PATIENT KNOWLEDGE OF MICROBIOTA AND ACCEPTABILITY OF FECAL MICROBIOTA TRANSPLANTATION IN VARIOUS CHRONIC DISEASES

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OBJECTIVES

Gut microbiota is now considered a key player in human health[1]. Despite increasing media exposure, patients' knowledge on microbiota has never been assessed.

We evaluated, in various chronic diseases, patient knowledge of microbiota and the acceptability of fecal microbiota transplantation (FMT) via an online patient community using an established approach[2-3].

METHODS

All patients that connected to the Carenity French online community from 10/08/2018 to 01/25/2019 were invited by e-mail to fulfill a questionnaire on a voluntary basis.

The following patient criteria were assessed: primary disease and its duration, demographic data, treatments, and dietary habits. Knowledge of microbiota, probiotics, and FMT acceptability were evaluated through specific questions.

RESULTS

In total, 877 patients participated. 72% (634/877) were women and 28% (243/877) men. Average age was 53.6 years.

Ankylosing spondylitis	222 (25.3%)
Diabetes type 2	195 (22.2%)
Rheumatoid arthritis	127 (14,5%)
Crohn's disease	101 (11.5%)
Psoriasis	64 (7.3%)
Obesity	61 (7%)
Ulcerative colitis	55 (6.3%)
Lupus	52 (5.9%)

Tab. 1 – Distribution of the diseases (n= 877).

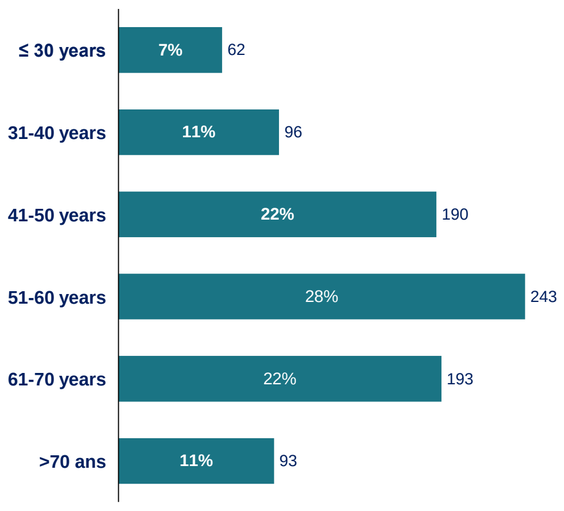


Fig. 1 – Age distribution (n= 877).

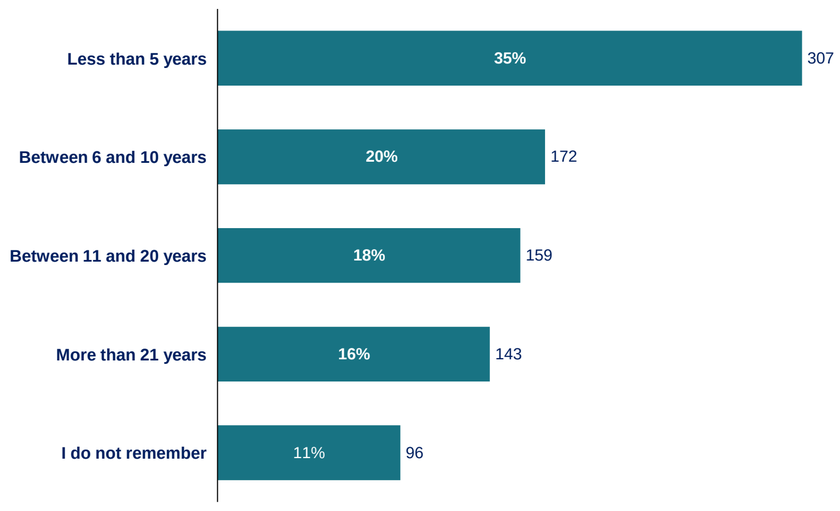
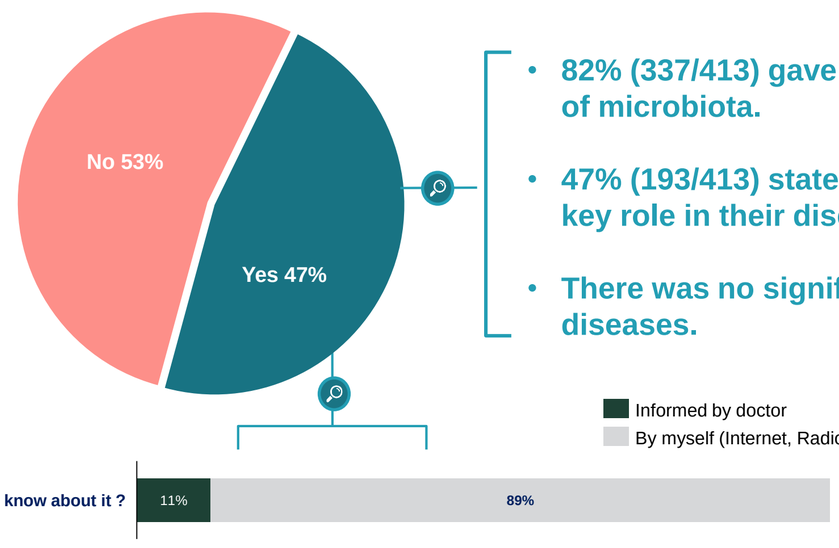


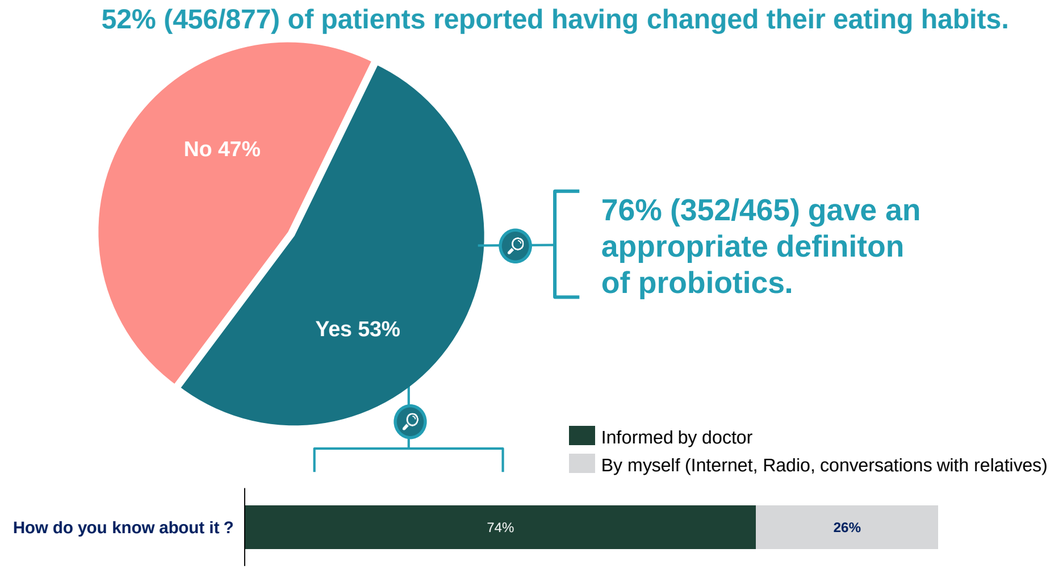
Fig. 2 – Disease duration (n= 877).



- **82% (337/413) gave an appropriate definition of microbiota.**
- **47% (193/413) stated that microbiota plays a key role in their disease.**
- **There was no significant difference between diseases.**

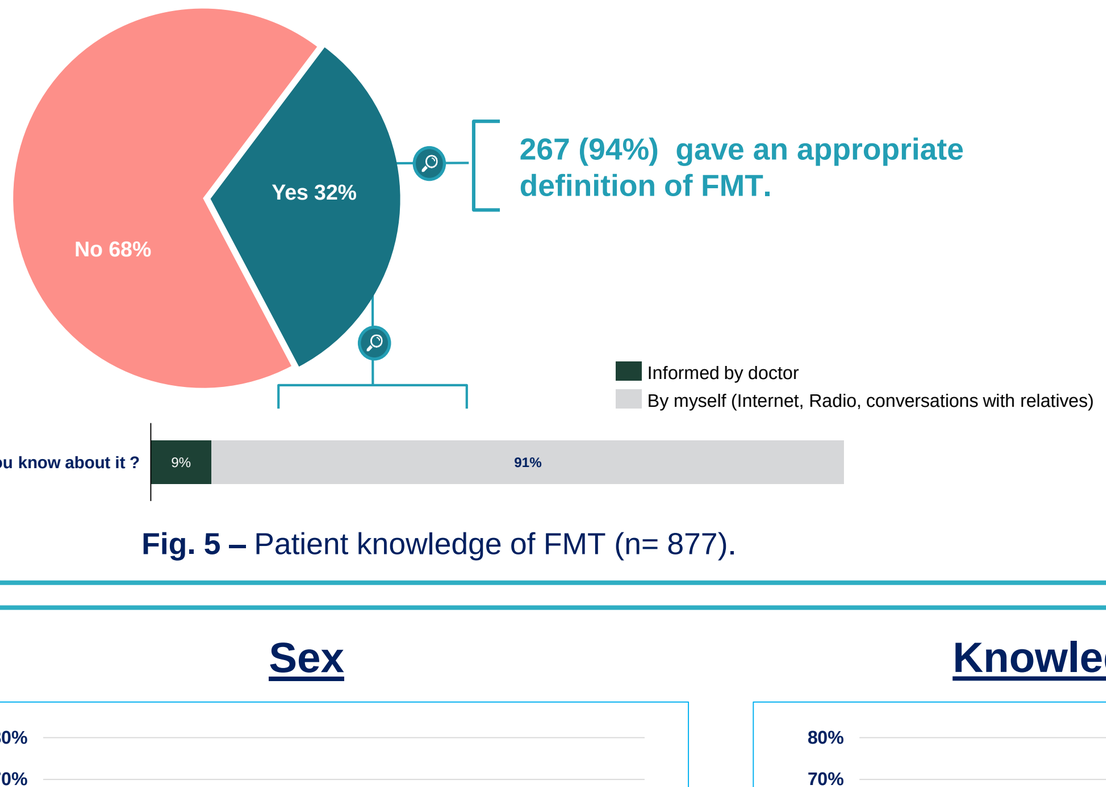
Fig. 3 – Patient knowledge of microbiota (n= 877).

48% (223/877) of patients reported having used probiotics.
52% (456/877) of patients reported having changed their eating habits.



- **76% (352/465) gave an appropriate definiton of probiotics.**

Fig. 4 – Patient knowledge of probiotics (n= 877).



- **267 (94%) gave an appropriate definition of FMT.**

Fig. 5 – Patient knowledge of FMT (n= 877).

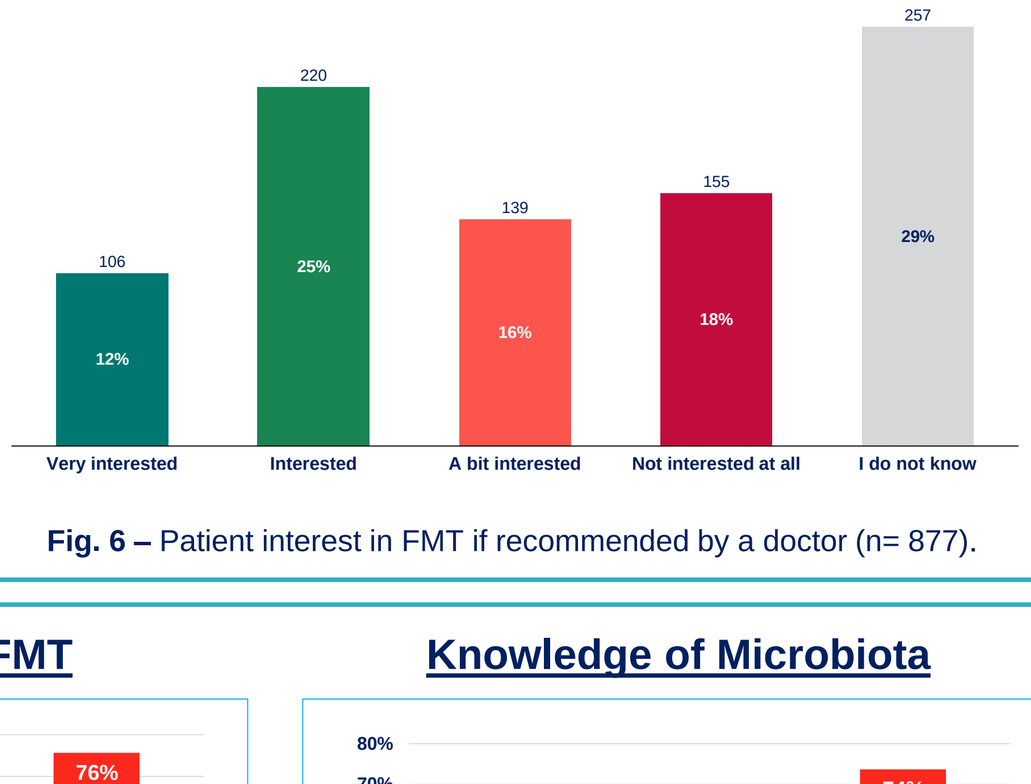
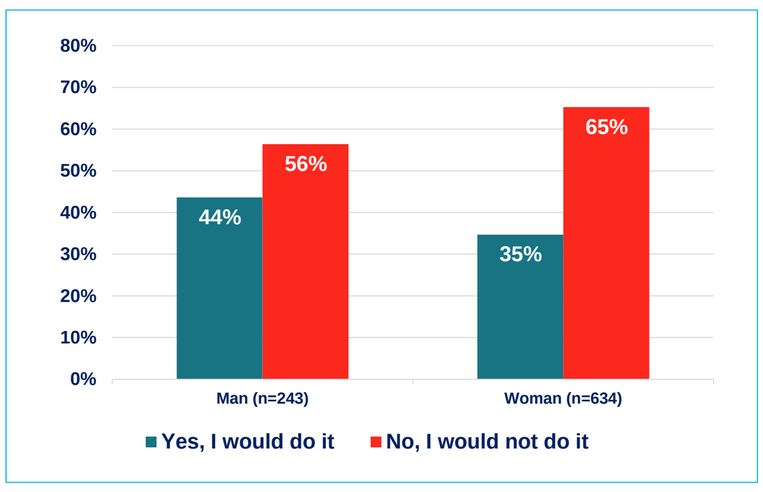


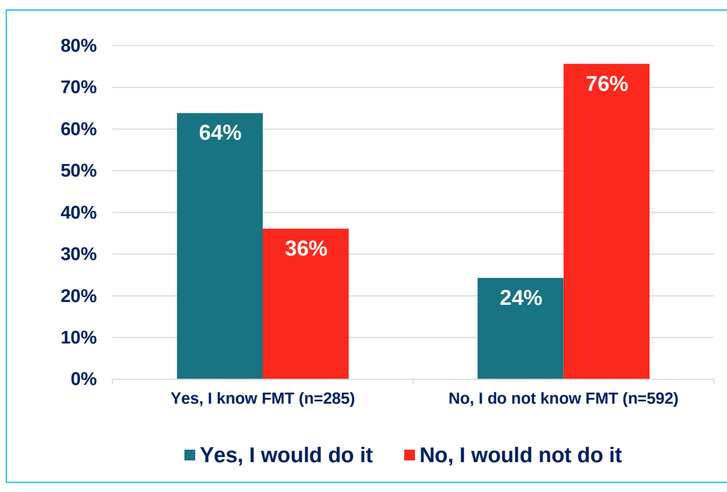
Fig. 6 – Patient interest in FMT if recommended by a doctor (n= 877).

Sex



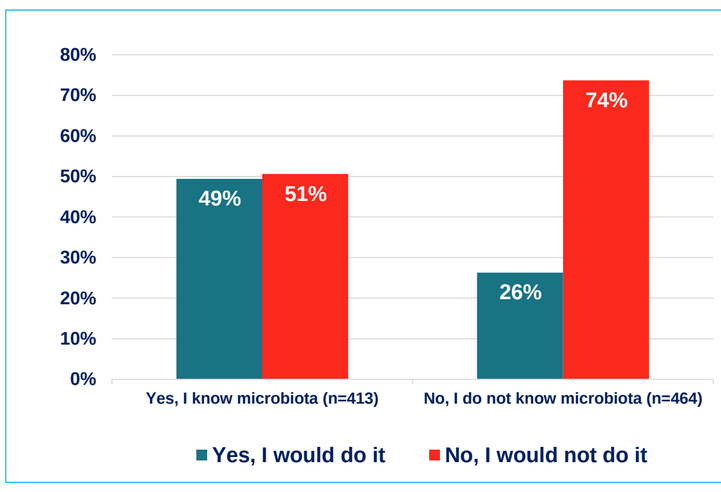
Male sex is associated with FMT acceptability (OR: 1.63, CI95% (1.14 to 2.32), p≤0.01)

Knowledge of FMT



Previous knowledge of FMT is associated with FMT acceptability (OR: 4.16, CI95% (2.92 to 5.96), p≤0.01)

Knowledge of Microbiota



Previous knowledge of microbiota is associated with FMT acceptability (OR: 1.54, CI95% (1.05 to 2.24), p≤0.05)

Fig. 7 – Factors associated with FMT acceptability (n= 877).

CONCLUSION

Knowledge on gut microbiota is still poor in patient communities and contributes to a relatively low level of FMT acceptability. Sex, knowledge on the gut microbiota, and previous knowledge of FMT are good predictors. Doctors play a key role in patients' acceptance of FMT and will have to promote education programs to expand treatment and clinical research using FMT and microbiome manipulation of FMT acceptability.

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