



Universität
Basel

Medizinische Fakultät
Departement Public Health

SHURP

Swiss Nursing Home Human Resources Project

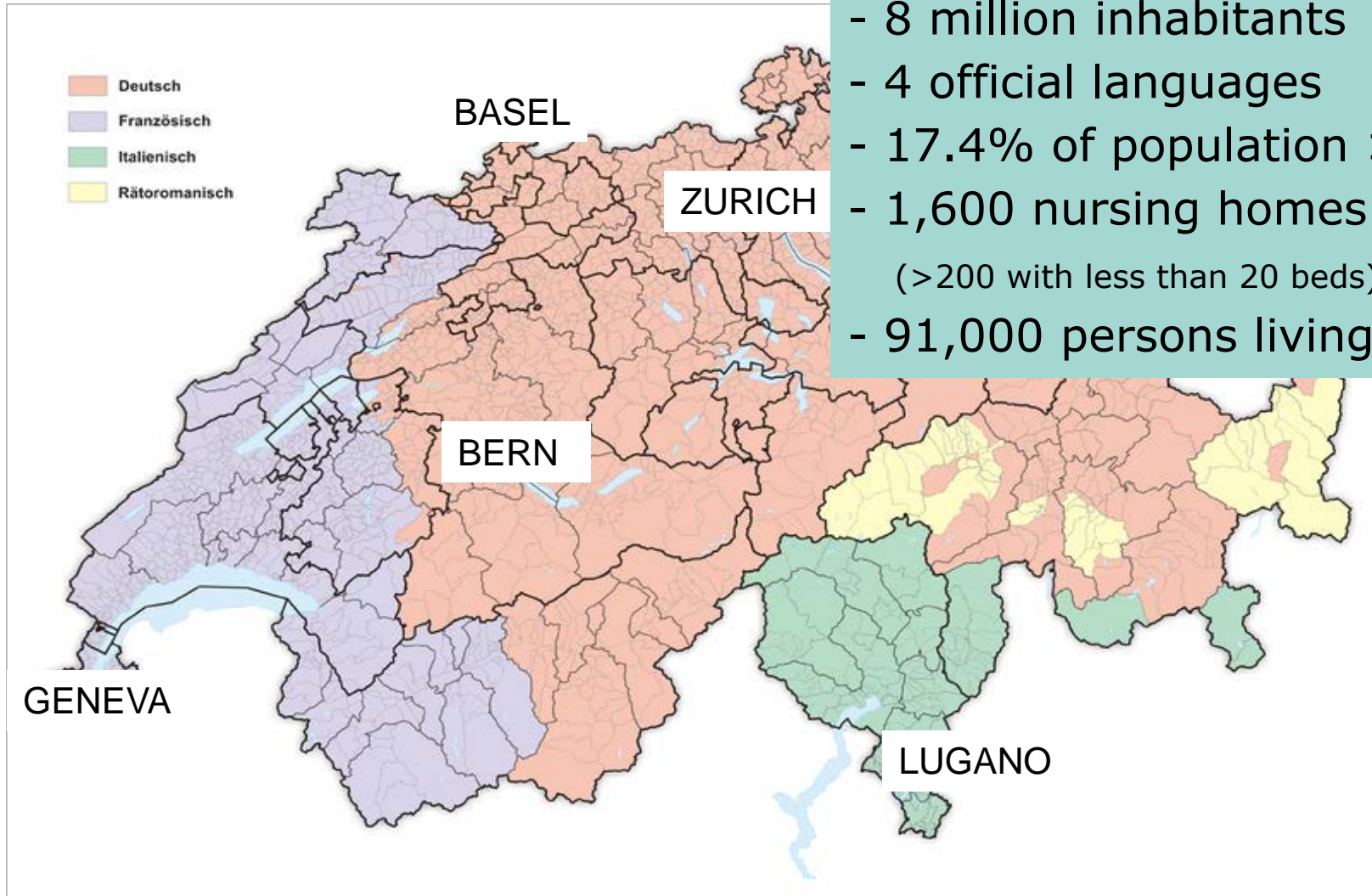
Quality of Care and the implicit rationing of nursing care in the Swiss Nursing Homes Human Resources Project (SHURP)

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Nursing home care in Switzerland



- 8 million inhabitants
- 4 official languages
- 17.4% of population >65yrs.
- 1,600 nursing homes (NH)
(>200 with less than 20 beds)
- 91,000 persons living in NH

Staffing, work environment, rationing and quality of care in nursing homes

- Inconsistent findings concerning the association of staffing level / staff mix and quality of care
- Better work environment (e.g. leadership, teamwork, participation, workload) related to higher quality of care (e.g. less pressure ulcers, aggression, pain, higher quality of life)
- Implicit rationing of nursing care , (i.e. “withholding of or failure to carry out necessary nursing measures” Schubert et al. 2007) related to worse patient outcomes in hospitals (e.g. nosocomial infection, falls, mortality).



→ **Need for combining staffing, work environment and implicit rationing of nursing care to assess their relationship with quality of care**

SHURP Methodology

Cross-sectional, multi-center study (2011-2013)

Random sample of Swiss nursing homes with at least 20 beds, stratified according to language region (German-, French-, Italian-speaking part) and nursing home size (small: 20-49 beds, medium: 50-99 beds, large: 100 and more beds)

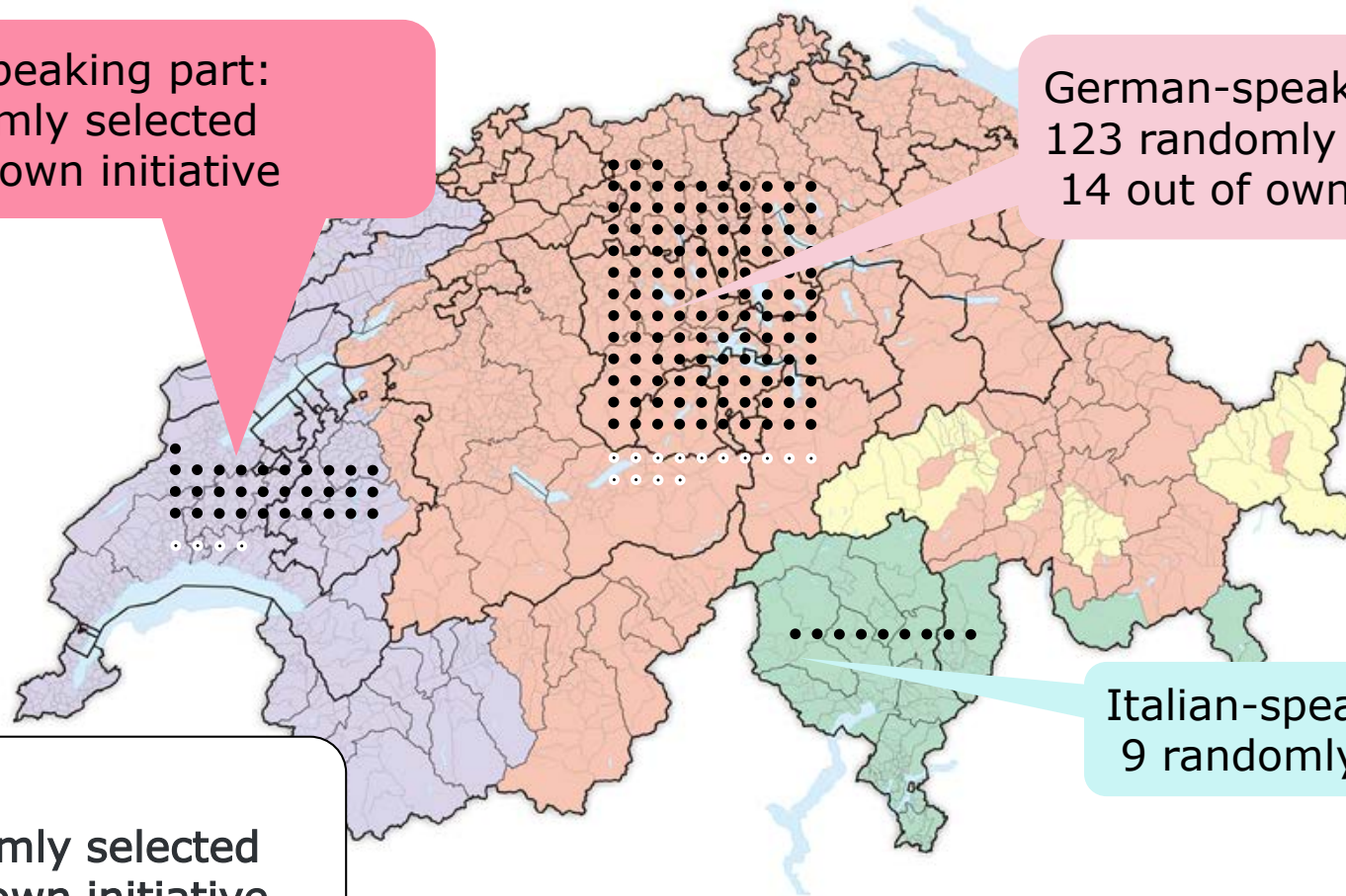
Questionnaire survey of:

- a. Care workers (registered nurses, licensed practical nurses, certified nurse aides; without students and volunteers)**
- b. Facility and unit characteristics with a questionnaire for each, filled out by nursing home administrator, director of nursing, or unit supervisors**

163 participating nursing homes

French-speaking part:
31 randomly selected
4 out of own initiative

German-speaking part:
123 randomly selected
14 out of own initiative



Italian-speaking part:
9 randomly selected

Total:
163 randomly selected
18 out of own initiative

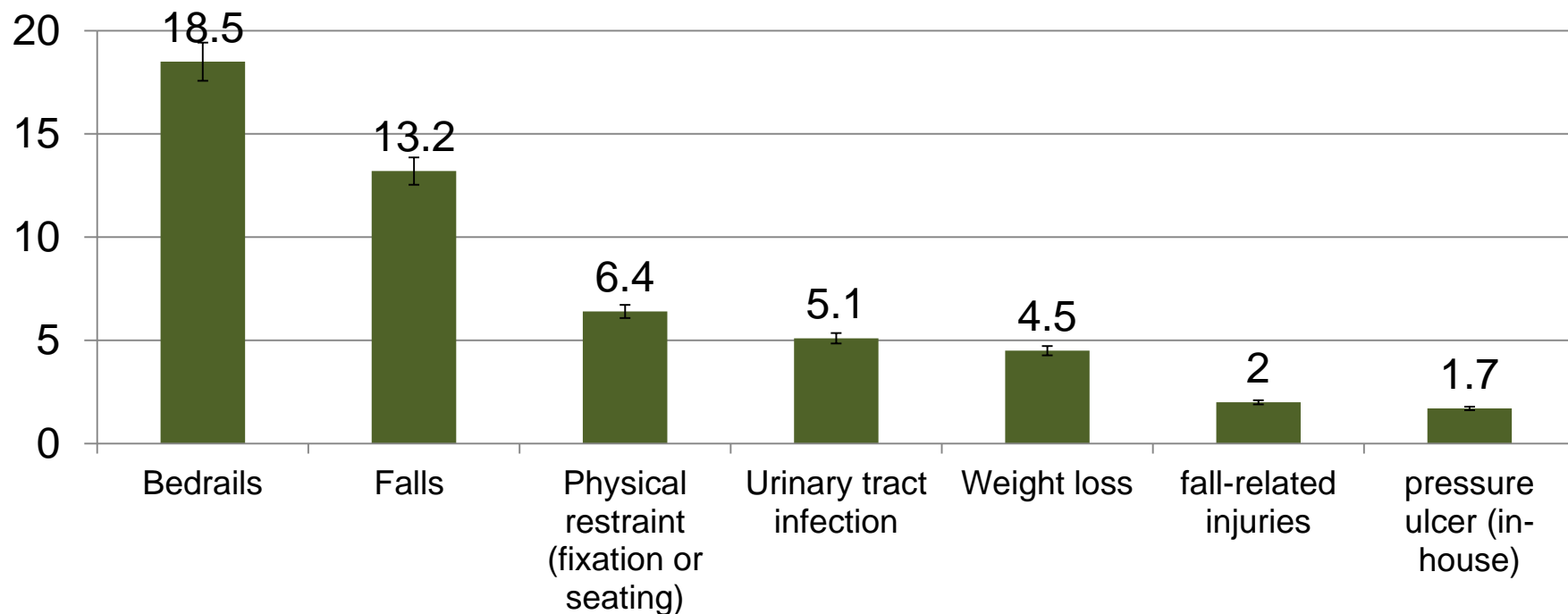
Overall response rate: 76% (n=5323 care workers)

Characteristics of nurse staffing and residents in the SHURP sample (n=402 units)

Nursing staff	Mean	SD ¹	Comparison US
Number of full-time equivalent posts / 100 beds (nursing staff)	51.7	15.3	
Staff mix (percentage of registered nurses):	31.8	11.9	<i>11.7</i>
Turnover (%)	11.8	15.9	<i>40-100</i>
Resident characteristics	Mean	SD ¹	
Mean age in years	84.6	3.0	
Mean length of stay in days	1237.0	434.5	<i>835</i>
Mean care load (Scale from 1 to 12, 1 unit=20 min. care/d)	5.9	1.6	

¹ SD= Standard Deviation

Resident outcomes (%)* – quality indicators



Percentage of units *without* any residents with outcome:

Bedrails: 19%

Falls: 16%

Physical restraints: 50%

Urinary tract infection: 33%

Weight loss: 45%

Fall-related injuries: 64%

Pressure ulcer: 70%

* % of resident with adverse event

Care worker characteristics

Characteristics	%
Response rate (n=5323):	76.3%

Age in years (n=5179):	
– Up to 30 years	20.0%
– 31 – 40	17.2%
– 41 – 50	28.6%
– > 50	34.2%

Professional group (n=5268):	
– Tertiary level	31.0%
– Secondary level (3 year education)	22.2%
– Secondary level (2 year education)	17.2%
– Nurse aides	26.2%
– Others	3.4%

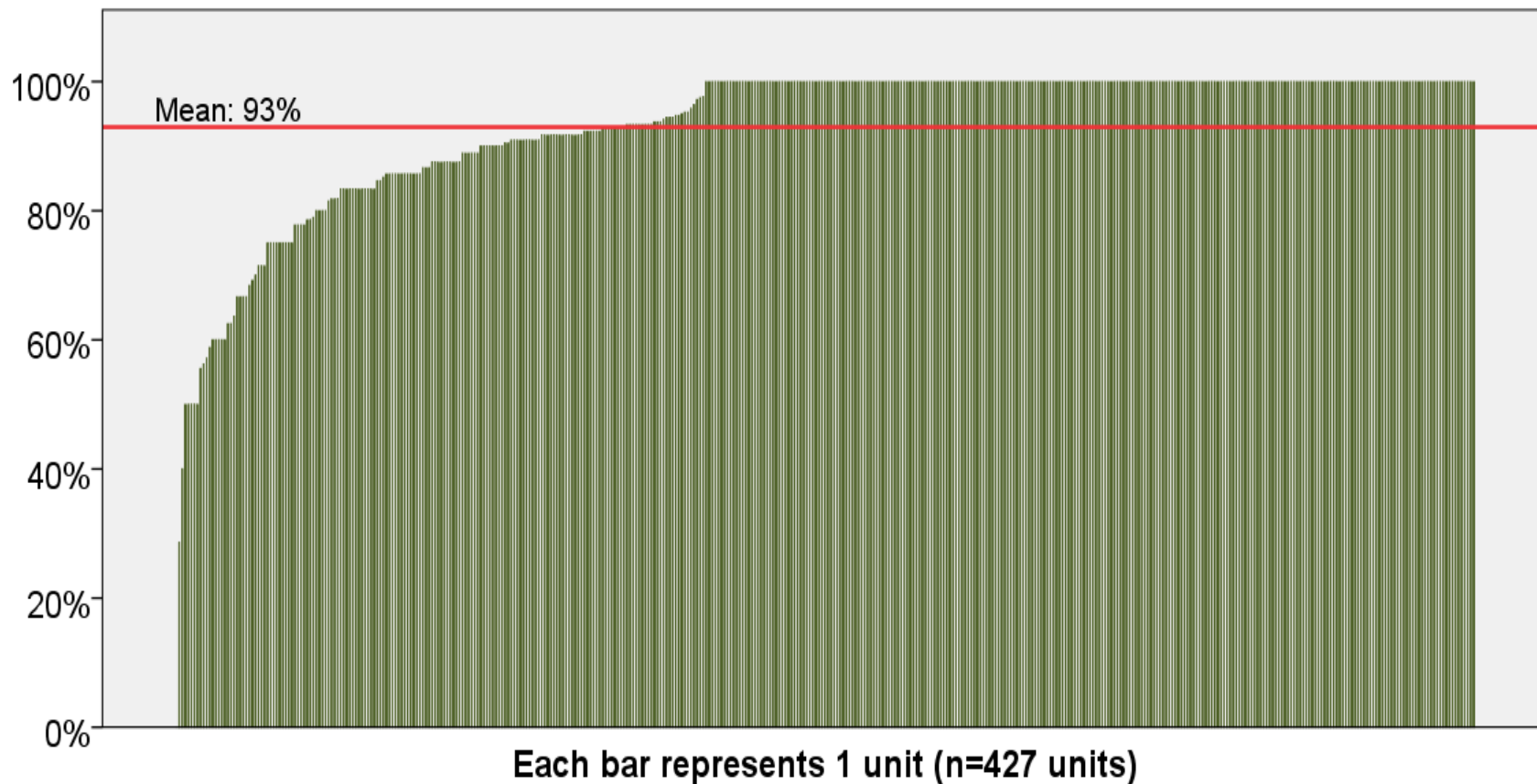
Characteristics	%
Gender (n=5265): female	91.8%

Employment percentage (n=5054):	
– Up to 50%	22.7%
– 51-90%	53.6%
– > 90%	23.7%

Experience in profession (n=4924)	
– Up to 5 years	19.2%
– More than 5 up to 10 years	21.4%
– More than 10 up to 15 years	17.9%
– More than 15 up to 20 years	13.5%
– More than 20 years	28.0%

High care-worker reported quality of care

Percentage of respondents per unit rating the overall quality of care as rather high or very high



Implicit rationing of nursing care

- Omitting, delaying or partly fulfilling necessary nursing task due to the lack of resources (personnel, material, time)
- Implicit: not openly discussed with clients / residents

Affected residents:

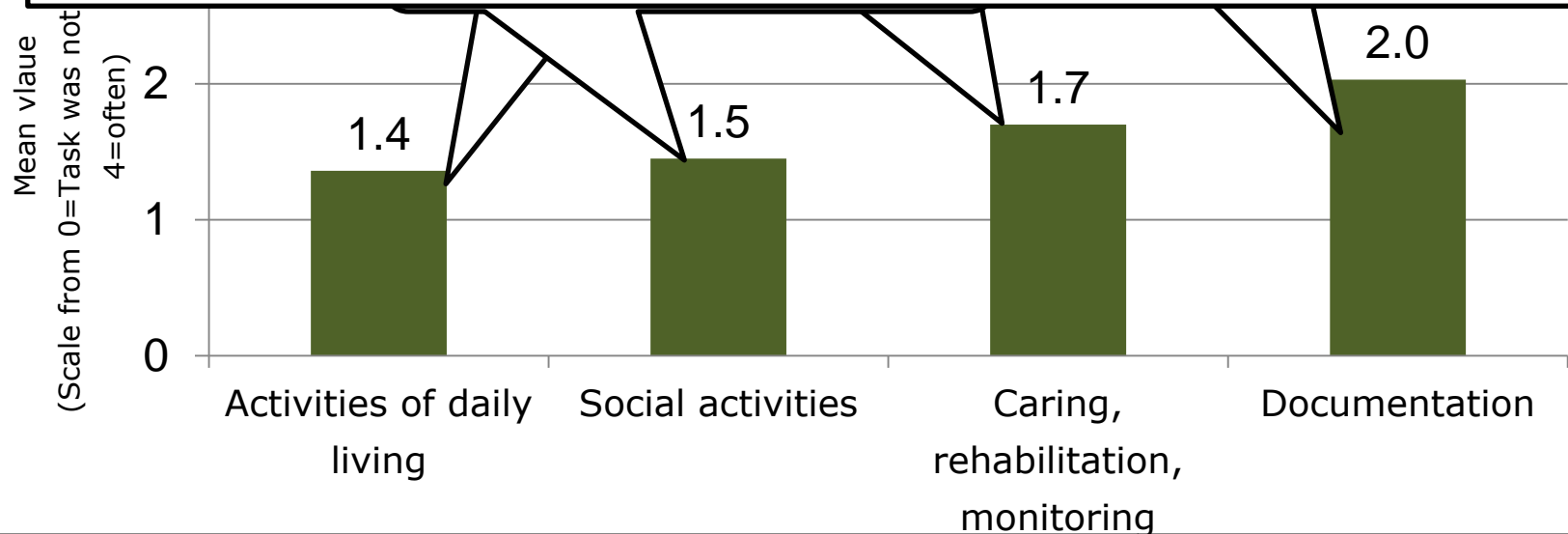
- Physically dependent on more than 1 care worker (e.g. mobilisation,
- Cognitively impaired
- Socially isolated
- Behavioural symptoms

Which tasks are rationed in Swiss nursing homes?

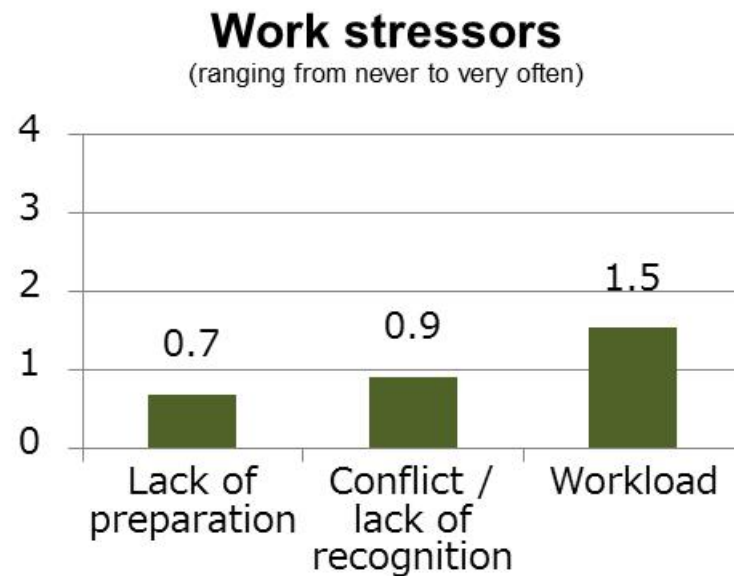
How often in your last 7 working days did it happen that you could not or only partly perform interventions and therapies that were NECESSARY and USUAL because of LACK OF TIME or HIGH WORKLOAD?

Prioritization of basic resident needs:

What about quality of life, person-centereness?



Positive ratings of work environment and few work stressors in SHURP







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Original Study

Are Staffing, Work Environment, Work Stressors, and Rationing of Care Related to Care Workers' Perception of Quality of Care? A Cross-Sectional Study

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Relationship of staffing, work environment, implicit rationing of nursing care and care-worker reported quality of care

Antecedents		Odds ratio	95% Confidence interval		
Staffing	Staffing level: FTE/100 beds	1.0	1.0	-	1.0
	Staff mix (% registered nurses)	1.0	1.0	-	1.0
	Turnover	1.0	1.0	-	1.0
Work environment	Leadership	1.1	0.8	-	1.5
	Staffing and resources adequacy	2.9***	2.1	-	4.2
	Teamwork and safety climate	6.2***	4.4	-	8.8
	Work stressors: Conflict and lack of recognition	0.8	0.6	-	1.1
	Work stressors: Workload	0.7*	0.6	-	0.9
	Work stressors: Lack of preparation	1.6**	1.2	-	2.2
Rationing	Activities of daily living	0.8	0.5	-	1.0
	Caring, rehabilitation, and monitoring	0.3***	0.2	-	0.5
	Documentation	1.5**	1.1	-	1.8
	Social care	0.8**	0.7	-	0.9

*** p<.001; ** p<.01; * p<.05

Adjusted model, controlled for facility, unit, resident and care worker characteristics

Conclusions

- Both medical quality indicators and subjective ratings of care workers point to a high quality of care in Swiss nursing homes.
- A positive work environment was the key factor related to high care-worker reported quality of care, while staffing levels, skill mix and turnover were not related to it.
- Care workers' perception of staffing and resources adequacy must be distinguished from actual staffing levels: care workers might have a broad view about different aspects of staffing adequacy.
- Care workers' perception of quality of care seems to focus on relational aspects of care, e.g. having time for emotional support or rehabilitating care.



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Many thanks!

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www.shurp.unibas.ch

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