



Diabetes and Eating Problems on Twitter: Qualitative Analysis

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OBJECTIVES

- To explore dialogue exchanged and shared on Twitter among people with diabetes, with a focus on disordered eating behaviours (DEB), eating disorders (ED) and body dissatisfaction.
- To examine the role of social media as a risk factor for DEB/ED.

METHOD

- Two searches of Twitter were conducted using pre-determined hashtags at two time-points (Dec 2014- Feb 2015 and Dec 2015- April 2016) related to diabetes-specific DEB/ED hashtags (e.g. #diabulimia) and diabetes generally (e.g. #diabetesprobz).
- Data were analysed in NVivo using a general inductive process to identify common themes.
- The current study was granted an ethics exemption from Deakin University and participant anonymity was maintained by ensuring example tweets provided are not searchable.

RESULTS

- In total, 454 tweets met the inclusion criteria: 430 were simple tweets and 24 were Twitter conversations (i.e. involving at least two participants and two or more responses). Examples of tweets and Twitter conversations presented in Figures 1- 3. Whilst DEB/ED related content was limited to a few users, several subthemes were identified across the Twitter conversations (n=12) and single tweets (n=62).
- Tweets described a lack of awareness of DEB/ED in the diabetes community; the need for greater advocacy; specific triggers for diabetes-specific DEB/ED; impact of diabetes distress on DEB; the use of diagnostic labels for ED; and recovering from/discouraging diabulimia. (See Figure 1a).
- Equally relevant, although not directly related, were posts about food and eating. Individuals discussed: feeling deprived and restricted with the food choices due to diabetes; the social consequences around food and meal times; internal and external criticism when eating 'restricted' foods; and the overall impact of diabetes management on eating (including food planning) and vice versa. (See Figure 1b).

Figure 1. Example tweets of diabetes-related DEB/ED and the impact of diabetes on food and eating.

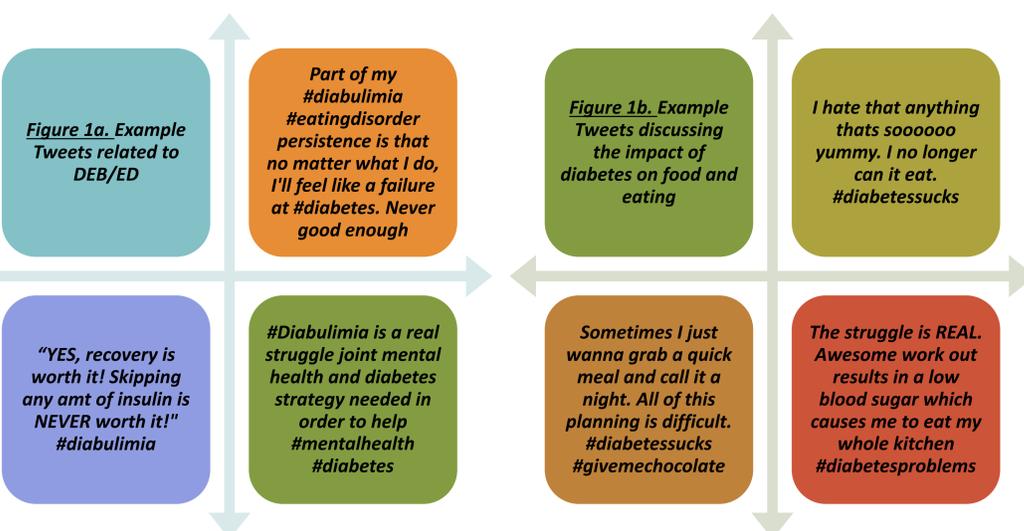
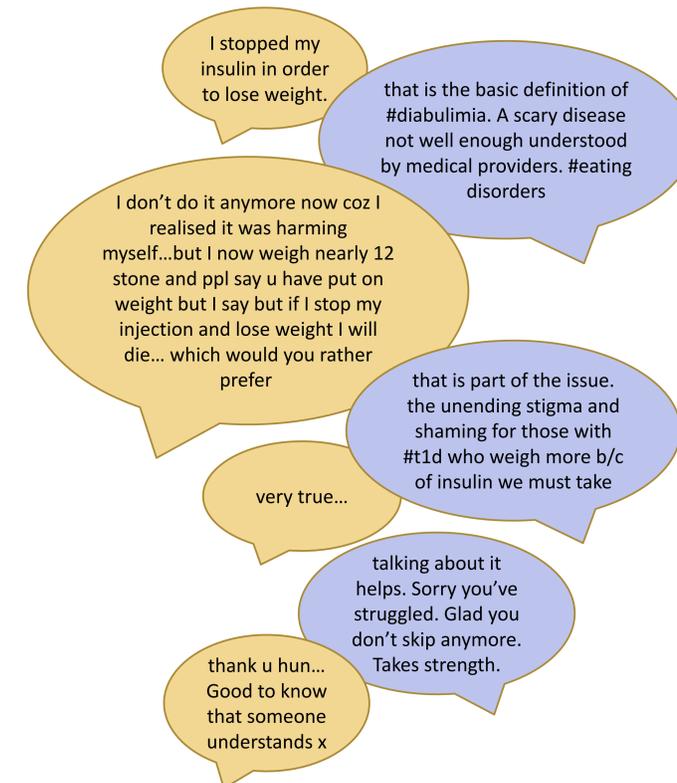


Figure 2. Twitter conversation between multiple participants discussing ED diagnostic labelling.



Abbreviations used in the tweets are defined below.
 EDNOS = eating disorder-not-otherwise-specified; BN = Bulimia Nervosa; AN= Anorexia Nervosa; T1 = Type 1; dx = Diagnosis; DSM-5 = Diagnostic Statistical Manual of Disorders (5th Edition); ed-dmt1 = eating disorder – diabetes mellitus type 1; idk = I don't know; tx = Treatment

Figure 3. Twitter conversation excerpt between two individuals discussing diabulimia.



DISCUSSION

- Tweets captured open and honest dialogue, raw emotions, distress, and ongoing difficulties associated with managing diabetes with users also candid in their descriptions of DEB and ED related content.
- The impact of diabetes and management practices, (i.e. constant attention to food, counting carbohydrates and insulin-related weight gain) were identified as triggering for 'diabulimia'.
- Tweets also emphasised the centrality of eating and magnified importance of food for individuals with diabetes.
- Social media may exacerbate DEB/ED but may also enable peer support for those who may otherwise feel isolated with this issue.
- Specific level of risk is likely to be variable and depends on pre-existing risk factors, engagement on social media and content accessed. Those who report being triggered and stigmatised by viewing and/or receiving messages online are likely to be most vulnerable.
- Limitations include: participant demographics were unknown (including age, gender and diabetes type); generalisability of results; and tweets relating to diabulimia were largely by one person.
- Incorporating social media into treatment models may be beneficial with peer-to-peer connections valuable and facilitated online.
- Findings also support the need for social media literacy programs to educate users about the risks present online and up-skilling individuals to better navigate social media and objectively appraise content shared online to mitigate associated risks.

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