crucial that a successful campaign plan appropriately to have numerous and varied posts, work within a multidisciplinary team, and determine outcome goals and metrics to evaluate those goals.

Rationale

In 2011 Facebook, MySpace, and Twitter were the primary social networking sites being used for sexual health promotion with Facebook engaging the most in health promotion campaigns (Gold et al., 2011). Now, ten years later, more social media platforms have entered the market, including Instagram and TikTok, which both present further opportunities for sexual health promotion. These platforms become even more relevant as the current global Coronavirus pandemic forces people to engage more online than in person. With more adolescents now utilizing Instagram than Facebook, this platform was chosen, keeping in mind that a successful social media campaigns must engage users, publish various types of posts and on multiple platforms, and consider working within a multidisciplinary team.

Two important frameworks to consider for this project include the Health Belief and Health Promotion Models. The Health Belief Model can be applied to health promotion and health prevention strategies. This model postulates that health-seeking behavior is influenced by perceived threats posed by a health problem and the value associated with actions that may reduce that threat (Polit & Beck, 2017). The Health Belief Model is directly related to perceived susceptibility and perceived costs and benefits. As a social media campaign that targets patients who would benefit from reproductive and sexual health care and screenings, it will be important to create a campaign that will influence these perceptions. In other words, a successful campaign

will convey the utility and benefit of services that fall under the Reproductive Health Equity Act, including STI testing and cancer screenings.

Additionally, the Health Promotion Model can be utilized to help develop resources to aid in sexual and reproductive health interventions. The Health Promotion Model explains health-promoting behaviors through self-efficacy. The model incorporates both interpersonal and situational influences that impact self-efficacy related to a given behavior and the likelihood of actual performance of that behavior (Polit & Beck, 2017). With a social media campaign, the goal is to influence users to health-promoting behavior, such as accessing reproductive and sexual health services. Through posts that educate on the benefits of these health-promoting behaviors, the hope is to influence viewers towards self-efficacy in actualizing those behaviors and actions.

Specific Aims

The primary purpose of this project was to create a social media campaign through collaboration with the Multnomah County Health Department that promotes sexual and reproductive health services offered through the Reproductive Health Equity Act.

Methods

Context

The campaign was a collaborative project with the Multnomah County Health
Department and Student Health Centers. Team members included the Deputy Nurse Practitioner
Director, the Medical Director's Program Specialist, and the Student Health Centers Program
Coordinator, and the DNP student. The pilot project's primary objective was to create a health
promotion campaign that educated adolescents on reproductive health practices and increased
knowledge of available free services offered through reproductive health grants. Specifically,

this project aimed to reach adolescents associated with Multnomah County Student Health Centers who could access the Student Health Centers Instagram account and health services.

Adolescents were chosen as the target demographic because of the increased risk that exists within this population. According to the Centers for Disease Control and Prevention, teens are less likely than younger children or adults to receive recommended preventative health (CDC, 2019). Furthermore, young people (ages 13-24) account for an estimated 22% of new HIV infections in the Unites States, and almost half of the 20 million STIs reported each year (CDC, 2018). One way to address this is through increased education and use of sexual health services. School-based health centers provide an opportunity to connect student and youth to sexual and reproductive health services including HIV and STI testing, contraceptive counseling, and HPV vaccination.

Intervention

A three-phase project was introduced using the Multnomah County Student Health Center Instagram account. Phase I was an Instagram poll among followers of the Student Health Center account used to gauge interest in sexual and reproductive health topics. Phase II included the creation of weekly Instagram feed posts addressing topics selected from Phase I. Phase III was the implementation of the posts through publishing on the Multnomah County Student Health Centers Instagram.

Phase I

Phase I was completed utilizing two Instagram story features that gave followers the opportunity to participate and provide input into what they wanted to learn more about. The first question that was asked of users through the Instagram story was: "what sexual and reproductive health topics would you like to learn about?" Since stories are temporarily available for 24

hours, this question was posted for three consecutive days to gather responses. One week later a poll was created based on responses to the initial question. The poll asked followers to select the one topic they were most interested in among four topics. Topic options included in the poll were STI testing, safer sex, birth control, and periods 101. The poll was also available for three consecutive days to gather sufficient responses. The top 3 choices, which were STI testing, safer sex, and birth control, were then chosen as monthly topics for the social media campaign.

Phase II

Phase II included the creation of posts using Canva, a graphic design platform. Weekly posts were created for each of the 3 monthly topics, resulting in 12 posts total. Each post was evidence-based with reminders of where and how to best access resources, such as the local Planned Parenthood, Student Health Center, or Primary Care Provider. Posts were reviewed by the interdisciplinary team from Multnomah County Health Department and Student Health Centers for approval before posting.

STI Testing

For the first month's topic of STI testing, weekly subtopics included general STI testing break down and recommendations and information on Chlamydia, Gonorrhea, and Syphilis as these are the three most common STIs. The weeks with specific STI subjects detailed basic information including signs and symptoms, testing, and treatment. See Appendix A. *Safer Sex*

The second month's topic was safer sex. Subtopics included an overview of safer sex, barrier protection, how to talk about safer sex, and tips for safer sex. The overview of safer sex detailed an explanation of safer sex and why it's important. Barrier protection included information on condoms and dental dams as well as how best to use them. How to talk about

safer sex detailed ways of initiating conversations and questions to ask. Finally, tips discussed how to be prepared for safer sex and plan ahead. See Appendix B.

Birth Control

The final month consisted of subtopics related to birth control including how to choose the right birth control and information on implants and IUDs, scheduled birth control, and the pill. The scheduled birth control included the depo shot, vaginal ring, and the patch. Each type of birth control was described, detailing how they work, duration of use, and side effects. See Appendix C.

Phase III

Phase III was the publication of posts on the Multnomah County Student Health Center's Instagram. The Multnomah County Student Health Center's Instagram account has 953 followers and has been used to address student-requested health topics, including mental health and sexual and reproductive health. Phase III included posts on both the Student Health Center Instagram feed and their Instagram story feed, which has temporary 24-hour access. Over three months, between January and March 2021, there was one post to the feed and one-story post weekly. The story post was used to help promote the weekly feed post. The content of each post was evidence based and utilize guidelines and recommendations from nationally recognized organizations such as American Academy of Family Physicians, American College of Obstetricians and Gynecologists, and Centers for Disease Control and Prevention and Planned Parenthood.

Measures

Due to the nature of this project, there were no qualitative or quantitative measures, but rather the creation of a final product that can then be used by Multnomah County Health Department to help advertise the services covered under RHEA.

Results

The final Instagram story poll from Phase I had an average of 54 views and 8.6 votes per day. STI testing had the most votes at 16, then safer sex at 12 votes, followed by birth control at 10 votes, and periods 101 at 5 votes. As this campaign consisted of monthly topics over three months, periods 101 was excluded from the project. The final topics, as mentioned previously, were STI testing, safer sex, and contraception.

During Phase III, the weekly posts received an average of 9 likes, with the most likes (21) on the initial first post of STI overview and recommendations. The weekly story posts, which were created through sharing the weekly posts, received an average of 29.6 views. The most viewed story was the safer sex overview, which received 53 views. This story was also the only story that was promoted or shared by another follower. On average, only 3.1% of followers saw story posts. Even lower, only 0.9% of followers engaged with the material by liking weekly posts.

Ethical Considerations

Before implementation, this project was submitted to the International Review Board for approval. There were no specific ethical considerations for this project as there were no surveys of participants or direct contact with human subjects. This project was exempt from IRB oversight.

Discussion

Interpretation

Literature suggests that the most successful social media campaigns publish multiple and varied posts and work alongside a multidisciplinary team (Friedman et al., 2016; Gold et al., 2012; Veale et al., 2015). The posts throughout this campaign were limited to just once weekly

to the Instagram feed and Instagram stories due to time constraints as the DNP student was solely responsible for creating posts. This ultimately meant that there were less posts overall, making the campaign more limited in scope and reach. Additionally, the interdisciplinary team was not as diverse as to include marketing or graphic design experts that could have contributed to more appealing infographics and widespread dissemination of information. Furthermore, although the Student Health Instagram targets students and adolescents, many followers are not students. Of those that liked, viewed, or answered the polling questions, many were adults or other student organizations. This indicates that the intended audience was perhaps not well reached through this account.

The final cost of this project was relatively low. The subscription to the Canva was only \$26.00 for a three month period. The use of structured doctoral student time to create the posts was crucial in keeping costs low. The initial plan to use a graphic designer proved to be challenging due to scheduling constraints, consistency of regular designs, and high cost that would have exceeded the budget provided by the grant.

Limitations

Although this social media campaign targeted adolescents through the Multnomah County Student Health Centers account, it is difficult to determine how many students this campaign reached. There is no way to identify how many students viewed each post related to the sexual and reproductive health campaign. Although there is data showing how many followers liked or viewed a story, this does not reflect the reach of the campaign. Likes and story views demonstrate who interacted with posts, but does not necessarily detail if the posts were shared with others, referenced, or utililized. Furthermore, there is no data showing whether or not the followers that did interact with the posts were adolescents and part of the target

audience. Followers of the Student Health Centers account range from adolescents, to parents, to other student or health organizations. While this may be beneficial in advertising RHEA services widely to the broader population, it does not necessarily help to prove that the campaign reached its target adolescent population. Since the Student Health Centers account is not private, posts are accessible and can be viewed by anyone, not necessarily followers of the account.

Therefore, while the likes and story views were relatively low in relation to followership, there may have been a far greater number of people viewing and sharing the posts. Ultimately, the data detailing the scope and reach of this project are limited.

In addition to the scope and reach, the utilization of RHEA services is also unknown. The goal of this project was to create a social media campaign that advertised services provided under the RHEA grant to ultimately increase utilization of these services. These services include comprehensive contraceptive counseling, voluntary sterilization, screenings for pregnancy, STIs, breast and cervical cancers, counseling on STIs and relationship safety, and abortion (Oregon Health Authority, n.d.). There is no data to reflect how the social media campaign influenced utilization of these services and whether or not access increased as a result of the information posted on the Student Health Centers Instagram account.

In terms of the external factors influencing this project, it is important to note two key situational components. Firstly, due to the worldwide pandemic, COVID-19 has further emphasized the use and value of social media as a means of communication and information dissemination. Social media is used as a tool for staying up to date when it comes to clinical practices, recommendations, and information (Tsao et al., 2021). The second situational factor to keep in mind through this project is the lack of experience with and novelty of a social media campaign. The Multnomah County Health Department has a Facebook account, but no Instagram

account. Rather than making a new account, there was collaboration with Multnomah County

Student Health Centers to use their Instagram account for the social media campaign. Members
of both the Multnomah County Health Department and the Student Health Center were novices
in the creation of such a campaign, but enthusiastic to work together on this pilot project.

Conclusion

This campaign was created as a pilot project meant to be built upon. The cost of this project was low as labor for creating the campaign posts was primarily completed through student doctoral hours. Future next steps to build upon this project may include the use of a full time staff member and graphic designer. Expertise in this area may help to create more appeal and effective visuals and posts that further the reach and utilization of services. A hired graphic designer would have knowledge and skills to create varied posts on various platforms and a full time staff member may be able to better coordinate videos or events that further engagement with the intended audience.

Additionally, this project was limited to a three month period and only addressed three topics. The expansion of this project may extend to topics that were not addressed, such as Periods 101, which came in fourth during the initial polling phase of this project. In addition to extending the topics, there could be more time spent getting feedback from adolescents to better understand what they find helpful and informative. Continued outreach to the intended audience will better inform the project to ensure that a social media campaign is created around their interests and preferences. Furthermore, expansion could also include posting on other social media platforms including Facebook and TikTok to further extend the reach of the project.

Social media campaigns can be a helpful tool in healthcare to inform, educate, and advertise. This was a pilot project to create a social media campaign specific to sexual and

reproductive health in order to help increase knowledge of and access to services provided under the Reproductive Health Equity Act (RHEA). Although evaluation of the success of this project is difficult to measure based on limitations in data, this project was still able to provide useful, informative posts that educated and advertised of RHEA services. The use of social media for information dissemination is likely to continue to be a helpful tool in the future, especially as social media platforms are utilized more for community outreach. Social media campaigns such as this one may be a way to help educate and inform the public on a variety of health topics beyond sexual and reproductive health.

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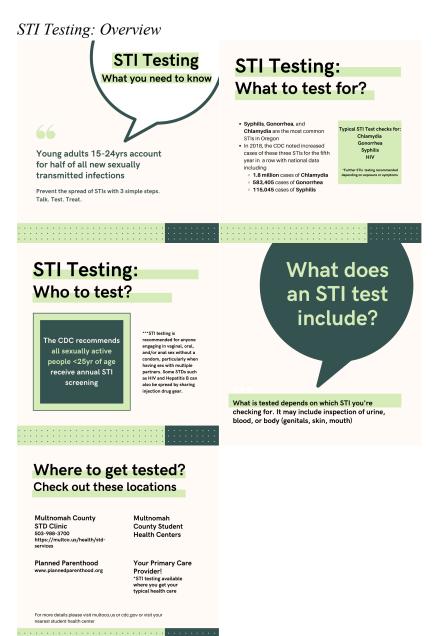
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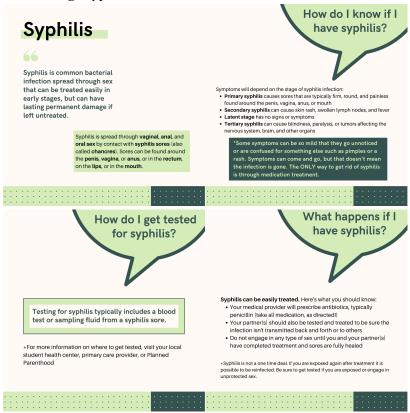
Appendix A



STI Testing: Chlamydia



STI Testing: Syphilis



Appendix B

Safer Sex: Overview



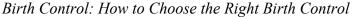


Safer Sex: Barrier Protection



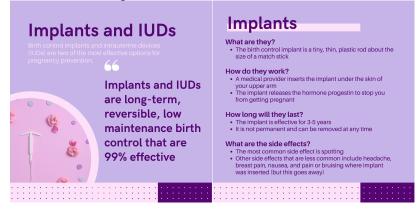


Appendix C





Birth Control: Implants and IUDs



UDS What are IUDs? • An intrauterine device IUUD is a small piece of flexible plastic or plastic with metal (copper) shaped like a T-that is placed inside the uturous to prevent pregnancy. • How long it lasts: Depending on the type of homonal IUD, it can last between 3-7 years, but can be removed at any time. • Side effects: Most people experience lighter periods or their periods go away all together, but some experience spotting. Non-Hormonal • How It works: Non-hormonal IUDs contain copper, which creates an environment that keeps sperim from reaching the egg, thus proventing pregnancy. • How long it lasts: 10-12 years • How It works: Non-hormonal IUDs contain copper, which creates an environment that keeps sperim from reaching the egg, thus proventing pregnancy. • How long it lasts: 10-12 years • Side effects: Some people have irregular bleeding or increased bleeding. With both types of IUDs there may be pain and cramping with insertion, but this goes away within a few days. Sexual partners typically do not feel or notice the IUD



Things to consider

- Birth control shots, rings, and patches do NOT prevent STIs. Condoms are the best protection from STIs.
- Set an alarm! These birth control methods must be remembered on a weekly, monthly, or quarterly basis. Set an alarm or reminder to keep you on schedule.
- Always check the expiration date before using the patch or ring. If expired, these medications will not work as well to prevent pregnancy

*Visit your nearest Planned Parenthood, Student Health Center, or Primary Care Provider for more information Birth Control: The Pill

