Evaluation of the Level of Knowledge about Probiotics amongst Community Pharmacy Staff in Jordan

Authors: Feras Darwish Elhajji, Alberto Berardi, Manal Ayyash, Iman Basheti

Abstract: The concept of the use of probiotics for humans now has been known for decades however, their intake by the Jordanian population seems to be less common when compared to population in the developed countries. Community pharmacy is the main supplier of probiotics, however, after conducting an extensive literature review, not any published research article could be found talking about the role, knowledge, and practice of the pharmacists in the area of probiotics. The main aim of this study was to evaluate the level of knowledge about probiotics and their dispensing practice in community pharmacies in Jordan. Community pharmacy staff (pharmacists and technicians) in Amman and north of Jordan were randomly selected to complete an anonymous questionnaire that had been pre-tested and validated. Ethical approval was obtained from the university ethics committee. The questionnaire included the following sections: demographics, knowledge and perceptions about probiotics, and role of the pharmacist Pharmacists and technicians were visited and interviewed in 281 community pharmacies. Asking about probiotics, 90.4% of them said that they know what probiotics are, although only 29.5% agreed that pharmacy staff in Jordan have good knowledge about probiotics, and 88.3% agreed that pharmacy staff in Jordan need more training and knowledge about probiotics. Variables that were significantly related to knowledge about probiotics were being a pharmacist (ρ = 0.012), area of the community pharmacy (ρ = 0.019), and female staff (ρ = 0.031) after conducting logistic regression statistical analysis. More than two-thirds of the participants thought that probiotics are classified as dietary supplements by Jordan Food and Drug Administration (JFDA). Of those who knew probiotics, the majority of them - 76.8% and 91.7% - agreed that probiotics are effective and safe, respectively. Believing in efficacy of the probiotics was significantly associated with answering their use to be with or after antibiotic administration and to increase normal flora gut population $(\rho = 0.007)$. Efficacy was also significantly associated with recommending probiotics to consumers by the pharmacist $(\rho < 0.001)$ and by the doctor (p= 0.041). At the same time, the concept of safety was mainly associated with their use for flatulence and gases (p= 0.048). Level of knowledge about probiotics and their uses, efficacy and safety amongst community pharmacy staff in Jordan is found to be good. However, this level can be raised in the future, especially knowledge about uses of probiotics.

Keywords: community pharmacy, Jordan, prebiotics, probiotics

Conference Title: ICPFF 2016: International Conference on Probiotics and Functional Foods

Conference Location: Miami, United States Conference Dates: March 24-25, 2016