

A Survey Using the Social Networks Revealed Poor Knowledge on Fecal Microbiota Transplantation

TO THE EDITOR: Changes in the composition of the intestinal microbiota (dysbiosis) have been associated with the presence of different gastrointestinal disorders such as recurrent *Clostridium difficile* infection (CDI), inflammatory bowel disease, and irritable bowel syndrome (IBS).¹⁻⁴ A current therapeutic option for restoring the resident microbiota is bacteriotherapy through Fecal Microbiota Transplantation (FMT).^{2,4,5} FMT is the transfer of a fecal suspension from a healthy donor into the gastrointestinal tract of a sick individual and this is the most effective way to reestablish the composition of the intestinal microbiota in patients with CDI, IBS, ulcerative colitis, and Crohn's disease.^{4,5} Efficacy of FMT in the treatment of these diseases has been recently described, for example, several studies showed responses of 63% or more in patients with inflammatory bowel disease.^{4,5} Several studies have shown that the microbiota balance is recovered following FMT, although the long-term effects remain unknown. Seekatz et al⁶ observed an increase of *Bacteroidetes* and a decrease of *Proteobacteria* following FMT, a microbial population more diverse and similar to healthy individuals. In the treatment of re-

current CDI, FMT has shown an efficacy of at least 81% which is significantly superior to vancomycin by 2.6-fold.⁷ In addition, it is currently being studied for refractory IBS. For example, in a study on post-infectious IBS after an outbreak of *Giardiasis*, infusion of intraduodenal live fecal culture showed a significant reduction in symptoms 7 weeks after bacteriotherapy which lasted for 12 months.⁸ In a more preliminary open study in patients with IBS refractory to treatment, symptom improvement or resolution was reported by 70% after FMT.⁹ Further, FMT has several advantages in comparison with the treatment with probiotics by the possibility of longer colonization in the adult intestine.¹⁰

FMT appears to be safe; however, some adverse events require further study such as diarrhea, fever, gastrointestinal diseases, inflammation, and infection.⁵ One limitation for this innovative therapy is its acceptance among the general population, patients and even physicians. Therefore, as part of a new program to implement a FMT in Mexico, we conducted a survey using social networks including Facebook and Twitter to learn about the knowledge and acceptability of FMT in the general

Table. Results of Fecal Microbiota Transplantation-related Questions

	Yes	No n (%) ^a	I don't know
Have you heard of Fecal Microbiota Transplantation?	18 (24)	55 (72)	3 (4)
If you knew that the donation of stool is a simple and noninvasive procedure, would you be donating?	30 (40)	10 (13)	36 (47)
Do you currently have any gastrointestinal infection or any other gastrointestinal disorder?	15 (20)	46 (60)	15 (20)
The Fecal Microbiota Transplantation is recommended to treat refractory gut infections and other gastrointestinal disorders. Would you be willing to receive a Fecal Microbiota Transplantation if the effectiveness was very high?	20 (26)	4 (5)	52 (69)
Do you know any hospital or other healthcare institution in Mexico where Fecal Microbiota Transplantation is performed?	3 (4)	67 (88)	6 (8)
Would you like to have more information about this topic?	65 (86)	11 (14)	NA

^aA total of 76 questionnaires were received.

population. We uploaded the survey on Facebook and an invitation to answer the survey was published for several graduate students on their Facebook Wall or Twitter. The questionnaire included 8 general questions about FMT. A total of 76 surveys were answered in 2 days (responders mean age, 30 [range, 20-58] years old; 60.5% female). Eighty-eight percent were on favor of organ donation for transplants and the best known were kidney, heart, bone marrow, and skin. Data of FMT willingness are shown in Table. The majority of the participants were not familiar with FMT and also hesitated on whether donating stools or to decide, if they would receive a FMT if needed.

This survey highlights 2 main issues: first, it suggests that the absence of information causes people to be uncertain about stool donation or having FMT. However, a high proportion (86%) wanted to receive more information about it. Secondly, we believe that this exercise opens new ways of communication¹¹ to obtain information of medical interest for the community in general. It can be useful for medical research, for example in patients who can be recruited quite fast for investigation protocols and surveys and also for spreading medical information and/or education to patients¹¹ with its simple and friendly platforms, which can be used by any person. Notwithstanding, surveys using the social media may be limited by the age of the responders, as younger subjects are the most frequent users of these networks as it was the case of our recruited subjects.

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