

STATE OF KNOWLEDGE OF GUT FLORA AND MICROBIOTA AMONG HEALTHCARE PROFESSIONALS AND GENERAL PUBLIC IN VARIOUS COUNTRIES¹

STUDY LED BY BVA IN 6 COUNTRIES

HEALTHCARE PROFESSIONALS RATHER WELL INFORMED ABOUT GUT FLORA AND MICROBIOTA

Gastro-enterologists, paediatricians, general practitioners and pharmacists have a good knowledge of intestinal flora, especially in Mexico and in the US. Almost all of them can spontaneously quote its composition made of bacteria or less specifically micro-organisms (around 90% of them). Professionals also quote spontaneous elements about gut flora localisation or gut flora roles (around 60% of them). American healthcare professionals (Mexicans and US) seems to have a better knowledge than the one's in other countries, especially general practitioners and paediatricians (around 95% of spontaneous quotations for gut flora's nature/composition).

Healthcare professionals are familiar with the terms "gut microbiota", especially in Mexico and in France. Nevertheless, pharmacists are less numerous to know those terms in all countries compared to other professionals.

Almost all gastro-enterologists are familiar with the terms "gut microbiota" (92%-100% of knowledge, depending on the country). Paediatricians and general practitioners also know what those terms refer to (from 77% to 98%), especially in France and Mexico. Most pharmacists know what gut microbiota is, but have the lowest level of knowledge (64%-82%), except in France. Indeed, all French pharmacists know what does terms refer to (95%).

A PERFECTIBLE KNOWLEDGE OF GUT FLORA AND MICROBIOTA TO THE PUBLIC

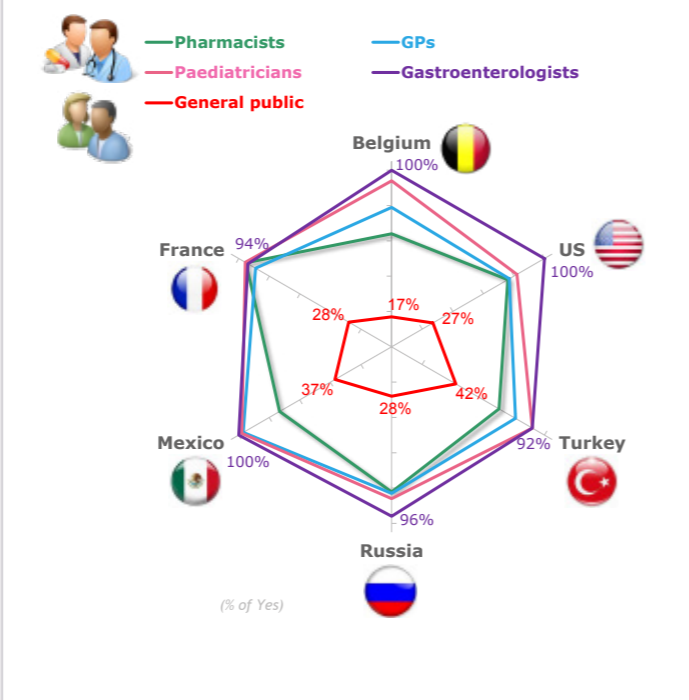
Even if general public knows the terms "gut flora", most people have difficulties to define it precisely. Except for Russians, the majority of general public doesn't know that gut flora is made of bacteria / micro-organisms (only 24% to 42% quote it spontaneously). In Russia, three-quarters of the population quote spontaneously its composition (73%). Moreover, most people cannot quote detailed information such as its functions or precise localization. In Turkey and in the US, people seems even less informed about gut flora (39-40% of people can't quote anything about gut flora versus 4-14% in other countries).

Gut microbiota is mostly unknown to the public.

In Belgium, France, Russia and in the US, the percentage of people who declares having already heard of "gut microbiota" represents a minority of population (from 17% to 28%). This percentage is a bit higher in Mexico and Turkey (from 37% to 42%).

Most people think gut flora preservation is important but only a part of it already preserves one's intestinal flora, mainly by paying attention to nutrition. On a scale between 1 and 10 to rate how important it is to take care about intestinal flora, general public gives rather high marks (average score from 7,8 to 8,6), especially in Russia and Mexico (average score from 8,8 to 9,5). Preservation of gut flora is important, but less than half of the population consider to take care of it (from 37% to 47%, depending on the country), except for Mexicans and Russians (60%-65%

GUT MICROBIOTA KNOWLEDGE AMONG THE DIFFERENT AUDIENCES BY COUNTRY



of people). Those who preserve their intestinal flora mostly pay attention to their diet, like having a good nutrition, eating fruits/vegetables or dairy products.

A NEED OF INFORMATION AND EXCHANGES BETWEEN HEALTHCARE PROFESSIONALS AND PATIENTS.

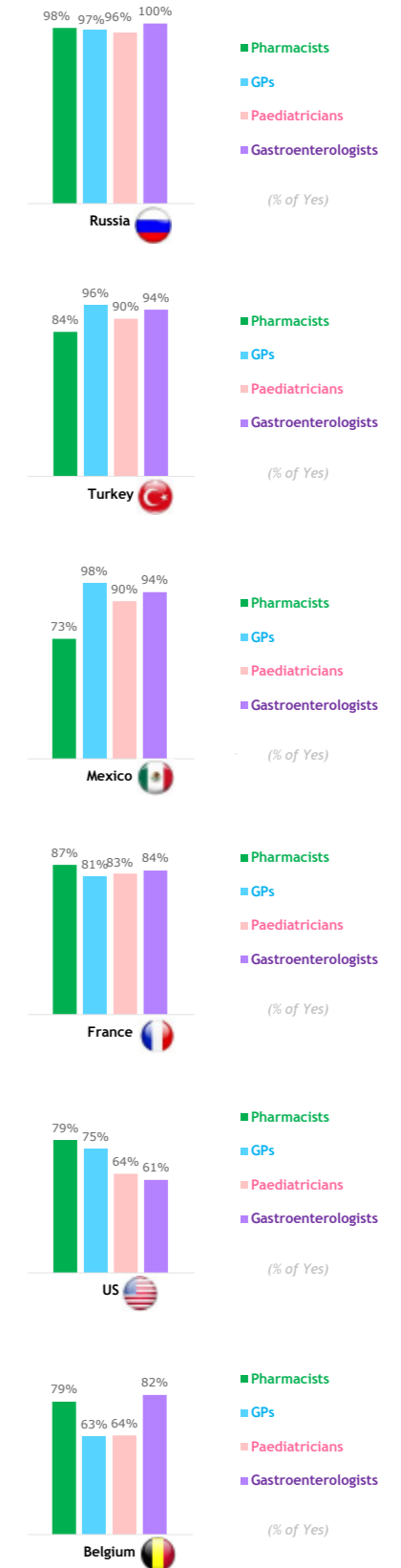
Training about gut flora is welcome by healthcare professionals, especially in Mexico, Russia and Turkey. When asked if they wish to receive training or information about gut flora, most healthcare professionals respond affirmatively (from 73% to 100%), especially Mexicans, Russians and Turkish. It is to be noted that Belgium paediatricians and gastro-enterologists are less numerous to desire information (64% and 61% of yes respectively), as well as US paediatricians and GP's (64% and 63% respectively).

According to the public, discussions about gut flora with healthcare professionals are rare.

Only a minority of the public has already discussed about gut flora with a doctor or a pharmacist: around a quarter of Belgians, French, Mexicans and Turkish (from 22% to 29%) and only 1 out of 10 in the US (10%). Nevertheless, almost half of Russian population has already discussed of gut flora with a doctor (45%). This can provide a partial explanation about their better knowledge on this matter.

The gut flora topic is mainly broached when healthcare professionals talk about gastro-intestinal troubles or antibiotics. Professionals mainly discuss about gut flora with their patients when they broach certain diseases (around 70%) such as gastro-intestinal troubles, immune problems or irritable bowel syndrome, but also about certain medications/therapies (30-60% according to the medical specialty) such as antibiotics.

REQUESTS FOR TRAINING AND INFORMATION ON GUT MICROBIOTA DIVIDED BY AUDIENCE AND COUNTRY



¹ Microbiota knowledge, a study led by BVA for BIOCDEX from December 2016 to January 2017 in Belgium, France, Mexico, Russia, Turkey and the United States.

- Among general public: 1000 people representative of Belgium population, 1000 of French population, 1001 of Mexican population, 1001 of Russian population, 1001 of Turkish population and 995 of American population.
- Among healthcare professionals: BELGIUM: 100 pharmacists, 100 general practitioners, 50 paediatricians, 31 gastro-enterologists; FRANCE: 104 pharmacists, 101 general practitioners, 46 paediatricians, 50 gastro-enterologists; MEXICO: 60 pharmacists, 100 general practitioners, 50 paediatricians, 50 gastro-enterologists; RUSSIA: 101 pharmacists, 100 general practitioners, 50 paediatricians, 50 gastro-enterologists; TURKEY: 101 pharmacists, 100 general practitioners, 50 paediatricians, 50 gastro-enterologists; UNITED STATES: 100 pharmacists, 101 general practitioners, 50 paediatricians, 50 gastro-enterologists.