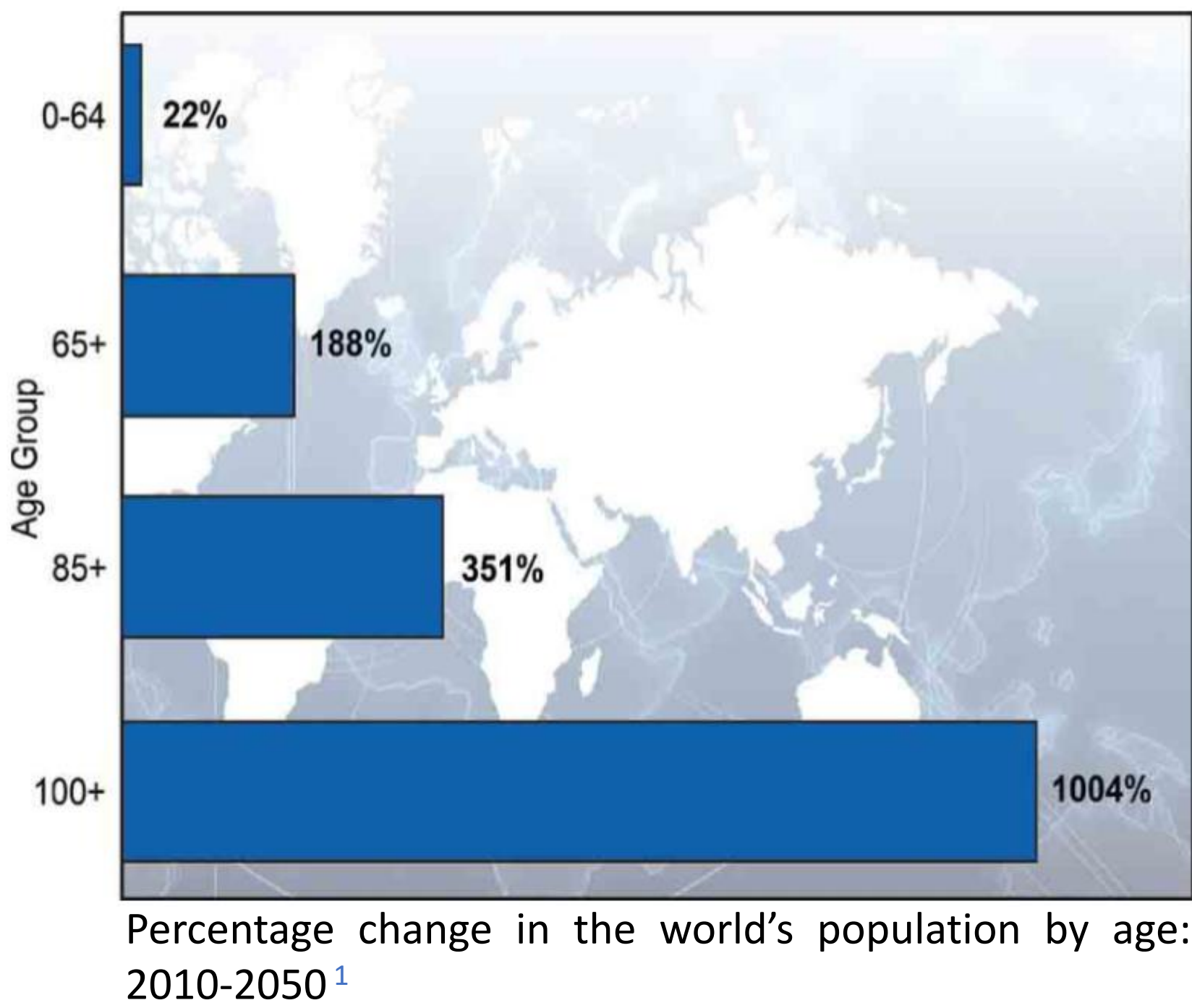


# THE RELATIONSHIP BETWEEN DEPRESSIVE SYMPTOMATOLOGY AND FUNCTIONAL STATUS IN CENTENARIANS: A Longitudinal Study Project

Carla Gomes da Rocha<sup>1,2,3</sup> RN, PhD(c); Armin von Gunten<sup>3</sup> MD; Olga Ribeiro<sup>4,5</sup> RN, PhD; Daniela Jopp<sup>6,7</sup> Psych. PhD; Stefano Cavalli<sup>8</sup> Sociol. PhD; Henk Verloo<sup>2,3</sup> RN, PhD

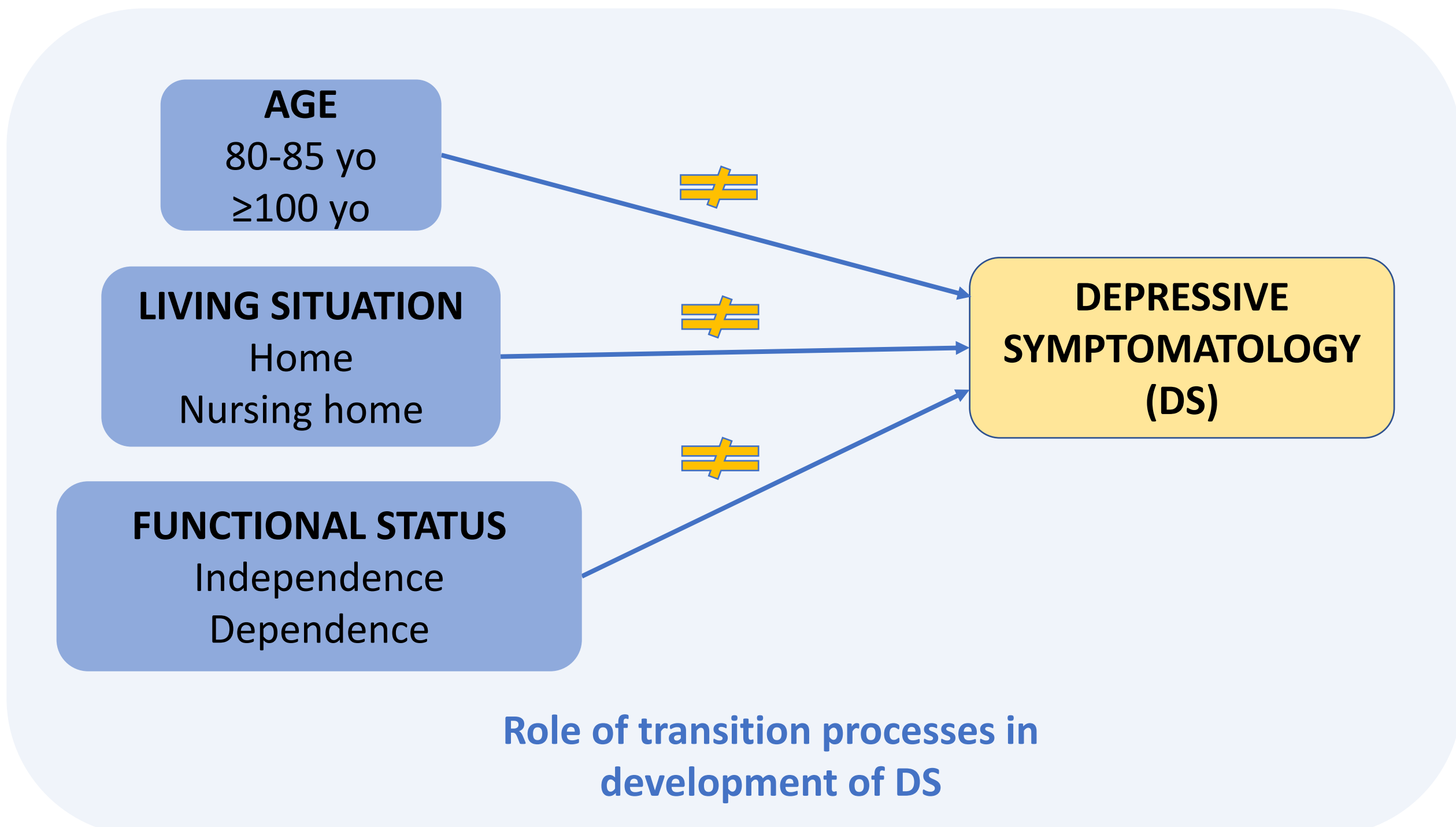
1. Institute of Biomedical Sciences Abel Salazar, University of Porto, Portugal; 2. School of Health Sciences, HES-SO Valais-Wallis, Switzerland; 3. Service of Old Age Psychiatry, Lausanne University Hospital, Switzerland; 4. Nursing School of Porto, Portugal; 5. Center for Health Technology and Services Research, Porto, Portugal; 6. Institute of Psychology, University of Lausanne, Switzerland; 7. Swiss National Centre of Competence in Research LIVES, University of Lausanne, Switzerland; 8. University of Applied Sciences and Arts of Southern Switzerland

## BACKGROUND



- Centenarians: emerging population<sup>1</sup>;
- Ageing population: appearance and exacerbation of chronic conditions<sup>2</sup>;
- Depressive symptomatology (DS): significantly prevalent (27-35%) among individuals aged ≥ 75 yrs in Switzerland<sup>2,3</sup>;
- Severe repercussions on QoL (e.g.: functional capacity)<sup>4,5</sup>;
- Major public health problem<sup>6</sup>;
- These issues are central to nursing sciences and deserve to be investigated in order to contribute to the development of best practices.

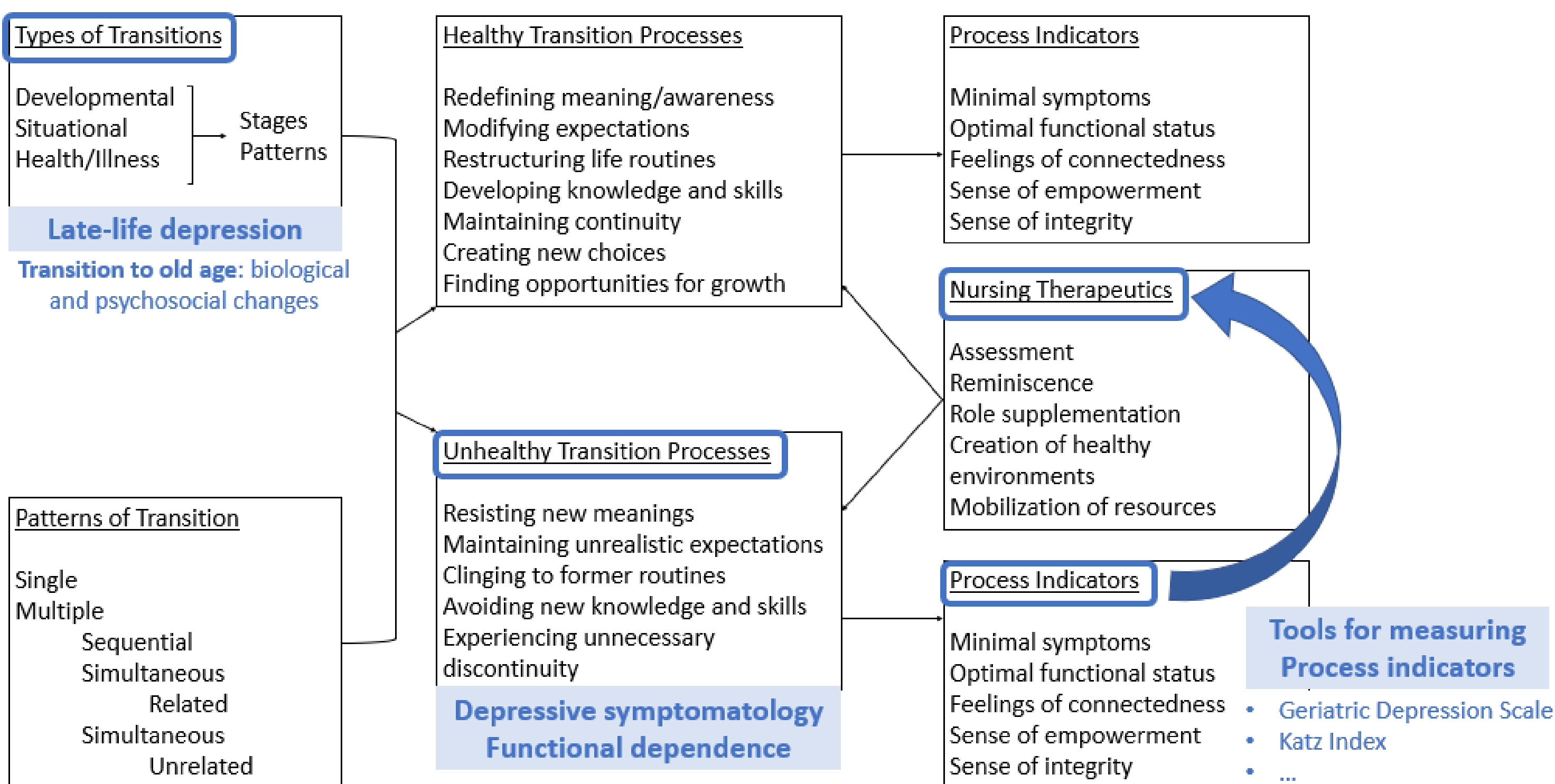
## RESEARCH HYPOTHESIS



## THEORETICAL FRAMEWORK

“Helping elderly persons in transition: A framework for research and practice”

Schumacher, Jones & Meleis, 2010<sup>7</sup>



### PRACTICAL EXAMPLE: How can the Transitions Theory be helpful for nurses in this specific context?

- Mr S. (101 yrs) → pneumonia → hospitalisation → loss of walking / transfer capacity → functional decline → dependence (Katz ADL = 2/6)
- His wife (91 yrs) passed away during his hospital stay.
- Depressive symptoms: GDS-15 score = 6/15
- Transfer to a nursing home.

**TYPES OF TRANSITIONS:** health / illness & situational

**PATTERNS OF TRANSITIONS:** multiple–simultaneous–unrelated

**PROCESS INDICATORS:**  
GDS, Katz Index

8 months later (nursing home): “*resisting new meanings*”

- Depressive symptoms: GDS-15 score = 10/15
- Functional dependence: Katz ADL = 3/6 (regain transfer capacity)

= UNHEALTHY TRANSITION PROCESS

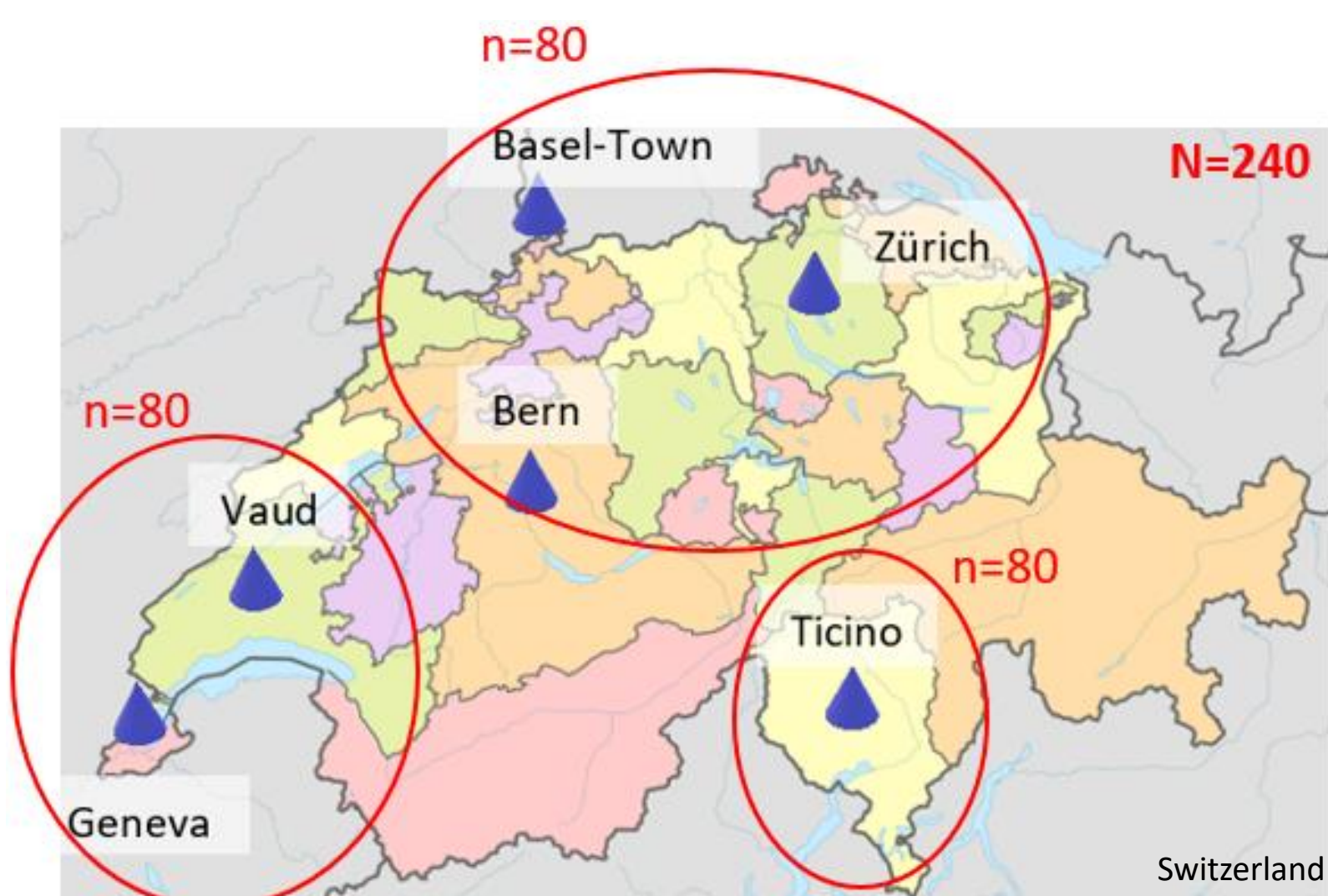
### NURSING THERAPEUTICS

E.g.: regular assessment, reminiscence, problem-solving therapy, coordination of an interdisciplinary programme, etc.

## METHODS

This project is part of a wider study–**The SWISS100**<sup>8</sup>, and follows the same methods, as presented below.

### SAMPLE:



### RECRUITMENT STRATEGY AND DATA COLLECTION:

[Via the Federal Statistical Office]



### MAIN INSTRUMENTS:

- ✓ **Geriatric Depression Scale** (GDS-15 items) → self-assessment (e.g.: “Do you feel that your life is empty?”).
- ✓ **Neuropsychiatric Inventory – Reduced version** (NPI-R); Depression/Dysphoria section → proxy assessment (e.g.: “Does the person say or act as if he/she is sad or in low spirits?”).
- ✓ **Resident Assessment Instrument** – Long-Term Care Facilities (RAI-LTCF); retrospective data for “Mood and Behaviour” in order to test a younger comparison group of people aged 80-85 years old → formal caregivers' assessment (e.g.: “The person made negative statements: nothing matters, would rather be dead, regrets having lived so long...”).
- ✓ **KATZ Index** – to assess the functional status of centenarians in the performance of the basic activities of daily living → observer assessment (e.g.: bathing, dressing, toileting, continence, transferring and feeding).

## EXPECTED OUTCOMES



- Epidemiology of DS among centenarians living in Switzerland;
- Comparison of the DS between centenarians living on private vs nursing homes;
- Comparison of the DS between centenarians vs younger older adults;
- Comparison of the DS between functionally dependent vs independent centenarians;
- Identification of relationships, mediation and moderator effects of functional dependence on DS.

## CONCLUSION



- Formulate recommendations for clinical practice, future research projects and educational activities;
- Optimise the quality and safety of nursing and interdisciplinary care interventions;
- Provide information to adjust current care models and healthcare policies, enabling authorities to adopt a more strategic vision of care for the very old and their proxies.

## REFERENCES

- UN - United Nations. World Population Prospects - 2015 Revision. New York; 2015.
- Höglinger M, Ehrler F, Maurer J. Gesundheit der älteren Bevölkerung in der Schweiz - Eine Studie basierend auf Daten des Survey of Health, Ageing and Retirement in Europe (SHARE) im Auftrag des Bundesamts für Gesundheit. In: UNIL, FORS, ZHAW, editors. Lausanne and Winterthur. 2019.
- Obsan - Observatoire suisse de la santé. Indicateurs de la santé de la population âgée en Suisse. Neuchâtel; 2019.
- Cappelletti P. La depression. In: Voyer P, editor. Soins infirmiers aux aînés en perte d'autonomie. 3e ed. Québec: Éditions du Renouveau Pédagogique Inc.; 2021. p. 185-98.
- Milaneschi Y, W. J. H. Penninx B. Depression in Older Persons with Mobility Limitations. Current Pharmaceutical Design. 2014;20(19):3114-8.
- WHO - World Health Organization. Mental health of older adults: World Health Organisation; 2017. [updated 12 December 2017; cited 2020 7 April ]. Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults>.
- Schumacher KL, Jones PS, Meleis AI. Helping Elderly Persons in Transition: A Framework for Research and Practice. In: Meleis AI, editor. Transitions Theory: Middle-Range and Situation-Specific Theories in Nursing Research and Practice. New York: Springer Publishing Company; 2010. p. 129-44.
- Jopp D, von Gunten A, Herrmann F, Cavalli S. Swiss Centenarian Study (SWISS100): Vulnerability and Resilience at Age 100. In: SNSF - Swiss National Science Foundation, editor. Sinergia Project Switzerland. 2019.

**Contact information:**  
✉ carla.gomesdarocha@hevs.ch

**SWISS100 study:**  
<https://wp.unil.ch/swiss100/>

**Acknowledgements:** The authors acknowledge that this work is supported by the grant SNSF Sinergia CRSII15\_186239/1 (SWISS100). They would also like to thank the SWISS100 members Kim Uittenhove, Daniele Zaccaria, Kira Lampraki, Flavien Delhaes and Garnelle Ziade for their valuable suggestions.