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Let's Face It: Patient and Parent Perspectives on Incorporating a Facebook Group into a Multidisciplinary Weight Management Program

Susan J. Woolford, MD, MPH, Alicia D. M. Esperanza Menchaca, Areej Sami, BS, and Natalie Blake, MS

Abstract

Background: Social media may have the potential to enhance weight management efforts. However, the acceptability of incorporating this entity into pediatrics is unknown. The objective of this project was to explore patients' and parents' perspectives about developing a Facebook group as a component of a pediatric weight management program.

Methods: Semistructured interviews were performed between September, 2011, and February, 2012, with patients and parents in a multidisciplinary weight management program. Interviews explored participants' perceptions of potential benefits, concerns, and preferences related to a program-specific Facebook group. Transcripts were reviewed and themes identified. The study concluded when thematic saturation was achieved.

Results: Participants (n=32) were largely enthusiastic about the idea of a program-specific Facebook group for adolescents. Most preferred a secret group, where only participants would know of the group's existence or group members' identity. No parents expressed concern about security or privacy related to a program-specific Facebook group; one parent expressed concern about undesirable advertisements. Participants endorsed a variety of ideas for inclusion on the page, including weight loss tips, live chats with providers, quizzes, and an incentive system where participants could gain points for making healthy choices. Many parents requested a separate parent-focused page, an idea that was supported by the adolescents.

Conclusions: This study suggests that participants perceive potential benefits from incorporating social media interventions into pediatric weight management efforts. Privacy and security issues do not appear to be major parental concerns. Future work should explore the impact of program-specific social media interventions on outcomes for patients in weight management programs.

Introduction

dolescents are ubiquitous users of technology and are early adopters of new media. Recent data suggest that 90% of adolescents in the United States have used social media and 75% currently have a profile on a social media site. Specifically, in regard to the most popular social media site in the United States, it is estimated that 68% of adolescents 13–17 years old use Facebook as their main social networking site. This acceptance of new technologies by adolescents may present a means for healthcare providers to interact with adolescents as part of the treatment for chronic conditions such as obesity.

The prevalence of obesity among adolescents has increased dramatically over the past 4 decades, putting millions of adolescents at risk for developing a myriad of co-morbid conditions and increased healthcare costs. ^{4–10} In response to this epidemic, the Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity were published in 2007 and advocate for multidisciplinary treatment when primary care interventions fail to achieve the desired results. ¹¹ However, the outcomes from such interventions are modest and there is a need to identify ways to increase their impact. ^{12,13}

Although the outcomes of weight management interventions are likely impacted by a number of patient level

¹The Child Health Evaluation and Research (CHEAR) Unit, Department of Pediatrics, University of Michigan, Ann Arbor, MI.

²College of Literature, Science, and Art, University of Michigan, Ann Arbor, MI.

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factors, such as motivation and self-efficacy, the potential exists that factors related to the structure of programs may be important. In particular, the frequency of contact with patients may play a pertinent role. Consistent with the 2007 recommendations, multidisciplinary weight management programs often offer weekly or biweekly sessions. However, more frequent contact with patients and their families in between visits might be a means of improving treatment outcomes. It is possible that interim contact with participants, without increasing program visits, may promote compliance with treatment plans and help to maintain motivation to adopt healthy lifestyle practices.

Social media applications such as Facebook provide an opportunity to communicate with adolescents between office visits. In addition, Facebook allows adolescents to communicate with each other as a means of providing support and encouragement. However, it presents the possibility of legal liability should participants post inappropriate or dangerous content. Furthermore, there is the potential for privacy concerns because patients' presence on the site divulges their participation in a healthcare intervention. In light of these issues, we wished to explore perceptions held by adolescents and parents about the use of social media, specifically Facebook, as part of a multidisciplinary weight management program.

Methods

Study Design

The focus of this project was to explore adolescents' and parents' perceptions of using a program-specific Facebook group as an adjunct to treatment in a multidisciplinary weight management program. In light of the absence of previous work in this area, we chose to utilize qualitative methods to gain an understanding of the issues that were important to this population in regard to the use of social media. Specifically, in person, semistructured interviews were conducted with study participants between September, 2011, and February, 2012.

Sample and Recruitment

A convenience sample was obtained from participants enrolled in the Michigan Pediatric Outpatient Weight Evaluation and Reduction (MPOWER) program. To join the MPOWER programs, patients are required to have a BMI at or above the 95th percentile for age and gender and be 12–18 years old at program enrollment for the teen program, or between 7 and 11 years old for the Junior program. Adolescents (13 years old or older) were recruited via letters of invitation distributed at the MPOWER program sessions. Parents of adolescents who enrolled in the study were also recruited. In addition, parents of patients in the MPOWER Junior program were invited to participate. Participants were compensated with a \$20 gift card for completing the interview.

Interview Guide

A prototype MPOWER Facebook group was created and an interview guide was developed to elicit perceptions of using Facebook as part of a weight management program in general and of the prototype specifically. The development of the interview guide and of the prototype was informed by patient input garnered from prior quality improvement projects within the program, and the Self-Determination Theory concepts of relatedness, autonomy, and competence that are incorporated into the MPOWER curriculum. The interview guide, including screenshots of the prototype group page, was piloted and revised in an iterative process. The instrument included both closedended questions and open-ended questions, with follow-up probes used as needed to clarify participant responses. The interview guides for parents and adolescents addressed similar domains with particular emphasis placed on eliciting potential concerns regarding the use of social media in a pediatric population.

Data Collection

In-depth interviews were conducted by the lead author and a research assistant (initially together and then separately). Adolescents and parents were interviewed individually or in small peer groups. Five groups were conducted with an average of 3 participants per group. The interviews, which were conducted with the same guide for both individual and group interviews, ranged from 20 to 40 minutes in duration; notes were taken and interviews were digitally recorded. Signed assent was obtained from the adolescents and consent from parents prior to the interviews. The study protocol was approved by the institutional review board of the University of Michigan, Ann Arbor, MI.

Data Management and Analysis

The interview transcripts were systematically analyzed using the constant comparative method by two authors independently to identify themes. ¹⁷ Consensus was achieved by review and discussion among authors. Within the main topic areas explored, common perceptions and concerns were identified and refined in an iterative process. Themes were compared between adolescents and parents. Lists were made of participant comments related to each theme. From these lists, representative comments were selected for the purpose of illustration. A total of 32 interviews were completed (11 adolescents and 21 parents; 13 were parents of adolescents and 8 were parents of younger patients). There was high convergence of the thoughts expressed and interviews were terminated after thematic saturation was achieved.

Results

Participant Characteristics

Adolescents. The majority of adolescent participants were female (78%), and white (78% white, 11% black, and 11% other); their mean age was 16 years old (range 13–18 years).

Parents. The mean age for the parents was 40.2 years (range 33–51 years). With the exception of one father, all of the parents/guardians interviewed were female. The majority of participants were from families with an annual income between \$25,000 and \$49,999.

Overall Perceptions

Adolescents and parents (irrespective of the age of their children) reported similar views regarding the idea of having a program-specific Facebook group. The vast majority of parents and adolescents believed that having a Facebook group would be a positive addition to the multidisciplinary weight management program and they expressed few concerns about such an intervention. The major themes from the interviews addressing the general idea of a Facebook group as a part of a weight management program, along with quotes that exemplify the most commonly stated opinions, are presented below.

Theme 1: Potential Benefits of Including a Facebook Group into Weight Management Efforts

Participants perceived a number of potential benefits from a Facebook group. Specifically, the most frequently mentioned potential benefits included allowing program participants to stay connected, bond with each other, and gain more support for their weight loss efforts. Parents also suggested that it would maintain adolescents' motivation to make healthy choices between clinic visits (when it is often challenging to stay motivated).

Typical quote (Parent): I think it'd be a good thing, not just for [my son], but the whole group to feel unified and know they are not alone. Share what they're going through.

Typical quote (Parent): [It's] a support network...It is really continuity of care because I feel like there is a long time between Monday [visits] ... [It provides] mindfulness about choices, reminders and connections with other children are important for [my daughter] because she is either all in or it's out of mind.

Theme 2: The Importance of Creating a "Secret" Facebook Group

Most adolescents and parents agreed that an MPOWER Facebook group for adolescents should be a 'secret' group so that no one outside of the group would know of the group's existence or the identity of the members. As such, they believed it would be important to require that participants join the group only via an invitation from an administrator (*i.e.*, one of the MPOWER providers). Consequently, only other participants in the MPOWER program would be part of the group, allowing greater bonding on the site and allowing them to feel comfortable having their identity disclosed on the site.

Typical quote (Teen): [It should be secret] Not like I'm embarrassed but then no one will be all in your business.

Typical quote (Teen): Well I wouldn't want to have my friends see that I'm in this program—it's embarrassing. I mean I told a lot of my friends but I'm friends with almost everybody at my school so I don't know.

Typical quote (Parent): As long as it's done privately...I know that [my daughter] deals with a lot of peer pressure, the negative, the push downs and to have it blasted all over the world that would do her in.

Theme 3: Monitoring and Rules

Both parents and adolescents indicated that it would be imperative to implement rules of participation to ensure that the adolescent participants experience only positive interactions on the site. To ensure this, parents thought that monitoring by MPOWER providers would be necessary to maintain the right tone on the site. For example, if the posts became negative or expressed hopelessness in relation to weight management, it would be necessary for MPOWER providers to be aware of this and be able to redirect the conversation to encourage and motivate the adolescents. In addition, there was the desire for all posts to be related to weight loss specifically, and it was noted that the MPOWER providers should ensure that participants adhered to this rule.

Typical quote (Parent):...Anytime kids are involved I would want to make sure that it was positive, not that they can't share their negative feelings that they are having but that it is monitored in some way that there is no bullying. And if there is the ability for staff to monitor and see a theme going on you would be interjecting to help move the kids along.

Typical quote (Teen): I think it should be strictly MPOWER stuff. Cause that is what the group is for.

Theme 4: Privacy and Security

Nearly all parents had privacy and security concerns related to social media in general, but not related to using Facebook as an adjunct to the MPOWER program. One parent expressed a concern about possible exposure to undesirable advertising. None of the adolescents expressed concern about being on the internet because they all felt that they had the requisite knowledge to protect themselves online, and that they were too savvy to put themselves in precarious situations when using the internet. Most parents also held these beliefs about their children.

Typical quote (Parent): When it comes to privacy you have to be careful with all the social networking...I think you can protect it [your page] but you have to be smart about what you put on it.

Typical quote (Parent): No specific [safety concerns]. We just talked about safety issues. I feel confident about her safety.

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Theme 5: Desire for a Parent Focused MPOWER Facebook Group

In addition to the belief that a program-specific Face-book group for adolescents would have positive effects, parents also indicated that they would like a similar group for themselves. Both parents and adolescents agreed that if parents wanted to communicate with providers and others in between visits, they should not be added to the teen Facebook group but should have a separate group of their peers.

Typical quote (Teen): Adults have a different mindset so they should have a different one. We have our own so why shouldn't they.

Typical quote (Teen): That [a shared group] would be really annoying. Maybe there can be an MPOWER parent one, but this is our space.

Typical quote (Parent): I don't think it would be as effective for the kids if they knew we were on it. I would think it would be effective if there was a parent page that we could go on and get kind of the same thing.

Perceptions of the Components of the Prototype

The feedback regarding specific components of a possible Facebook group, as illustrated in the prototype, was as follows.

Tips and Recipes

Parents and adolescents noted that healthy lifestyle tips would be particularly helpful. They wanted the tips to address practical issues (e.g., providing nutrition-related information with recipes that are easy to prepare or promoting exercise with suggestions for specific workout routines), and address behavioral issues (e.g., by boosting self-esteem, enhancing motivation, or providing encouragement). Frequent updating of these tips was recommended as a means of encouraging participants to visit the group regularly.

Chats/Discussions

Participants wanted to have weekly or biweekly opportunities to chat with MPOWER providers and group members via Facebook. They noted that posting a theme or question of the day and focusing the chat around that topic would be engaging, encourage participation, and help adolescents and parents address challenges they might face between visits.

Quizzes

Adolescents (but not parents) thought that the inclusion of quizzes would be of interest, especially if they could see how their responses compared to the responses of their peers. In the prototype, the questions focused on preferences (*e.g.*, What is your favorite form of exercise?).

However, the adolescents also requested questions that were knowledge based and related to the topics covered during the MPOWER program (*e.g.*, How many grams of fiber should be in a serving of healthy bread?).

Incentive System

Adolescents and parents thought that including an incentive system would help engagement and motivation. Adolescents wanted an incentive system linked to their participation in the MPOWER program (e.g., receiving points for completing their self-monitoring tasks and attending sessions) and they wanted those points reflected on a graphic in the Facebook group page. For example, they could have icons on a graphic that moved upward every week as they accrued more points. Parents appeared to prefer a system whereby points were given to adolescents for participation in activities on the Facebook group page, such as submitting a healthy recipe, answering a quiz or participating in a chat.

Typical quote (Teen): [I like] the point system that you can work towards rewards. I think that would help a lot.

Typical quote (Teen): [I like] the chats because sometimes you forget things during the week so that's a good idea.

Discussion

This is the first study to our knowledge to explore adolescent and parent perceptions of incorporating a 'secret' Facebook group into a weight management program. We found that participants were enthusiastic about the potential of such a page and they believed that it would likely have positive effects. Most notably the topic of social support appeared to be a prominent driver of their desire for a Facebook group. Indeed, in a recent study of past participants of a multidisciplinary weight management program, adolescents and parents indicated that peer support was one of the most positive aspects of program participation. Thus, our findings in this study confirm the importance of this issue for participants engaged in multidisciplinary weight management efforts.

While health systems and providers may be reticent about the use of social media in clinical programs with adolescents, particularly due to concerns regarding privacy and issues of Health Insurance Portability and Accountability Act (HIPAA) compliance, in this study participants did not report these concerns. It appears that creating a secret group (that prevents nongroup members from being aware of the group or the participants in the group) was considered protective. In this format, a Facebook group could be a means of creating a safe space where adolescents with similar goals could extend their contact with MPOWER participants via online communication.

In keeping with the desire for a positive space for teens to interact online, it was important to both adolescents and their parents for a program-specific Facebook group to be closely monitored by the MPOWER providers and to have rules of participation. This desire may be due in part to the fact that social media interactions have sometimes promoted negative behaviors and interactions.¹⁹ The active participation of team members on the site could shape the conversation to augment the program curriculum and avert any problems with interactions that might allow the 'viral' spread of any negative emotions.

Although the idea of a Facebook group was generally embraced, it is likely that keeping participants engaged in a Facebook group would require keeping content frequently updated, ensuring that it is personally relevant to the participants and that a variety of novel features are included. However, due to the nature of social media, which encourages the inclusion of user generated content, it is probable that keeping the site relevant will be aided by parents and adolescents posting salient material. Providers may then focus on keeping the core features (e.g., basic tips, ongoing quizzes, and incentive system) updated as a means of drawing participants to the site where they might then add their content. In this way, a Facebook group could serve as an extension of the in person program where treatment approaches could be reinforced.

Limitations

This study had a number of limitations. This is a relatively small study conducted with participants from one multidisciplinary weight management program with limited ethnic and economic diversity; findings may differ for more diverse populations of adolescents and parents in other programs and may vary by clinical setting. Furthermore, participants shared their perceptions of potentially having an MPOWER Facebook group; their actual interaction with such a page, the degree to which they would use it, and whether it would enhance treatment outcomes all remain unknown. However, recent research exploring the use of social media to aid weight management among college students showed that those assigned to a Facebook group along with a text messaging intervention (but not alone) experienced significantly greater weight loss compared to those in the wait list control group.²⁰ This underscores the need for further research to explore the extent to which the use of social media, such as Facebook, may be beneficial as an adjunct to weight loss efforts.

Conclusions

Adolescents engaged in multidisciplinary weight management efforts and their parents appear open to engaging with other program participants and providers via social media, specifically via a program-specific Facebook page. While few concerns were expressed by the study participants, important considerations included ensuring that membership in the group is not visible to nonmembers, that participation is a positive extension of the in-person pro-

gram interactions, and that content of the site reflects the interests of the adolescents.

Author Disclosure Statement

No competing financial interests exist for the authors of this manuscript.

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Address correspondence to:
Susan J. Woolford, MD, MPH
Medical Director
Pediatric Comprehensive Weight Management Center
C.S. Mott Children's Hospital
Co-Director, Program on Mobile Technology
To Enhance Child Health
Child Health Evaluation and Research (CHEAR) Unit
Department of Pediatrics
University of Michigan
300 NIB, Room 6D20
Ann Arbor, MI 48109-0456

E-mail: swoolfor@med.umich.edu