RESEARCH & DEVELOPMENT

R&D Letter n" 21 - November 2021



La Source. Institut et Haute Ecole de la Santé

Hes·so

R&D Letter

Introduction

One of the strengths of La Source School of Nursing lies in its scientific and educational creativity, which enables the institute to provide leadership in its fields of expertise. In this R&D

newsletter, we would like to offer our particular thanks to Maria Grazia Bedin, associate professor at the Ageing and Health Teaching and Research Laboratory (AH LAB), and Shota Dzemaili, senior lecturer at the Community Health Promotion and Prevention Teaching and Research Laboratory (CHPP LAB), for the work involved in the creation of an ethics guide in research intended for the personnel of La Source. Thanks to their expertise and the experience acquired through their involvement in the Commission of Ethics in Research of the canton of Vaud (Commission d'Ethique de la



From I. to r.: Maria Grazia Bedin and Shota Dzemaili

Recherche – Vaud, <u>CER-VD</u>), they have provided a reference document that draws up an inventory of good practices and formal resources required to conduct research projects.

We also want to pay tribute to the creative dynamics of our teams in the development of Bachelor Works (Travaux de Bachelor) through participation in their research projects. These last years, several plans have been designed in order to involve 3rd year students in on-going research work, on topics such as social struggle and care, the exploration of how families accept a care intervention, interactional skills in psychiatry, literacy in the field of health, or therapeutic education. The students interested in these research topics or in scientific work take part in our research projects during one academic year and are involved in the on-going steps, for example by contributing to the collection of data, analyses, the developments stemming from research results, dissemination of the knowledge acquired through research, etc. The teams of supervisors in the Bachelor Work through research programme are composed of complementary profiles amongst the teaching and research staff and bring together scientific and educational skills in order to make this academic experience a resource in students' professionalisation.

The research teams of La Source have organised various events, such as the conference on the "Evolution of habitat types allowing ageing at home (Evolution des formes d'habitat pour vieillir chez soi)" hosted by the <u>senior-lab</u> and the AH LAB on 28th January and the Symposium "Health promotion and prevention (Promotion de la santé et prévention)" hosted by the CHPP LAB and Unisanté on 5th October.

These last months, two new members have joined our teams: Floriane Roulet Jeanneret, as a scientific collaborator in Delphine Roulet Schwab's team (AH LAB). Holder of a Masters degree in social sciences and of a Certificate in Advanced Studies in community health, she has many years of experience in the federal administration, high schools and non-profit organisations. At La Source, she is working for the project "Model of habitat and of integrated care oriented towards the social environment (Modèle d'habitat et de soins intégrés orientés vers l'environnement social, WOPM)", in collaboration with CURAVIVA Switzerland and the senior-lab. This applied project follows on from her previous topics of interest and her

competence areas; **Jonathan Jubin**, as a research assistant in the INF+COVID-19 and HEalStud projects with, among others, Annie Oulevey Bachmann, Claudia Ortoleva and Myriam Guzman. He is a doctor of psychology and has led research on reasoning at the University of Geneva, which he continued as a post-doc at the University of Fribourg

A. Nguyen, faculty dean

New projects

[VCA] Prevention of violence in elderly couples (VEC): Study and development of awareness material

This national project, conducted from 2022 to 2024 by La Source (Prof. Delphine Roulet Schwab), the national platform "Vieillesse sans violence (Ageing without violence)" and the senior-lab, aims to improve the prevention of violence in elderly couples in Switzerland. It is co-funded by the Federal Office for Gender Equality (FOGE) and various non-profit organisations and aims to 1) better understand these situations and the collaboration between professional networks linked to domestic violence and those related to the assistance and care of the elderly, and 2) formulate, design and disseminate awareness material in three languages (French, German, Italian). The knowledge acquired and the material developed during the project will complete already existing knowledge and prevention tools.

In the long term, this project will contribute to improving the detection, orientation and management of violence situations in elderly couples, as well as the access to already existing aid resources for persons over 65. It will also foster collaborations between professional networks linked to domestic violence and those related to the assistance and care of the elderly.

Contact: D. Roulet Schwab, AH LAB

[Oncobots] Understanding the expectations, needs and main criteria of acceptance and usability of a chatbot intended for patients, healthcare practitioners and care structures in oncology

Patients in oncology have many questions on their care pathway, their treatment, their disease and their new life. The presence of responders helps them to lower their psychological distress and to maintain their quality of life. It is therefore necessary to help them receive, at all times and in the most appropriate way, any useful information.

Moreover, healthcare practitioners also need support to manage the complexity of patient care and answer all their questions. Care teams cannot handle all these roles on their

Chatbots are conversation tools that can provide various types of information to patients, about their care pathway, and other issues essential to their well-being. They can also help healthcare providers to improve the way in which they provide care to patients.

The project is led by the SILAB and will gather all the potential users of chatbots. It will analyse the desirability, feasibility and compatibility of chatbots in oncology. This will enable to identify the users' real needs, expectations and possible reluctance, which will guide the future development of a chatbot.

This project will also lead to the creation of a community dedicated to the joint development of the chatbot in the long term, in order to provide a sustainable solution.

Contact: D. Cefaï, SILAB

[COVID-BAG] The psychological impact of the lockdown

due to the coronavirus pandemic (COVID-19) in Switzerland, one year later

Thanks to the financial support of the Uniscientia Foundation and the Erika Foundation, the first national epidemiologic survey took place in Switzerland in May 2021, in order to examine the psychological effects of the COVID-19 pandemic on young adults, children, teenagers and their parents. The first results of this study have been published in the Journal of Environmental Research and Public Health. They show a relatively high level of stress and symptoms of mental health problems in youngsters during the COVID-19 pandemic. It therefore appears essential to determine if this stress and these symptoms can have a long-term impact on children, teenagers and young adults. Furthermore, the pandemic is still ongoing.

In order to examine the long-term impact of the pandemic on the above-mentioned population and to see if there is a change in time, 1,627 young adults (20-24 year old) and 1,150 children and teenagers (12-17 year old) will be contacted again. These persons had already been contacted during the first survey.

This study is supported by the Federal Office of Public Health and the Uniscientia Foundation.

Contact: M. Mohler-Kuo, CHPP LAB

[Défi Source] Review of this innovative event

The first Défi Source event was a success, as shown by the figures displayed in the computer graphics of the event, available on the News page of the SILAB on the La Source website.

The success of this first edition is first and foremost human as the Défi was a wonderful and long (2 months) enlarged transdisciplinary adventure (healthcare practitioners, patients, innovators, engineers, designers, etc.); but the event was also conclusive in terms of innovative projects. The SILAB currently ensures a follow-up with the laureates and award-winning partners (La Source Clinic, EHL, Genilem, UCreate at the University of Lausanne, Vygon, ElcaELCA, Pryv, etc.) and assists them in the achievement of their projects.

The Défi Source event will take place again in 2023, and other SILAB events are proposed for 2022.

Contact: T. Dagaeff, SILAB

Research activities

Assessment of the project on the promotion and effective implementation of the Joint Crisis Plan (ProPCC)

The Joint Crisis Plan is the result of a shared decision between at least a professional and a patient, and possibly a relative. This form of anticipated declaration was initiated by mental health users in order to defend their interests and rights. It was first promoted in adult psychiatry after an exploratory study identifying the needs and obstacles related to its implementation in the canton of Vaud.

The project was mainly funded by Promotion Santé Suisse and addressed four different aspects: promotion, training, tailor-made institutional implementation, and creation of a web platform to facilitate its access in case of crisis. It was co-constructed in partnership with peer workersand relatives and ended in June 2021 on a positive note: 7,500 information flyers in public health and 250 posters were printed in a psychiatric rehabilitation unit, and they were largely distributed in institutions and at physicians and psychiatrists offices of the canton. 1,299 professionals received e-learning training and 128 "change champions", coming from the 21 sites

participating in the institutional implementation process, attended the training programme in person in order to ensure the application of the Joint Crisis Plan in practice, which was a success: familiarity with the tool, its prevalence on site and the structures' support for its use have increased significantly. Over 740 Joint Crisis Plans have been collected since then. Two Master dissertations have highlighted a decrease in early readmissions and in compulsory readmissions after 9 months for patients benefitting from a Joint Crisis Plan written in anticipation of their hospital discharge, the presence of a professional identified as a reference being a protective factor.

More information on www.plandecriseconjoint.ch

Contact: P. Ferrari, MHP LAB

Article: Identification of new demands regarding prehospital care based on 35,188 missions in 2018.

The Swiss health system is confronted with a major transition related to population ageing and the prevalence of chronic diseases. The aim of our study is to identify its consequences on primary emergency missions. To do so, we analysed all the ambulance missions performed by prehospital services in the canton of Vaud in 2018 (n=35,188), with a focus on the characteristics of the population requesting emergency demands, the typology and severity of the health issues encountered and the number of not transported patients.

Our results show that 87% primary emergency missions concern "non-urgent" situations (without acute threat to life), that over half of the patients are 65 or more, that 23% of the cases are for traumas, 7% are linked to mental health issues, 6% to intoxications, and that about 12% of missions lead to the non-transport of the patient.

While responding to vital emergencies is a priority in emergency missions, our results suggest that the actual needs of the population requesting an ambulance are much wider, with non-urgent but often complex care requirements. Our results highlight the necessity to reconsider the adequacy between the population needs and the paramedics' scope of practice and on to reflect on the coordination of pre-hospital care providers in collaboration with paramedics, emergency medical services, nurses, social emergency services or palliative care services.

Link to the complete article.

Contact: S. Vuilleumier, CHPP LAB

Connected health: How about talking about the SWISKO study, a technological innovation project at the heart of home care?

The SWISKO study was funded by CTI/Innosuisse and led by Valérie Santschi, who is a higher education professor and head of the Health Systems, Ethics and Interprofessional Practice Teaching and Research LAB (SELLAB), with the NOMAD home care service in Neuchâtel, the INSELSPITAL and its cardiology service, the University of Bern and its centre for biomedical research, the Idiap in Martigny, and the DomoSafety company at the EPFL. The study assessed if a new domotic technology solution — combining movement/presence environmental sensors installed at home and portable sensors — can be useful to maintain elderly persons at home by informing, for example their nurse on possible changes concerning their life habits or incidents (fall, fainting fit).

In this study, 21 persons aged 72 to 96 were followed for a year by NOMAD. The use, usefulness and integration of this new technology were assessed by the patients, their families and the healthcare practitioners involved.

The results of the study were published in international scientific journals. They showed that the users appreciated this domotic solution because it seems to help maintain elderly persons at

home, decrease families' stress, improve living conditions and prevent accidents at home. The nurses showed more reserve concerning the practical integration of such a solution because of a lack of time; they were also concerned about the fact that it could weaken their relationship of trust with their patients.

A technological solution like this one has potential to respond to elderly persons' wish to carry on living at home in an autonomous way.

Link to the complete article.

Contact: V. Santschi, SEI LAB

New publications

Scientific publications

- Abt, M., Lequin, P., Bobo, M.-L., Perrottet, T. V. C., Pasquier, J., & Ortoleva Bucher, C. (2021). The scope of nursing practice in a psychiatric unit: A time and motion study. Journal of Psychiatric and Mental Health Nursing, n/a(n/a).
- Filliettaz, L., Bimonte, A., Koleï, G., Nguyen, A., Royer, S., Trébert, D., Tress, C., & Zogmal, M. (2021). Interactions verbales et formation des adultes. Savoirs, 56, 11-51.
- Martinez, D., Laloyaux, J., Favrod, J., Silva, B., Libera, C. D., Larøi, F., Bonsack, C., & Golay, P. (2021). Specific aspects of aberrant salience: Comparison between patients with or without psychosis and healthy participants. Swiss Archives of Neurology, Psychiatry and Psychotherapy, 172(w03215).
- Michel, O., Manjon, A.-J. G., Pasquier, J., & Ortoleva Bucher, C. (2021). How do nurses spend their time? A time and motion analysis of nursing activities in an internal medicine unit. Journal of Advanced Nursing, n/a(n/a).
- Schütz, N., Botros, A. A., Ben Hassen, S., Saner, H., Buluschek, P., Urwyler, P., Pais, B., Santschi, V., Gatica-Perez, D., Muri, R. M., & Nef, T. L. (2021). A sensor-driven visit detection system in older adults homes: Towards digital late-life depression marker extraction. IEEE journal of biomedical and health informatics.
- Schütz, N., Saner, H., Botros, A., Pais, B., Santschi, V., Buluschek, P., Gatica-Perez, D., Urwyler, P., Müri, R. M., & Nef, T. (2021). Contactless Sleep Monitoring for Early Detection of Health Deteriorations in Community-Dwelling Older Adults: Exploratory Study. JMIR MHealth and UHealth, 9(6), e24666.
- Quecke, B., Graf, Y., Epure, A. M., Santschi, V., Chiolero, A., Carmeli, C., & Cullati, S. (2021). Caesarean section and obesity in young adult offspring: Update of a systematic review with meta-analysis. Obesity reviews : an official journal of the International Association for the Study of Obesity, e13368.
- Vuilleumier, S., Fiorentino, A., Dénéréaz, S., & Spichiger, T. (2021). Identification of new demands regarding prehospital care based on 35,188 missions in 2018. BMC Emergency Medicine, 21(63).

Professional publications

- Antonini, M. (2021). Calling leaders' bluff: The Covid-19 outbreak and power relations in European societies. The European Sociologist, Special Issue: Pandemic (Im)Possibilities, 2(46)
- Droz Mendelzweig, M., & Bedin, M.G. (2021, 16 Septembre). Seniors: se sentir chez soi en logement protégé. REISO, Revue d'information sociale.
- Bélanger, L., & Cohen, C. (2021). Les stratégies d'enseignement et d'apprentissage requises pour développer les modes de savoirs infirmiers : constats et réflexions. L'infirmière clinicienne, 18(1)
- Borloz, C., & Fischer, L. (2021). Les premiers secours sans (trop) se mettre en danger! Courrier de l'AVIVO, Février-Mars, 12-15.
- Dagaeff, T. (2021). Du gadget connecté au dispositif médical. Compétence, 4, 10.
- Drainville, A.-L., Monteiro, S., & Rexhaj, S. (2021). Je ne sais plus quoi faire pour mon fils. Santé mentale, 258, 68-73.
- Droz Mendelzweig, M. & Grazia Bedin, M. (2021). Seniors: Se sentir chez soi en logement protégé. Reiso, Revue d'information sociale,

- Septembre.
- Guignard, M., Lazic, K., Monod, M., Reber, M., Bernardi, N., & Roulin, V. (2021). Enfants issus de la migration forcée : pour une optimisation de la prise en soins infirmière. Cahiers de la puéricultrice, 348, 31-36
- Pais P., Biollaz J.-M., Berger C., & Santschi V. (2021). Nouvel outil connecté pour le suivi de la prise médicamenteuse. PharmaJournal, 9. 24-25.

Book

- Oulevey Bachmann, A., Ludwig, C., & Tétreault, S. (2021). Proches aidant-e-s : Des alliés indispensables aux professionnels de la santé.
 - https://www.georg.ch/pub/media/productattach/p/r/proches_aidants_ oa_20210615_light.pdf

Book chapters

- Bovet, E., Frobert, L, & Nguyen, A. (2021). La musique comme médiation pour penser son propre corps de soignant e : une expérience pédagogique auprès d'étudiant·e·s HES en soins infirmiers. In A. Güsewell, E. Bovet, A. Stantzos, G. Bangerter, & C. Bornand (Éds.), Musique et santé mentale : orchestrer la rencontre (pp.67-78). Champ social
- Cohen, C., Bélanger, L., Pereira, F., & Kampel, T. (2021). L'intégration des personnes proches aidantes dans les mesures de prévention du délirium lors d'une chirurgie orthopédique. In A. Oulevey Bachmann, C. Ludwig & S. Tétreault (Éds.), Proches aidant·e·s: Des alliés indispensables aux professionnels de la santé (pp. 226-261). Georg.
- Kryzsztof, S., Monteiro, S., Coloni-Terrapon, C., Lê Van, K., Wenger, D., & Rexhaj, S. (2021). Santé psychologique et stigmatisation chez les personnes proches aidantes en psychiatrie adulte. In A. Oulevey Bachmann, C. Ludwig & S. Tétreault (Éds.), Proches aidant e s : Des alliés indispensables aux professionnels de la santé (pp. 107-151). Georg.
- Oulevey Bachmann, A., Ludwig, C., & Tétreault, S. (2021). Pénurie de professionnels de santé et situation des proches aidant e s en Suisse. In A. Oulevey Bachmann, C. Ludwig & S. Tétreault (Eds.), Proches aidant·e·s: Des alliés indispensables aux professionnels de la santé (pp. 25-45). Georg.
- Tétreault, S., Bellagamba, D., Ducommun, D., Vaucher, P., Meyer, S., Bertrand Leiser, M., Tinguely, J., Minisi, L., Aviolat, L., & Kühne, N. (2021). L'apprentissage par le service communautaire: Une possibilité de répit pour les personnes proches aidantes et une opportunité de formation pour les futurs professionnels de la santé. In A. Oulevey Bachmann, C. Ludwig & S. Tétreault (Éds.), Proches aidant-e-s : Des alliés indispensables aux professionnels de la santé (pp. 325-378). Georg.

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