

Engagement in Diabetes Health Education Content on Facebook



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Background and aim

Research suggests that social media could represent valuable channels for diabetes patient education¹⁻⁴. This study analyzes the engagement with health education contents posted on the Norwegian Diabetes Association's (NDA) Facebook page (34.000 followers).

Methods

All Facebook posts from NDA published between 01/01/2017 and 30/06/2019 were extracted, and classified according to its main contents' type. This study was declared exempt by the Ethics Committee (REK Sør- Øst, Ref:2017/764C). The treatment of personal information was approved by the data-protection officer at the University Hospital North Norway (Ref:0720).

Results

A total of 417 Facebook posts were published during the study period. Health education contents (i.e., learn self-management, self-monitoring) were the most shared type of content ($p < 0,05$). A remarkable significant low engagement around exercise promotion' contents was found, being both the least liked, shared, and commented ($p < 0,05$). The table shows the engagement around the different types of content.

Discussion

Social media users engage considerably in health education content posted on Facebook. Since



physical activity is very relevant for diabetes⁴, exercise promotion content posted on social media should be presented in different ways to be more engaging.

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References

1. Laranjo L, Arguel A, Neves AL, et al. The influence of social networking sites on health behavior change: a systematic review and meta-analysis. *J Am Med Inform Assoc* 2015 Jan;22(1):243-256.
2. Gabarron E, Årsand E, Wynn R. Social media use in interventions for diabetes: rapid evidence-based review. *J Med Internet Res* 2018;20(8):e10303.
3. Toma T, Athanasiou T, Harling L, et al. Online social networking services in the management of patients with diabetes mellitus: systematic review and meta-analysis of randomised controlled trials. *Diabetes Res Clin Pract* 2014; 106(2):200-211.
4. Williams G, Hamm MP, Shulhan J, et al. Social media interventions for diet and exercise behaviours: a systematic review and meta-analysis of randomised controlled trials. *BMJ Open* 2014 Feb;4(2):e003926

Keywords: Diabetes; Social media; Health Education

Engagement in Facebook Posts

CONTENT TYPE Number (%)	LIKES Mean (SD)	SHARES Mean (SD)	COMMENTS Mean (SD)
Health education = 71 (17,0%)	220,8(505,3)*	85,5(260,6)*	18,29(36,6)
Exercise promotion = 25 (6,0%)	47,2(31,0)**	8,1(7,9)**	2,7(2,5)**
Other (i.e., awareness, conferences, gatherings) = 321 (77,0%)	239,2(343,9)	50,5(110,8)	25,7(44,4)*
Total = 417 (100%)	224,6(368,8)	54,0(146,1)	23,4(42,4)

*Students t-test, $p < 0,05$; **Mann-Whitney U test, $p < 0,05$