

Knowledge, attitudes and behaviours on smoking cessation in nurses caring for patients with inflammatory bowel disease



Conocimientos, actitudes y comportamientos sobre el abandono del tabaco en enfermeras que atienden a pacientes con enfermedad inflamatoria intestinal

Smoking is a major environmental factor implicated in the development and clinical course of inflammatory bowel disease (IBD).¹ Tobacco use has been associated not only with an increased risk of developing Crohn's disease (CD), particularly in Western countries, but also with unfavourable outcomes.¹ Despite the controversy that smokers are less likely to develop ulcerative colitis (UC), the risks of smoking for people with both IBD conditions far outweigh the benefits. Despite all the evidence on the detrimental effects on health, smoking is still a prevalent behaviour among patients diagnosed with IBD.¹ Therefore, patients should be encouraged to stop smoking according to the ECCO management guidelines.²

Nurses have become a mainstay in the care of patients with IBD and could play a critical role in the identification of patients smoking status and in the support for smoking cessation.³ However, data on nurses' beliefs, attitudes and performance in this regard are scarce. In this study, we aim to explore the knowledge, attitudes and behaviours of nurses caring for IBD patients in relation to smoking cessation. For this purpose, we carried out a multicentric, observational, cross-sectional study based on a survey conducted among advanced practice IBD nurses, hospital and day care centre nurses who supervise IBD patients. The "Knowledge, Attitudes, Behaviours, and Organization (KABO) Questionnaire" was used as an evaluation instrument. The KABO questionnaire is a self-administered instrument specifically designed to assess factors relevant to smoking cessation implementation practices.⁴ The questionnaire assesses the brief smoking cessation intervention 5A model based on five strategies (1) Ask patients about smoking during every visit, (2) Advise all tobacco users to quit, (3) Assess smokers' willingness to try to quit, (4) Assist smokers' efforts with treatment and referrals, and (5) Arrange follow-up contacts to support cessation efforts. In addition, it explores individual cognitive and behavioural factors and smoking cessation support from an organizational-level.⁴

We collected surveys from 54 nurses caring for IBD patients in three public hospitals in Spain. The mean participant age $\pm$ standard deviation was 43.9 ± 11.4 years (range: 23–64): 94.4% were women, 63% were engaged in the care of IBD patients on a full-time basis and 37% on a part-time basis. Participants had 18.9 ± 11 years of experience as nurses and 63% were advanced practice nurses. Regarding smoking habits, 51.8% (n: 28) had never smoked, 20.4% (n: 11) were current smokers, and 27.8% (n: 15) were former smokers. Only 11 (20.4%) had previous training in smoking cessation.

Survey results are summarized in Table 1. Only the Ask and Advise questions scored ≥ 7 (median score in a range from 0 to 10). The three questions regarding Follow-up

scored quite poorly ($\leq 1/10$). Regarding cognitive and behavioural factors, participants obtained the highest scores in questions exploring individual commitment (30/40) but scored below average in individual skills (13.5/60). All organizational factors also scored low. Considering professional and personal backgrounds, advanced practice nurses scored significantly better in five out of the seven questions that assess the intervention 5A model. Nurses previously trained in smoking cessation scored better in individual skills. Never-smokers scored significantly better in individual commitment and in attitudes and beliefs.

Nurses play a key role in the control of IBD,³ but our data suggest that there are deficiencies in implementing smoking cessation interventions as part of their routine practice. Most nurses have never been trained in smoking cessation strategies and although commitment seems to be high, smoking cessation practices are not broadly implemented. Never-smoking status seems to positively influence nurses' attitude, beliefs and individual commitment. Advanced practice nurses perform better than nurses without this specialized background. In line with our results, surveys conducted in gastroenterologist offices suggest that smoking cessation counselling is provided irregularly and many gastroenterologists do not feel comfortable discussing cessation strategies.⁵ As a conclusion, there is a need to integrate smoking cessation interventions as part of standard practice. Nurses play an important role in raising the issue of smoking cessation with IBD patients, but training is needed in techniques to deliver brief advice on smoking, better resources, and organizational support.

Ethics

This study has been approved by the Ethics Committee for Clinical Research of the Hospital Universitari Vall d'Hebron (reference PR(AG)342/2019). Throughout the investigation process, ethical and data protection protocols related to anonymity and data confidentiality were complied with.

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Conflict of interest

Non to be disclosed.

Bibliografía

1. Ducharme-Bénard S, Côté-Daigneault J, Lemoyne M, Orlicka K, Lahaie R, Weber A, et al. Patients with inflammatory bowel disease are unaware of the impact of smoking on their disease. *J Clin Gastroenterol*. 2016;50:490–7, <http://dx.doi.org/10.1097/MCG.0000000000000386>.
2. Torres J, Bonovas S, Doherty G, Kucharzik T, Gisbert JP, Raine T, et al. ECCO guidelines on therapeutics in Crohn's disease: medical treatment. *J Crohns Colitis*. 2020;14:4–22, <http://dx.doi.org/10.1093/ecco-jcc/jjz180>.

Table 1 Summary of KABO questionnaire survey results.

	Range of scores ^a	Global assess- ment	Smoking status			Previous training			Advanced IBD Nurse		
			Never smoked (n: 28)	Smoker or ex-smoker (n: 26)	<i>p</i>	Trained (n: 11)	Never trained (n: 43)	<i>p</i>	Yes (n: 34)	No (n: 20)	<i>p</i>
<i>Level of action</i>											
How often do you QUESTION AND DOCUMENT consumption of tobacco use of your patients?	0–10	7.0 (4.0–9.0)	7.0 (4.5–8.0)	5.5 (3.0–9.0)	0.986	8.0 (2.0–9.0)	7.0 (4.0–9.0)	0.713	8.0 (6.0–9.0)	4.5 (1.2–7.7)	0.004
How often do you ADVISE your patients to quit smoking?	0–10	9 (5.7–10.0)	8.5 (6.0–9.0)	9.0 (5.0–10.0)	0.750	8.0 (4.0–10.0)	9.0 (6.0–10.0)	0.424	9.0 (7.75–10.0)	5.5 (4.0–7.7)	<0.001
How often do you ASSESS your patients’ desire to quit smoking?	0–10	5.5 (4.0–8.0)	6.0 (5.0–7.7)	5.0 (2.7–8.2)	0.275	6.0 (4.0–10.0)	5.0 (4.0–8.0)	0.405	6.0 (5.0–9.0)	4.5 (0.2–5.7)	0.001
How often do you HELP your patients quit smoking (using strategies or techniques to encourage change, setting a quit day and/or using medication).	0–10	3.5 (0.7–7.0)	5.0 (1.2–7.7)	3.0 (0.0–6.0)	0.073	5.0 (2.0–9.0)	3.0 (0.0–6.0)	0.208	5.5 (2.0–7.2)	1.5 (0.0–5.0)	0.011
How often do you RECOMMEND/INDICATE smoking cessation medications to your patients such as nicotine replacement therapy, bupropion or varenicline?	0–10	2.0 (0.0–5.2)	2.5 (0.0–6.0)	2.0 (0.0–5.0)	0.512	6.0 (0.0–8.0)	2.0 (0.0–4.0)	0.095	3.0 (0.0–6.0)	1.0 (0.0–3.75)	0.213
How often do you FOLLOW UP with your patients as part of the smoking cessation intervention by scheduling follow-up visits, referring to other professionals, sending a letter or reminder by mail, or making follow-up phone calls?	0–10	1.0 (0.0–5.2)	4.5 (1.0–7.7)	0.0 (0.0–1.5)	<0.001	4.0 (0.0–8.0)	1.0 (0.0–5.0)	0.333	2.0 (0.0–6.2)	0.0 (0.0–4.0)	0.133

Table 1 (Continued)

	Range of scores ^a	Global assessment	Smoking status			Previous training			Advanced IBD Nurse		
			Never smoked (n: 28)	Smoker or ex-smoker (n: 26)	p	Trained (n: 11)	Never trained (n: 43)	p	Yes (n: 34)	No (n: 20)	p
How often DO YOU FOLLOW UP with patients who have started smoking cessation treatment under your care?	0–10	0.0 (0.0–5.0)	1.0 (0.0–5.0)	0.0 (0.0–0.25)	0.016	0.0 (0.0–8.0)	0.0 (0.0–3.0)	0.227	0.5 (0.0–5.0)	0.0 (0.0–0.75)	0.027
How often DO YOU FOLLOW UP with patients who have quit smoking under your care through referrals to other professionals or units?	0–10	0.5 (0.0–5.0)	1.0 (0.0–5.0)	0.0 (0.0–2.75)	0.250	1.0 (0.0–7.0)	0.0 (0.0–2.0)	0.328	2.0 (0.0–5.25)	0.0 (0.0–0.75)	0.002
<i>Cognitive, behavioural and organizational factors</i>											
Individual skills	0–60	13.5 (8.0–12.2)	14.5 (8.0–23.5)	12.5 (8.7–22.2)	0.917	34.0 (23–0–39.0)	11.0 (8.0–19.0)	<0.001	15.5 (8.7–24.0)	10.5 (8.0–19.7)	0.479
Attitudes and beliefs	0–40	24.5 (17.5–30.2)	28.0 (20.2–32.0)	23.5 (15.0–26.2)	0.014	29.0 (23.0–32.0)	24.0 (16.0–30.0)	0.317	26.0 (19.7–31.2)	23.5 (14.0–28.2)	0.057
Individual commitment	0–40	30.0 (20.7–35.2)	33.5 (28.0–39.0)	25.0 (19.2–30.0)	0.001	38.0 (24.0–40.0)	28.0 (20.0–34.0)	0.056	30.0 (22.5–35.0)	28.0 (20.0–36.7)	0.929
Beliefs about patient desire/readiness to quit	0–30	21.0 (17.0–24.2)	23.0 (19.0–25.0)	19.5 (15.0–24.0)	0.065	23.0 (19.0–29.0)	21.0 (16.0–24.0)	0.249	22.0 (17.7–24.2)	19.5 (15.5–24.7)	0.414
Positive organizational support	0–40	10.0 (1.7–15.5)	13.0 (0.0–18.5)	5.0 (2.0–13.0)	0.288	17.0 (10.0–32.0)	5.0 (1.0–14.0)	0.015	5.0 (0.75–14.0)	11.5 (5.2–19.7)	0.828
Organizational resources	0–30	10.0 (3.0–16.5)	9.5 (5.0–15.0)	10.0 (3.0–20.5)	0.768	9.0 (3.0–25.0)	10.0 (3.0–16.0)	0.880	9.0 (3.0–17.0)	11.0 (6.0–17.2)	0.355
Organizational endorsement	0–20	4.0 (0.0–9.2)	4.5 (3.0–10.0)	2.5 (0.0–6.2)	0.025	6.0 (2.0–11.0)	3.0 (0.0–8.0)	0.149	3.5 (0.0–8.5)	4.0 (0.5–9.7)	0.115

Results are shown as median (interquartile range).

^a Higher scores indicate higher levels of support and implementation of smoking cessation practices.

3. Kemp K, Dibley L, Chauhan U, Greveson K, Jäghult S, Ashton K, et al. Second N-ECCO consensus statements on the european nursing roles in caring for patients with Crohn's disease or ulcerative colitis. *J Crohns Colitis*. 2018;12:760–76, <http://dx.doi.org/10.1093/ecco-jcc/jjy020>.
4. Andrés A, Castellano Y, Fu M, Feliu A, Ballbè M, Antón L, et al. Exploring individual and contextual factors contributing to tobacco cessation intervention implementation. *Addict Behav*. 2019;88:163–8, <http://dx.doi.org/10.1016/j.addbeh.2018.08.003>.
5. Nulsen B, Sands BE, Shah BJ, Ungaro RC. Practices, attitudes, and knowledge about Crohn's disease and smoking cessation among gastroenterologists. *Eur J Gastroenterol Hepatol*. 2018;30:155–60, <http://dx.doi.org/10.1097/MEG.0000000000001010>.

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