CONSIGNELA-APPLI-R-1.0: A RESEARCH TOOL FOR STUDYING IN REAL TIME ELECTRONIC MEDICATION PRESCRIPTION COMPREHENSION IN OLDER ADULTS AND PATIENTS WITH PARKINSON’S DISEASE

Élodie Vandenbergh, Mathieu Hainselin, Harold Mouras, Gregory Moro Puppi Wanderley, Marie-Hélène Abel, Jean-Paul Barthès, Claude Moulin and Laurent Heurley

*Université de Picardie Jules Verne, France
**Université de Technologie de Compiègne, France

Statement of the Problem: If following a medication prescription is a complex task for standard adults, it is often a too complex task for many older adults. Because they are generally prone to complex polypharmacy, may suffer from cognitive, motor, or sensorial decline, and are faced with a standard prescriber-patient communication, elderly people encounter supplementary difficulties. These factors could partially explain why they are frequently non-adherent. Specific tools are needed to analyze the exact nature of these difficulties. Our objective is to present such a tool, that we are developing in a multidisciplinary project, the CONSIGNELA project.

Methodology & Theoretical Orientation: CONSIGNELA-Appli-R-1.0 is an application designed to study in real time older patient’s and parkinsonian patient’s behavior while consulting and understanding fictive medication prescriptions on tablets and touch-screens. It can display the same prescription in different formats (textual or tabular), and can simulate virtual and interactive pillboxes that can be filled by pressing, in a given order, different objects represented on the screen. It automatically stores the beginning, duration and end of every patient’s action while he/she is consulting the prescription, and is filling the pillbox.

Conclusion & Significance: Preliminary results of a pilot study carried out with young adults showed that our application is operational. The next phase will consist in using it alone, or coupled with an eye-tracking device, to study cognitive processes and visual strategies of older non-impaired people and patients with Parkinson’s disease interacting with fictive prescriptions. CONSIGNELA-Appli-R will be of particular interest for understanding why impaired and non-impaired older patients may encounter difficulties with some prescription designs.

Biography

Élodie Vandenbergh is a neuropsychologist. She is currently writing a thesis on the cognitive processes involved in prescription comprehension in older adults and patients with Parkinson’s disease. By adopting an experimental approach, she aims two objectives: To enrich existing models of procedural document’s processing by taking into account user’s characteristics, and to identify the prescription designs that are the most adapted for different older adult cognitive profiles.

elodie.vandenbergh@gmail.com

Notes: