Do Health Apps Stigmatize People with Obesity?

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Abstract. Apps in the "Medicine" category of Apple's App Store were examined concerning the potential stigmatization of people with obesity through word and image language. Only 5/71 potentially stigmatizing apps related to obesity were identified. Stigmatization in this context can occur, for example, through the excessive promotion of very slim people in connection with weight loss-related apps.

Keywords. Health apps, adiposities, stigmatization

1. Introduction

A negative perception of obesity pervades society, often leading to stigmatizing those affected [1]. This can harm their mental health and health-related behavior [1] and may negatively impact physical health. We investigated if such stigmatization can also be found in apps meant to prevent or treat obesity.

2. Methods

In December 2022, we extracted all metadata of apps of the category "medical" of the German Apple App Store, which had a thematic reference to obesity and a German-language store description. We used the standardized SARASA method and the procedure described in [2]. The description texts were pre-filtered by an automated keyword-based search for the presence of stigmatizing terms according to the "Media Guide Obesity" of the German Obesity Society [3]. The results were then manually validated. The app artwork and screenshots were manually assessed by two raters using the above media guide to determine whether stigmatization was present. Furthermore, the judgment dimensions were expanded regarding the idealization of slim persons. For comparison, a subset of comparable apps from 2019 was analyzed according to the same scheme. The results were analyzed descriptively.

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3. Introduction

In 2022, of 3762 apps in the "medical" category with German descriptions, 71 apps (71/3762; 1.89%) were identified as having obesity-related content. 5 (5/71; 7.04%) of these apps were potentially stigmatizing in text or imagery. In two apps (1 coach, 1 diary), potentially stigmatizing text language was found in the form of the use of the term "overweight," which is, according to [3], considered to be stigmatizing as there is a focus on obesity-related characteristics. The expressions were "[...] know if you are [...] overweight, severely overweight, or extremely overweight," "The app indicates if you are [...] overweight or severely or extremely overweight," and "By [...] using the [...] app, overweight adults are guided to [...]." In the three other apps (1 monitoring, 1 calculator, 1 coach), potentially stigmatizing imagery was found. Slender people were idealized in four apps (2 calculators, 1 calculator/ diary, 1 information). The visual stigmatization and idealization of slender people occurred in the form of unwarranted emphasis on weight and presentation of an isolated part of the body, stereotypical behavior and appearance, skimpy clothing, and the transportation of clichés (e.g., people with overweight standing on a scale, slender people being happy). The apps with potentially stigmatizing content (2 with textual stigmatization, one via images) were already on sale in 2019.

4. Discussion and Conclusions

In the present study, the presence of five apps for obesity prevention and reduction was found to be a small proportion of apps with potentially stigmatizing text or imagery. In contrast, a strong emphasis on the slim beauty ideal was conspicuous in four apps. The portrayal of extremely lean, muscular, yet happy people can lead to false and unhealthy expectations and ideals for people with obesity, leading to frustration when these aspirations are unmet. It would be desirable to sensitize the manufacturers of apps that aim to prevent and reduce obesity to potentially stigmatizing and idealizing texts and images. They could subsequently review the apps and, if necessary, revise them to exclude stigmatization of app users and to avoid creating or reinforcing unhealthy expectations. The present study may have identified only some apps that use potentially stigmatizing text or imagery, as the apps were selected using a limited set of search words applied to the store descriptions. This limits the interpretability of the results.

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