The impact of pharmacy services on health related quality of life

Paulino Ema, Maximiano Sofia, Mendes Maria João, Pinto Ana Luísa, Soares Patrícia, Rosa Mariana

Background In Portugal, the average life expectancy at birth registered in 2015 was 81.2 years, one year higher than the OECD average. However, this indicator does not inform us on the number of years lived with quality. In fact, the perceived quality of life (QoL) of Portuguese individuals is 23% lower than that for other European Union citizens, highlighting the need for initiatives that focus on improving QoL.

Purpose To evaluate the HQoL of pharmacy users that have been integrated in one or more of the services made available by a group of pharmacies; and to explore the potential impact of such services on perceived QoL.

Method A before and after study was used in a real life context, where the two measurement points were approximately 6-month apart. We used the 5-dimensions EuroQoL (EQ-5D), in its EQ-5D-3L version and the visual analogue scale (VAS) included, as considered suitable for all interventions considered. A group of 160 pharmacies was invited to participate by collecting data following patient informed consent. Data were analysed using univariate and bivariate analysis (paired samples Students't-test), considering a confidence interval of 99%.

Findings Between October 2016 and August 2017, data from 5976 pharmacy users was obtained, through the involvement of 138 pharmacies (participation rate=86%). Average age was 54.2 ± 19.7 years, and 4354 individuals were female (72.8%). The average EQ-5D and EQ-5D VAS scores at baseline were 0.7639 ± 0.2058 and 71.24 ± 19.28 (X ±DV), respectively. These results were consistent with published population norms (0.758 and 74.9). So far, only 130 people have undergone the second evaluation. Considering this sub-sample, the EQ-5D-3L score increased significantly (0.7169 ± 0.2515 to 0.7418 ± 0.2368; p <0.01) and so did the EQ-5D VAS score (65.89 ± 18.55 to 73.81 ± 17.40; p <0.01). The positive improvement was observed for 43.1% of patients (n=56) in the EQ-5D score and for 50.4% of patients in the EQ-5D VAS score (n=65). More data will be available in February 2018.

Conclusion The preliminary data suggests pharmaceutical interventions developed may have a positive impact on patients? HQoL. It should be acknowledged that the study reflects daily practice, hence not submitted to a rigorous control. This implies the observed results may result from various pharmacist-led interventions (e.g. pharmaceutical care) but also from other health care professionals (e.g. nutritionists). This implies we cannot isolate the contribution of the pharmacist, but instead the impact of multiprofessional collaboration on public health.