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Self-management behavioural change as a result of engagement with online peer support: Insights from a qualitative analysis of a UK asthma online community

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1. Background

- Patients with long-term conditions take part in online health communities (OHCs) for advice and guidance from other patients with similar conditions. Engagement with OHCs may prompt changes in self-management behaviour.
- Limited evidence exists concerning the determinants of behaviour change resulting from engagement with an OHC.

2. Aim

To understand the factors associated with behaviour change observed in the Asthma + Lung UK (ALUK) OHC.

3. Methods

- Threads posted from Dec 2022 to August 2023 were identified using Google with the search term 'helped'.
- Posts expressing behaviour change/intention to change were identified and these threads further analysed.
- Within these threads, posts which appeared to prompt behaviour change/intention to change were analysed using the Behaviour Change Technique (BCT) Taxonomy[1].
- Usernames and user demographics were obtained from within posts and/or publicly available profiles, where given.

User demographic	Posts expressing behaviour change/intention	Posts prompting behaviour change/intention
Total users (n)	18	32
Female/Male Not stated	9/1 8	12/8 12
UK/Other Not stated	9/1 8	22/3 7
White/Other Not stated	7/1 10	15/0 17
<60/>60 years old Not stated	2/1 15	6/2 24
Asthmatic/Carer Not stated	13/1 4	27/0 5

Definition of OHC terms
'User'   An individual who has signed up with the OHC.
'Post'   A comment/reply/question etc 'posted' on the forum by a user. This can be to start a new 'thread' on a particular topic, or in reply to or commenting on a previous post.
'Thread' A group of posts about a particular topic, with a title, often started by a user posting a question or comment, followed by replies from other users.

4.2. Behaviour Change Techniques, resulting actions and intentions

BCTs identified in posts prompting change/intention to change:

BCT Taxonomy[1]		Frequency	
1.4	Action Planning	26	
2.7	Feedback on outcome of behaviour	2	
3.1	Social Support (unspecified)	2	
3.2	Social support (practical)	1	
4.1	Instruction on how to perform the behaviour	17	
5.1	Information on health consequences	7	
6.1	Demonstration of the behaviour	30	
6.2	Social comparison	1	
8.1	Behavioural practice	1	
9.1	Credible source	4	
11.1	Pharmacological support	10	
12.5	Adding objects to the environment	15	

Actions or intended actions that resulted from users engaging with online peer support were:
- The user contacted, or said they would contact, their practice nurse, consultant or ALUK helpline for advice/help.
- The user tried, or said they would try, the self-support measure suggested, e.g. gargling salt solution, purchasing an air purifier, using Corsodyl mouthwash, reading up on inhaler propellants.

Examples of posts prompting behaviour change/ intention to change, with the identified BCTs, are given below:

Silent reflux and asthma
The user describes which medications they take for this issue and the relative merits of different medications.
(BCTs 5.1, 4.1, 6.1)

Asthma and COVID
The user has reviewed previous posts on this topic and surmises that experiences are varied, but not as bad as expected. The user recommends discussing with the GP specific medications for a rescue pack, so as to be prepared during holidays.
(BCTs 11.1, 6.2, 1.4)

Sore throat and inhalers
The user recommends a medicine and an alternative treatment for oral thrush as well as explaining how inhaled corticosteroids can cause this issue. Also recommends they ask their GP for a spacer and get their inhaler technique checked.
(BCTs 8.1, 9.1, 4.1, 5.1)

Air purifiers
The user describes how they use air purifiers and how that helps with their asthma. The user also gives details of the type of air purifier, cost and necessary maintenance.
(BCTs 12.5, 4.1, 6.1)

5. Conclusions

In an OHC for patients with asthma, we found evidence of behaviour change as result of engagement with online peer support,. Users prompting behaviour change employed a variety of BCTs. More active, experienced OHC users tended to adopt a supportive role rather than seeking help/advice themselves. This study sheds light on how online peer support may help self-management among patients with long-term health conditions.

Reference (1) Michie S, Richardson M, Johnston M, et al. The Behaviour Change Technique Taxonomy (v1) of 93 Hierarchically Clustered Techniques: Building an International Consensus for the Reporting of Behaviour Change Interventions. Ann Behav Med. 2013 Aug 1;46(1):81–95.

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