

<b>Titre</b>	Implementation of the Symptom Navi Program for cancer patients in ambulatory services: A cluster randomized pilot study (Symptom Navi Pilot Study)
<b>Acronyme</b>	Symptom Navi© Program ( <a href="http://www.unil.ch/sciences-infirmieres/home/menuinst/recherche/manuela-eicher/auto-gestion-des-symptomes.html">http://www.unil.ch/sciences-infirmieres/home/menuinst/recherche/manuela-eicher/auto-gestion-des-symptomes.html</a> )
<b>Statut (dates début-fin)</b>	Data recruitment completed
<b>Requérant-e principal-e</b>	<ul style="list-style-type: none"> <li>Prof. Manuela Eicher (directrice de thèse de doctorat de Marika Bana, professeure associée à l'IUFRS-FBM-UNIL, <a href="http://www.unil.ch/sciences-infirmieres/home/menuinst/recherche/manuela-eicher.html">http://www.unil.ch/sciences-infirmieres/home/menuinst/recherche/manuela-eicher.html</a>)</li> </ul>
<b>Co-requérant-e (site)</b>	<ul style="list-style-type: none"> <li>Marika Bana (doctorante et assistante de recherche à la Haute école de santé Fribourg, <a href="http://www.heds-fr.ch">http://www.heds-fr.ch</a>)</li> </ul>
<b>Collaborateur-trice(s)</b>	<ul style="list-style-type: none"> <li>-</li> </ul>
<b>Source de financement (partenaire financier)</b>	<ul style="list-style-type: none"> <li>HES-SO (<a href="http://www.hes-so.ch/">http://www.hes-so.ch/</a>) via la Ra&amp;D domaine Santé : montant forfaitaire pour la préparation du projet</li> </ul>
<b>Résumé</b>	<p><b>Background:</b> All cancer patients diagnosed with cancer facing anticancer treatments have to develop skills to manage symptoms and other consequences related to their illness. However, evidence-based support for the self-management of the most common symptoms at the onset of anti-cancer treatment is lacking. Nurses of the Lindenhofgruppe initiated a nurse-led intervention to support symptom self-management in 2011. Several development phases resulted in the Symptom Navi Program (SNP) The SNP consists of three elements 1) sixteen symptom-specific leaflets called Symptom Navi Flyers (SN-Flyers: written information in brochure format), 2) semi-structured nurse-led consultations, and 3) a training manual for nurses how to apply the SNP in daily practice. Previous qualitative evaluations of the SNP revealed that SN-Flyers are well received by patients and health care professionals. They confirmed that the evidence-based recommendations to mitigate symptoms on the SN-Flyers are easily understandable, helpful, and relevant for patients and their family members. <b>Objectives:</b> The dissertation project was part of an overall pilot study evaluating the implementation of the SNP in clinical practice based on the <b>Reach, Effectiveness, Adoption, Implementation, Maintenance (RE-AIM)</b> framework. Three objectives were in focus: 1) exploring a larger study's feasibility by investigating patients' accrual and retention rates (reach), 2) exploring the impact and safety of the SNP (effectiveness), and 3) evaluating nurses' fidelity to the training manual (implementation). <b>Methods:</b> We used a cluster-randomised design including nine cancer outpatient centres in German-speaking parts of Switzerland. Level of randomisation were the participating centres. Adult patients, newly diagnosed with any cancer disease and planned to receive first-line systemic treatment were included. Two study members trained graduated nurses to apply the SNP at the centres of the intervention group. Semi-structured consultations were based on behaviour change theories and motivational interviewing techniques. During semi-structured consultations, nurses provided patients with SN-Flyers tailored to their anticipated symptoms. Control clusters continued with usual care for symptom management. The Symptom Navi Pilot Study got approval from ethic committees (KEK-BE: 2017-00020). <b>Outcomes:</b> Patients' accrual and retention rates were assessed by identification and enrolment logs at each centre. Preliminary impact was investigated by the mean symptom interference</p>

	<p>with daily function scores of the MD Anderson Symptom Inventory. Further outcomes included symptom severity and burden, patient' self-efficacy, and perceived quality of nursing care. Safety was assessed by adverse event reporting from participating intervention centres. Patient-reported outcomes have been assessed four times over a period of 16 weeks. To evaluate nurses' fidelity to the training manual, we developed a study-specific questionnaire. Nurses completed this questionnaire after each consultation. Additionally we observed two semi-structured consultations at each intervention centre following the same questionnaire. <b>Analysis:</b> The CTU Bern supported statistical analyses. We used linear and logistic mixed models including all measurement time points for patient-reported outcomes and descriptive statistics for reporting reach and implementation outcomes. The study protocol was published at the BMJ-open: doi: 10.1136/bmjopen-2018-027942. <b>Results:</b> Development and evaluation of the nurse training was published in the European Journal of Oncology Nursing: doi.org/10.1016/j.ejon.2019.101714. Results on patient-reported outcomes are submitted to a peer-reviewed nursing journal. <b>Contribution:</b> The dissertation project adds insight about feasibility and safety of implementing the SNP in the selected cancer outpatient setting. Further development of the program is required based on the pilot testing of the intervention. The primary focus will be to adapt the nurse training by emphasising self-management education skills.</p>
<p><b>Partenaire(s) de terrain</b></p>	<ul style="list-style-type: none"> <li>• Hôpital fribourgeois – sites de Fribourg, Tafers, Murten</li> <li>• Solothurner Spitäler</li> <li>• Departement Onkologie / Hämatologie, Kantonsspital Graubünden</li> <li>• Gynäkologisches Tumorzentrum, Universitätsspital Basel</li> <li>• Brustzentrum Bern, Oncocare</li> <li>• Rundum Onkologie am Bahnhofplatz Sargans</li> <li>• Tumorzentrum ZeTuP Rapperswil-Jona</li> <li>• Onkologie- und Hämatologiezentrum Thun-Berner Oberland</li> <li>• Division Onkologie, Hämatologie und Transfusionsmedizin, Kantonsspital Aarau</li> </ul>
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<p><b>Valorisation (publications, conférences, congrès)</b></p>	<p>Publications</p> <ul style="list-style-type: none"> <li>• Bana M, Ribi K, Kropf-Staub S, Näf E, Sailer Schramm M, Zürcher-Florin S, Peters S, Eicher M. Development and implementation strategies of a nurse-led symptom self-management program in outpatient cancer centres: The Symptom Navi© Programme. <i>European Journal of Oncology Nursing</i>. (Published online 15 January 2020). doi.org/10.1016/j.ejon.2019.101714</li> <li>• Bana, M., Ribi, K., Kropf-Staub, S., Zürcher-Florin, S., Näf, E., Manser, T., Bütikofer, L., Rintelen, F., Peters, S., &amp; Eicher, M. (2019). Implementation of the Symptom Navi © Programme for cancer patients in the Swiss outpatient setting: a study protocol for a cluster randomised pilot study (Symptom Navi© Pilot Study). <i>BMJ Open</i>, 9(7), e027942. doi: 10.1136/bmjopen-2018-027942</li> <li>• Bana, M. (2019). Éducation du patient. L'auto-efficacité influe sur l'autogestion des symptômes. <i>Soins en oncologie / Onkologiepflege</i>, 1, 14-16.</li> <li>• Bana, M. (2019). Patientenedukation. Selbstwirksamkeit beeinflusst das Symptom-Selbstmanagement. <i>Soins en oncologie / Onkologiepflege</i>, 1, 5-8.</li> <li>• Bana, M., Szüts, N., Sager, Ch., Senn-Dubey, C., Rappo, S., Hériché-Ferreira, F., Betticher, D., &amp; Eicher, M. (2018). La consultation infirmière en oncologie. Soutenir de manière ciblée les patients adultes atteints de cancer traités en</li> </ul>

oncologie ambulatoire. Soins en oncologie / Onkologiepflege, 2, 26-30. Article

- Bana, M., Szüts, N., Sager, Ch., Senn-Dubey, C., Rappo, S., Hériché-Ferreira, F., Betticher, D., & Eicher, M. (2018). Onkologische Pflegekonsultationen. Ambulant behandelte Krebspatienten gezielt unterstützen. Soins en oncologie / Onkologiepflege, 2, 31-35. Artikel

Presentations:

- Bana, M. (2019). Implementing the Symptom Navi Program at Swiss outpatient cancer centres: Nurses fidelity to training manual. Oral presentation at the Juravinsky Cancer Centre as part of the "Oncology Nursing Rounds", 5th November, Hamilton, Ontario, Canada.
- Bana, M. (2019). Preliminary effectiveness of a nurse-led programme to support symptom self-management for patients receiving first-line systemic outpatient anti-cancer treatment (Symptom Navi Pilot Study). Oral presentation at the McMaster University, 29th October, Hamilton, Ontario, Canada.
- Ribl, K., & Bana, M. (2019). Erfahrungen aus einer pflegegeleiteten Intervention zur Förderung der Resilienz. Parallelworkshop at the 16. Schweizer Fachtagung Psychoonkologie, 16. Mai, Fabrikhalle, Bern, Schweiz.
- Ribl, K., Bana, M., Peters, S., Kropf-Staub, S., Näf, E., Zürcher, S., Eicher, M. (2018). Nurse-led approaches to self-management of symptoms in routine Swiss outpatient care: a qualitative exploration. ESMO/EONS congress Munich. Annals of Oncology, 29, Supplement 8. doi: 10.1093/annonc/mdy278.001
- Bana, P. (2018). The Academic Society for Oncology Nursing. Poster presented at the Swiss Association for Nursing Science, Science apéro, 13th December, Bern, Switzerland. (Poster)
- Bana, M., Peters, S., Manser, T., Kropf-Staub, S., Näf, E., Zürcher, S., & Eicher, M. (2018). Symptom Navi© Program: Training nurses to facilitate cancer patients' self-manage of symptoms within a structured program. E-Poster at the Multinational Association of Supportive Care in Cancer (MASCC) annual meeting 2018, June 28-30, Vienna, Österreich.
- Bana, M., Eicher, M., Peters, S., Jahn, P., Hoffmann, S., & Symptom Navi© Programm Steuergruppe. (2017). Symptom Navi© Program: development of a nurse-led symptom self-management support for cancer patients. Poster presented at the 3rd Annual Doctoral Student Research Day (Swiss PhD in Nursing Science Education (SPINE)), 7th November, Kollegienhaus, Basel, Schweiz (Poster)
- Bana, M., & Sager Tinguely, C. (2017). Pflegekonsultationen für ambulante onkologische Patient-inn-en. AKADEMIE (HEdS-FR) UND PRAXIS (HFR) GEMEINSAM UNTERWEGS. Présentation orale au Forum recherche de la Haute école de santé Fribourg, 2 novembre, Fribourg, Suisse (Vortrag) (Présentation)
- **Bana, M.**, Eicher, M., Peters, S., Jahn, P., Hoffmann, S., & Symptom Navi© Programm Steuergruppe. (2017). *Symptom Navi© Program: development of a nurse-led symptom self-management support for cancer patients*. Poster presented at the 3rd Annual Doctoral Student Research Day (Swiss PhD in Nursing Science Education (SPINE)), 7th November, Kollegienhaus, Basel, Schweiz.