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## A Tool to Represent People Approach to the Use of Pharmaceuticals and Related Criticality and Needs: A Territory Experience

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Abstract: Communication is fundamental to health education. The proper use of medicinal products is a crucial aspect of the health of citizens that affects both safety and health care spending. Therefore, encouraging/promoting communication, concerning the importance of proper use of pharmaceuticals, has substantial implications in terms of individual health, health care, and health care system sustainability. In view of these considerations, in the context of two projects, one of which is still in progress, a relational database-backed web application named COLLABORAFARMACISOLA has been designed and developed as a tool to analyze and visualize how people approach the use of medicinal products, with the aim of improving and enhancing communication efficacy. The software application is being used to collect information (anonymously and voluntarily) from the citizens of Sardinia, an Italian region, regarding their knowledge, experiences, and opinions towards pharmaceuticals. This study that was conducted to date on thousand of interviewed people, has focused on different aspects such as: the treatment interruption and the "self-prescription" without medical consultation, the attention paid to reading the leaflets, the awareness of the economic value of the pharmaceuticals, the importance of avoiding the waste of medicinal products and the attitudes towards the use of generics. To this purpose, our software application provides a set of ad hoc parsing routines, to store information into the structure of a relational database and to process and visualize it through a set of interactive tools aimed to emphasize the findings and the insights obtained. The results of our preliminary analysis show the efficacy of the awareness plan and, at the same time, the criticality and the needs of the territory under examination. The ultimate goal of our study is to provide a contribution to the community by improving communication that can result in a benefit for public health in a context strictly connected to the reality of the territory.

**Keywords:** communication, pharmaceuticals, public health, relational database, tool, web application **Conference Title:** ICBBE 2019: International Conference on Bioinformatics and Biomedical Engineering

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