



## Research Letter

## Perceptions of social support for weight loss among patients in primary care



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## ABSTRACT

This study examined primary care patients' experiences with support for weight loss efforts. Adult patients ( $N = 106$ ) were recruited through primary care clinics and completed an electronic survey pertaining to their weight loss efforts. The majority (76%) received support from their existing social network (e.g., family members, professionals); 59% had used apps and <20% had used social media for support. Findings reveal differences in satisfaction with support between men and women and between support sources, which will be useful for informing weight loss interventions in primary care.

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The primary care setting represents a key opportunity for obesity intervention, as patients develop supportive relationships with their providers and seek weight control information from them [1]. Further, social support is known to influence weight loss and maintenance [2], and the popularity of social media (e.g., Facebook) and mobile health tools (e.g., smartphone apps) present novel opportunities for support. However, it is not yet clear how to optimize support for individual patients [3]. The aim of this study was to examine patients' experiences of and satisfaction with various support sources, with emphasis on their use of digital tools to support weight loss efforts.

## Method

Adult patients from a Family Medicine clinic were directed to an electronic survey. Although existing measures capture aspects of support for weight loss [4], no measure assessing human versus technology-based support was available at the time of data collection. Consequently, we created a measure to address research questions specific to this study, available in Appendix A.

## Results

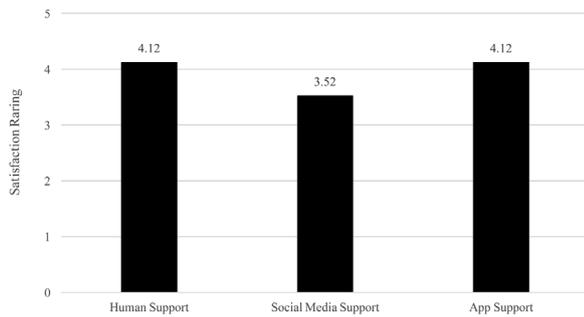
The majority of patients (57%) reported that their weight loss efforts were self-driven, versus supervised by a professional (e.g., dietician; 25%), with 18% indicating a combination. Across effort types, 76% reported receiving support from their social networks (see Table 1). Friends/peers/colleagues, significant others, and family provided motivation (e.g., talking, sharing photos) rather than participating in dietary choices or physical activity with them, whereas professionals assisted with designing a weight loss program rather than providing motivation. Satisfaction with support did not differ by source ( $F [3,21] = 1.73$   $p = 0.19$ ), with means at or slightly above 4 on a 5-point scale (see Fig. 1). However, patients

Table 1

Sources of social support for weight loss among primary care patients.

Category	Frequency (%)
Overall perception of receiving human support	
No	25 (24%)
Yes	81 (76%)
Sources of human support (yes responses)	
Significant other	32 (30%)
Family members	54 (51%)
Friends, peers, or colleagues	46 (43%)
Professionals	29 (27%)
Other	6 (6%)
Types of apps used for weight loss support	
Medical, health, or weight information (e.g., WebMD)	15 (14%)
Fitness or activity tracking (e.g., RunKeeper)	106 (42%)
Diet or nutrition information/tracking (e.g., Weight Watchers)	27 (25%)
Other	29 (4%)
Use of social media for weight loss support – sharing, documenting, posting, or discussing	
Weight loss efforts	14 (13%)
Diet	14 (13%)
Daily activities	20 (19%)
Social media platforms used for weight loss support	
Facebook	22 (21%)
Twitter	5 (5%)
Instagram	12 (11%)
YouTube	5 (5%)
Blogs	2 (2%)
Other	6 (6%)

with professional supervision were more likely to endorse having (vs. not having) support in general (i.e., ~90% vs. 6%), whereas this discrepancy was smaller among patients whose efforts were self-driven (i.e., 63% vs. 37%). Women also were more likely to report receiving support than men ( $\chi^2 = 12.30$ ,  $p = 0.001$ ).



**Fig. 1.** Average ratings of satisfaction with human, social media, and app support sources.

Fifty-nine percent (59%) of patients indicated that they used an app to support their weight loss. The most popular were fitness and activity tracker apps (used by 46%), followed by diet and nutrition information apps (25%) and medical/health information apps (14%). Satisfaction with help from these apps did not significantly differ by app type ( $F [2,18]=0.57$   $p=0.57$ ), and mean satisfaction ratings exceeded 4 on a 5-point scale (see Fig. 1). In contrast, few patients used social media for weight loss support (see Table 1). Facebook was most popular for this purpose (21%), followed by Instagram (11%); Twitter, YouTube, and blogs each were used by less than 5% of patients. Facebook was used for motivation (e.g., looking at photos and posts; 16%), with some patients comparing themselves to other users (8%) or sharing weight-related content (9%). Reports of Instagram activity were similar across posting and following motivational content (~7%); patients who used Twitter did so to post updates and follow weight control-focused individuals or organizations with approximately the same frequency (~3%). Patients reported that they watched YouTube videos about weight loss (5%) and followed users with weight loss-related accounts (1%). No patients had posted their own weight loss-related content to YouTube. Although satisfaction with support from these platforms did not significantly differ by platform ( $F [3,3]=0.41$   $p=0.76$ ), mean satisfaction ratings were lower for social media platforms (all less than 4 out of 5) than for human or app support (all greater than 4 out of 5;  $F [2,55]=11.81$ ,  $p<0.01$ ; see Fig. 1).

## Discussion

Findings show that primary care patients perceive weight loss support from several sources (i.e., close others, professionals, social media, apps) and that men perceive less support than women. As perceiving support for weight loss is associated with weight loss maintenance [5], recommending that primary care patients – particularly men – seek support may improve weight loss outcomes. Findings also show that patients use digital tools for support, though very few patients used social media for this purpose and satisfaction with it was noticeably lower than satisfaction with support from apps or human support. Strengths of this study were recruitment of a patient sample from primary care, emphasis on patients' real-world experiences of support, and assessment of support from both human and digital sources. This study was limited by reliance on self-report methods, use of a not-yet-validated measure of support that did not assess weight loss outcomes, and a modest sample size. Overall, this study contributes to the goal of maximizing weight control outcomes through primary care and identifies key areas for future research. Understanding patients' underuse of and relative dissatisfaction with social media support may reveal necessary steps for improving existing weight control interventions delivered through these platforms [6]. Finally, ensuring that clinics are equipped to offer advice regarding weight loss support could enhance patient experiences and weight loss success.

## Author contributions

MB led the development of the manuscript; AD conceptualized the study and created the measure; DA conducted data analysis and visualization; KP contributed to data curation; all authors drafted sections and reviewed/edited the manuscript.

## Funding

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## Ethics statement

Electronic informed consent was obtained from all participants and privacy rights were observed.

## Conflict of interest

The authors have no conflicts of interest to disclose.

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## Appendix A. Survey Measure

1. Have you ever been or are you currently involved in any kind of weight loss efforts?

- Yes
- No

2. Are your weight loss efforts supervised by a professional or self-driven? (Examples of Professionals include Physicians, Personal Trainers, Dietitians, etc.)

- Professional
- Self
- Both

3. Do you have any human social support for your weight loss efforts? (Examples of human social support include any person that could be part of family, relatives, peers, spouse, professionals, etc.)

- Yes
- No

4. What forms of human social support have you previously benefited from and are currently benefiting from for your weight loss efforts? (Check all that apply)

- Significant other
- Family members
- Friends/peers/colleagues
- Professionals

5. How helpful was your Significant other in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

6. How did your Significant other participate in your weight loss efforts? (Check all the apply)

- Participated in physical activity along with me (gym, work outs, running, etc.)
- Helped me manage my diet (food choices, calorie intake and tracking, etc.)
- Kept me motivated without themselves actually participating in physical activity (talks, pictures, quotes, etc.)

7. How helpful was your Family in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

8. How did your Family participate in your weight loss efforts? (Check all the apply)

- Participated in physical activity along with me (gym, work outs, running, etc.)
- Helped me manage my diet (food choices, calorie intake and tracking, etc.)
- Kept me motivated without themselves actually participating in physical activity (talks, pictures, quotes, etc.)

9. How helpful were your friends, peers, or colleagues in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

10. How did your friends, peers, or colleagues participate in your weight loss efforts? (Check all the apply)

- Participated in physical activity along with me (gym, work outs, running, etc.)
- Helped me manage my diet (food choices, calorie intake and tracking, etc.)
- Kept me motivated without themselves actually participating in physical activity (talks, pictures, quotes, etc.)

11. How helpful was the professional in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

12. How did the Professional participate in your weight loss efforts? (Check all the apply)

- Designed a weight loss program for my personal use and helped me stick to it
- Helped me manage my diet (food choices, calorie intake and tracking, etc.)
- Kept me motivated through patient visits and gave me feedback on my efforts

13. Do you use social media to share, document, post, or discuss any of the following? (Check all that apply)

- Your weight loss efforts
- Your diet
- Your daily activities
- No

14. What social media outlets have you previously used or are currently using for the items answered in the previous question? (Check all that apply)

- Facebook
- Twitter
- Instagram
- YouTube
- Blogs

15. How helpful was Facebook in your weight loss efforts?

- Very dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very satisfied

16. How did you utilize the services of Facebook in your weight loss efforts? (Check all that apply)

- Motivation through viewing pictures, videos, posts, links, etc.
- Comparing your efforts to others on your list
- Sharing pictures, videos, posts, or links on weight loss, diet, nutrition, work outs, etc.

17. How helpful was Twitter in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

18. How did you utilize the services of Twitter in your weight loss efforts? (Check all that apply)

- Tweeting about your weight loss, work out stats, diet and nutrition, etc.
- Following motivational weight loss personalities, athletes, trainers, physicians, etc.
- Following weight loss and work out Twitter Profiles (MyFitnessPal, Weight Watchers, etc.)

19. How helpful was Instagram in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied

Very Satisfied

20. How did you utilize the services of Instagram in your weight loss efforts? (Check all that apply)

- Posting personal pictures on weight loss, work outs, physical activity, etc.
- Following motivational weight loss personalities, athletes, trainers, physicians, etc.
- Posting motivational picture quotes on weight loss, work outs, physical activity, etc.

21. How helpful was YouTube in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

22. How did you utilize the services of YouTube in your weight loss efforts? (Check all that apply)

- Watching videos on weight loss, work outs, physical activity, etc.
- Following motivational weight loss personalities, athletes, trainers, physicians, etc.
- Posting personal videos on weight loss, work outs, physical activity, etc.
- Other

23. How helpful were blogs in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

24. How did you utilize the services of blogs in your weight loss efforts? (Check all that apply)

- Watching videos on weight loss, work outs, physical activity, etc.
- Reading about other individuals weight loss efforts, work outs, physical activity, etc.
- Following motivational weight loss personalities, athletes, trainers, physicians, etc.
- Posting personal videos or posts on weight loss, work outs, physical activity, etc.

25. Do you use any apps (smartphone or tablet applications) to help you in your weight loss efforts or to manage your dietary goals?

- Yes
- No

26. What kind of apps do you use for your weight loss efforts? (Check all that apply)

- Medical, Health & Weight Information (Ex: WebMD, Medscape, iTriage, MedCoach, etc.)
- Fitness & Activity Tracker (Ex: MyFitnessPal, Runkeeper, Endomondo, Loselt, etc.)
- Diet & Nutrition Information and Tracking (Ex: Weight Watchers, Fooducate, Calorieking, etc.)

27. How helpful was the Medical, Health & Weight Information app in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

28. How helpful was the Fitness & Activity Tracker app in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

29. How helpful was the Diet & Nutrition Information and Tracking app in your weight loss efforts?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

30. What is your current age?

- 18–24
- 25–34
- 35–44
- 45–54
- 55–64
- Over 65

31. What is your gender?

- Male
- Female

32. What is your highest level of education?

- No degree
- High school
- Junior college
- College bachelor's degree
- Masters or doctorate
- Other

33. Ethnicity/Origin: Please specify your ethnicity

- African American/Black
- Asian
- White
- Hispanic
- Pacific Islander
- Other

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