

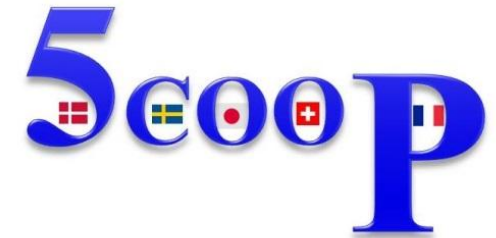
DISCLOSURE(S)

Research Support:

**CERA (Caisse d'Epargne Rhône Alpes)
foundation for financing the 3 preparatory
international seminars**

**AXA Research Fund for covering all the
costs of the field study**

Morbidity



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7. Ecole Pratique des Hautes Etudes (EPHE), Paris, France.
8. Université de Montpellier, Inserm, U1198, Montpellier, France.
9. for the "Japanese 5-COOP team" : Yasu Arai; Yasuyuki Gondo; Hirose Nobuyoshi; Yasu Arai; Donald Craig Willcox; Marina Kozono; Yukie Masui; Hiroki Inagaki, Various cities, Japan.

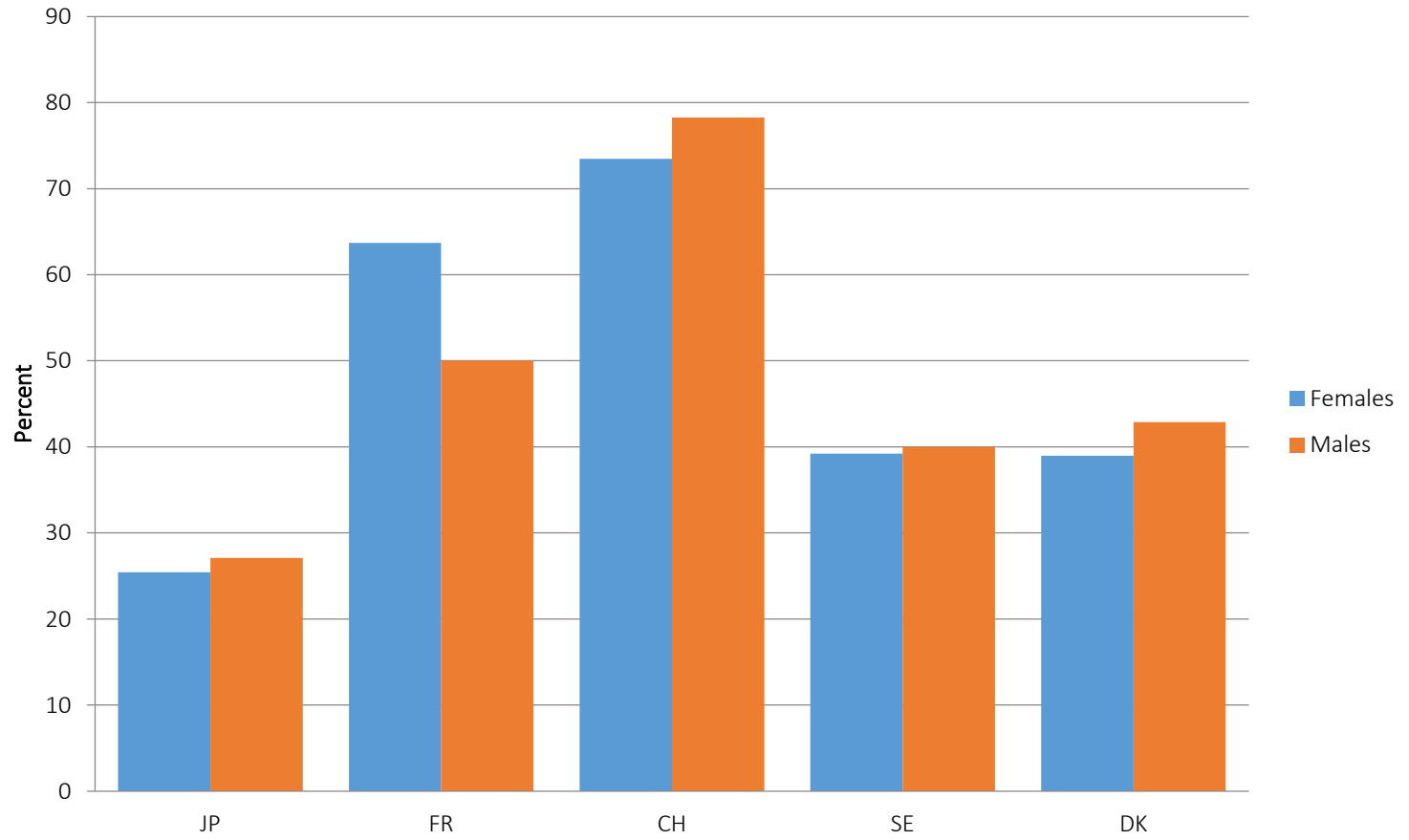


Healthy centenarians?

- Are centenarians people harbouring a subpopulation protected against some diseases like cancer, dementia...?
- "Centenarians are the best examples of successful ageing as they have escaped major age-related diseases and have reached the extreme end of human life"
 - Candore et al. 1997
- "Healthy centenarians do not exist, but autonomous do!"
 - Andersen-Ranberg et al. 2001
- Scientific interest as a human model of relative resistance to dementia?

Pooled heart disease

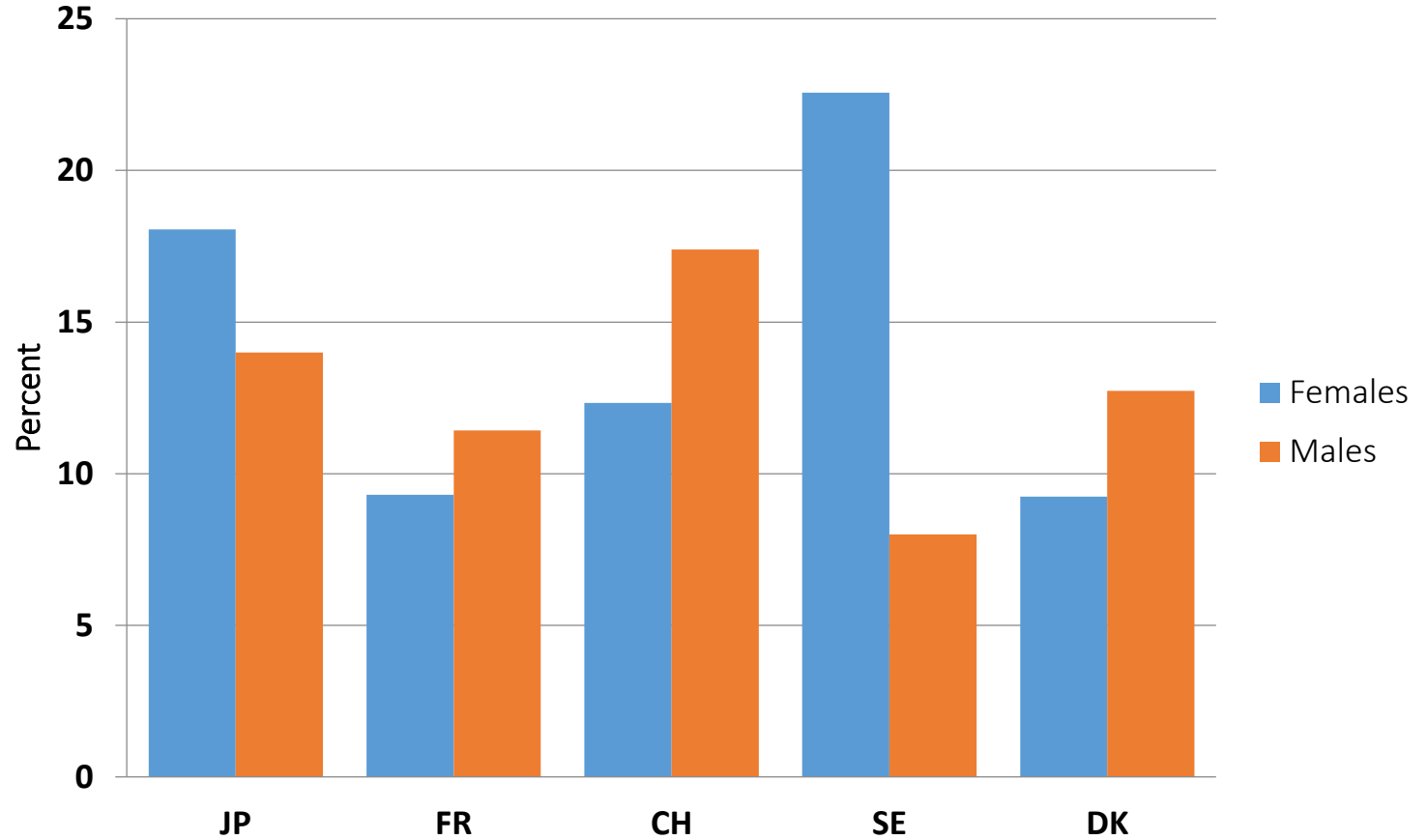
Heart attack, heart failure, atrial fibrillation, HTA



Hypertension 28% FR \Rightarrow 55% JP

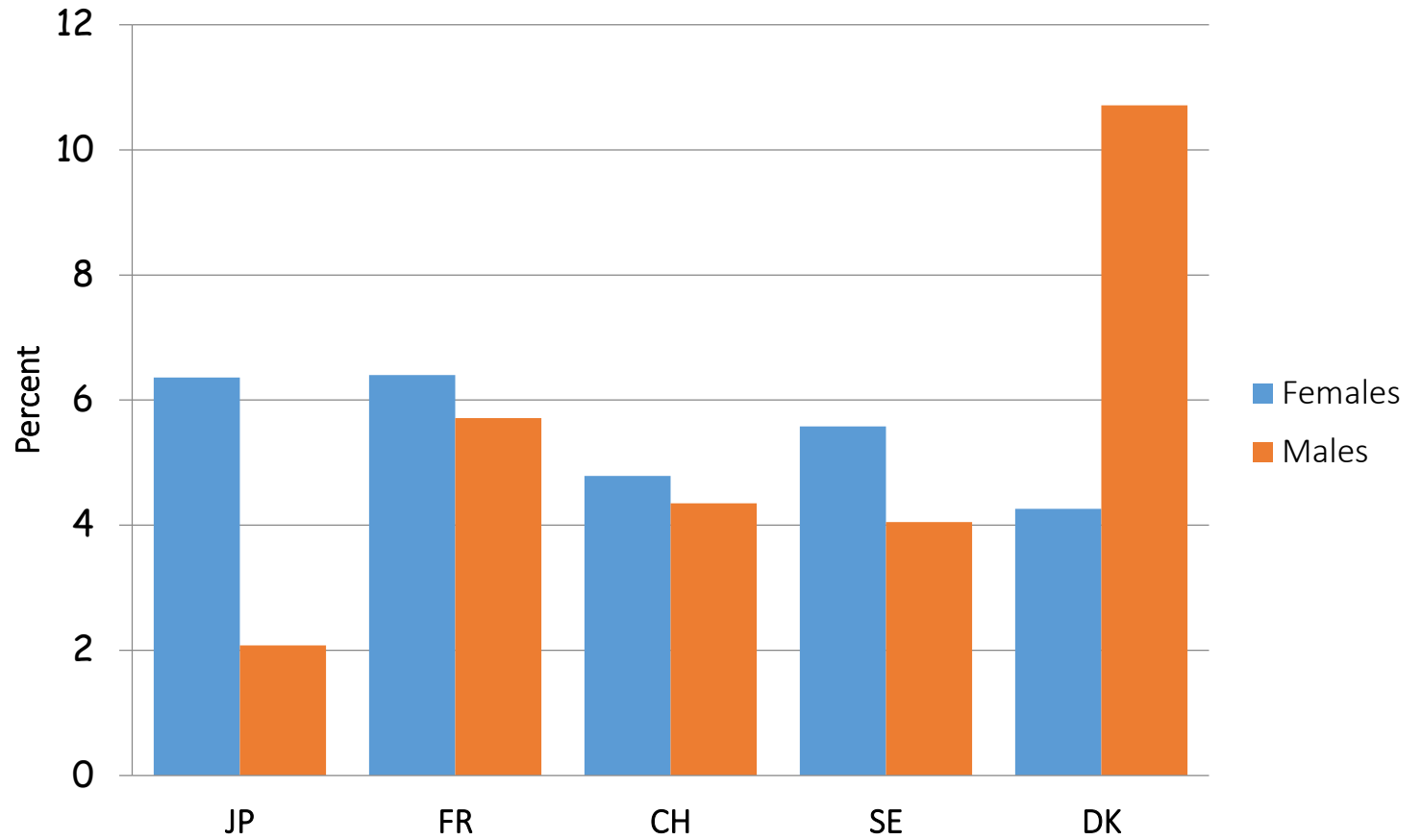
Myocardial infarction 9% DK \Rightarrow 56% FR

Stroke

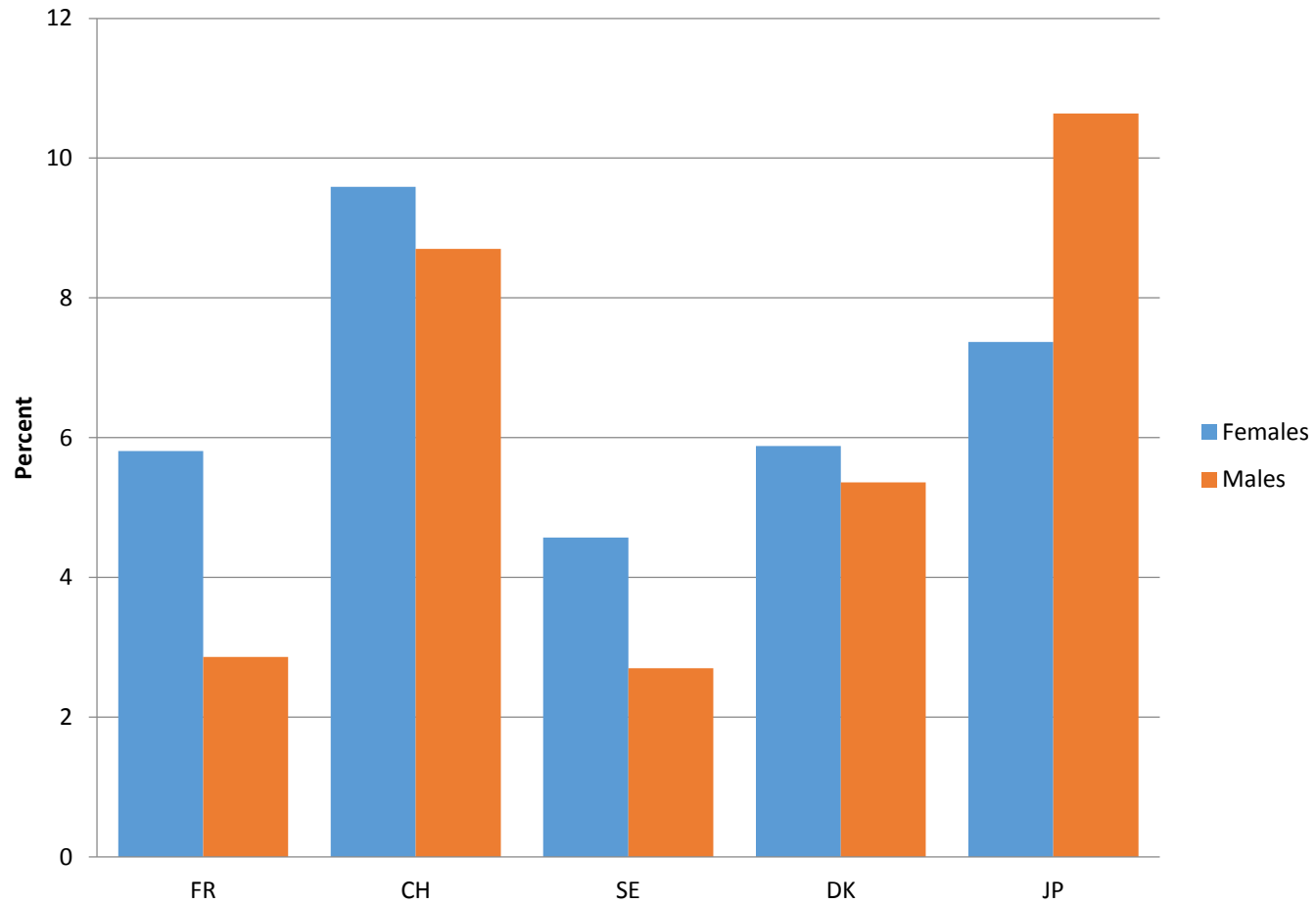


Stroke 10% FR and DK \Rightarrow 19% SE

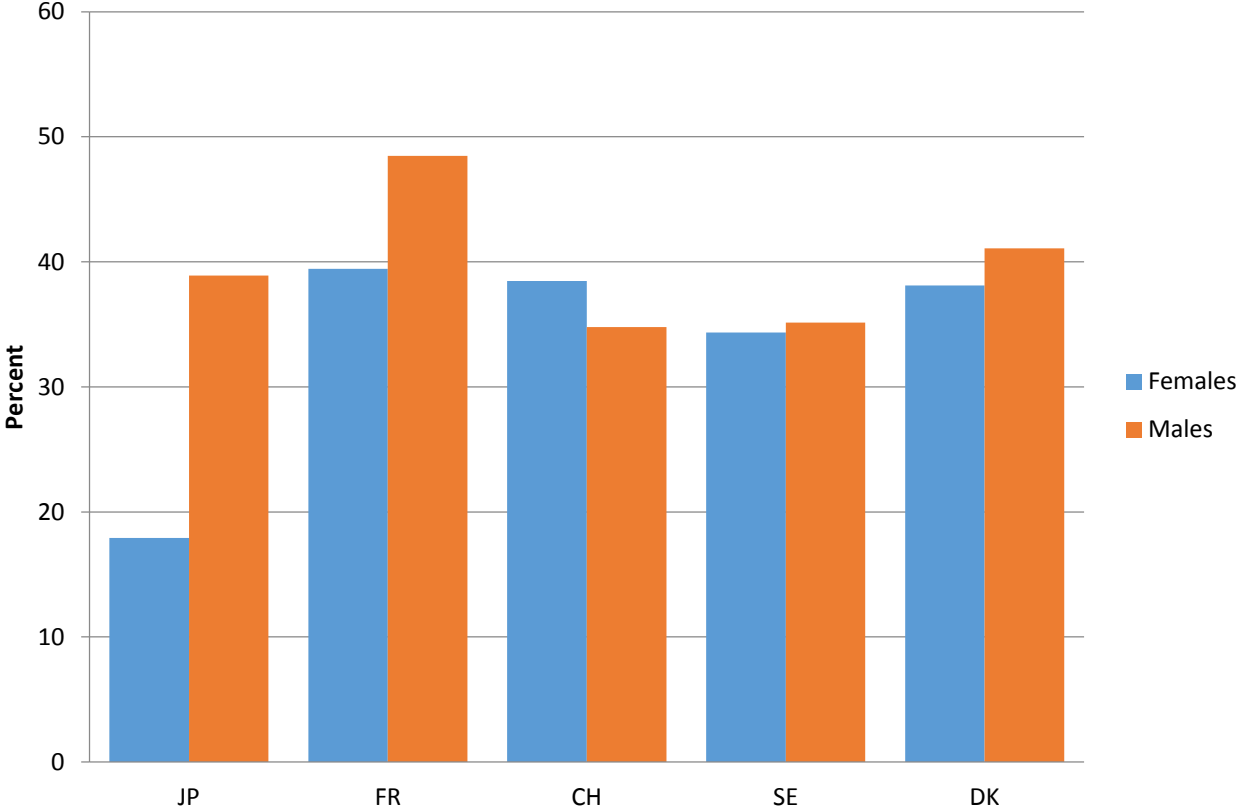
Diabetes



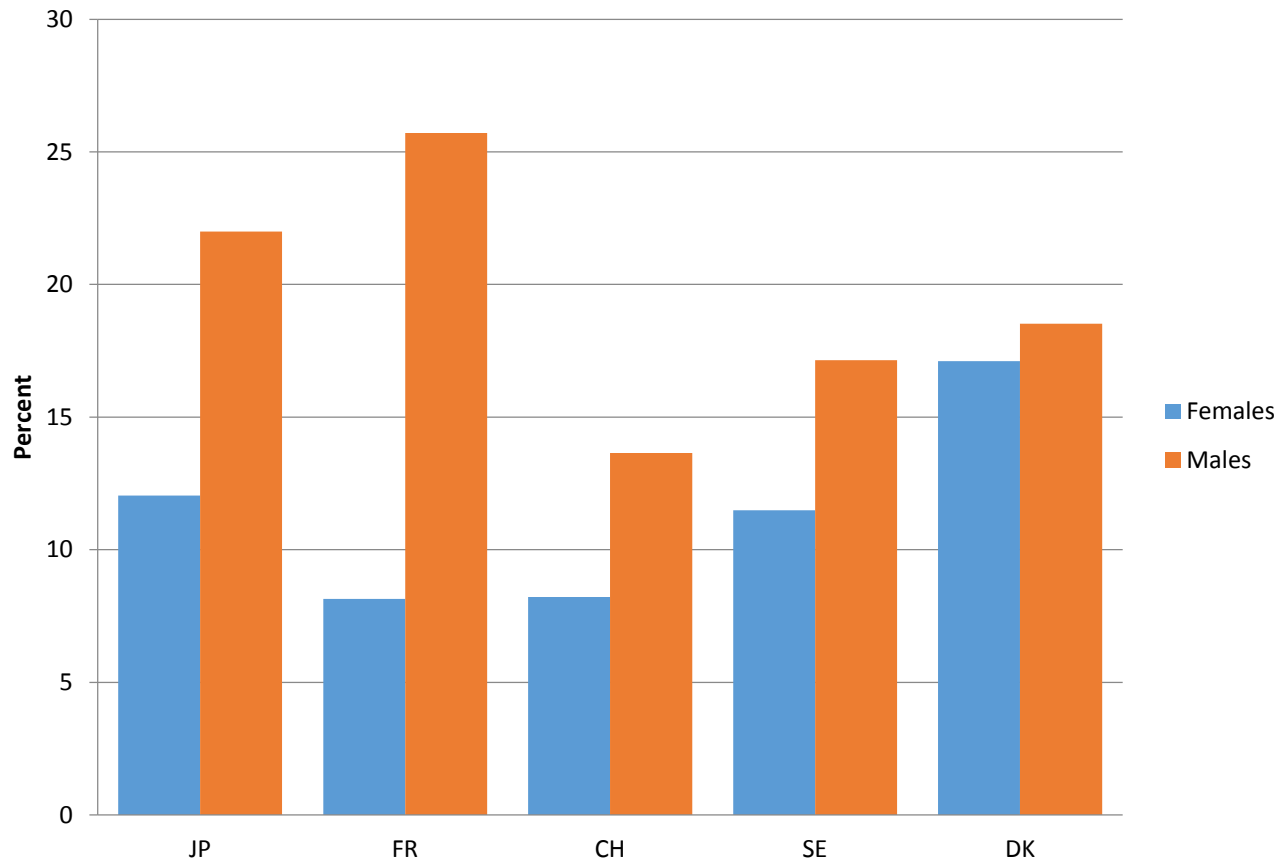
COPD



Falls within the last 6 months

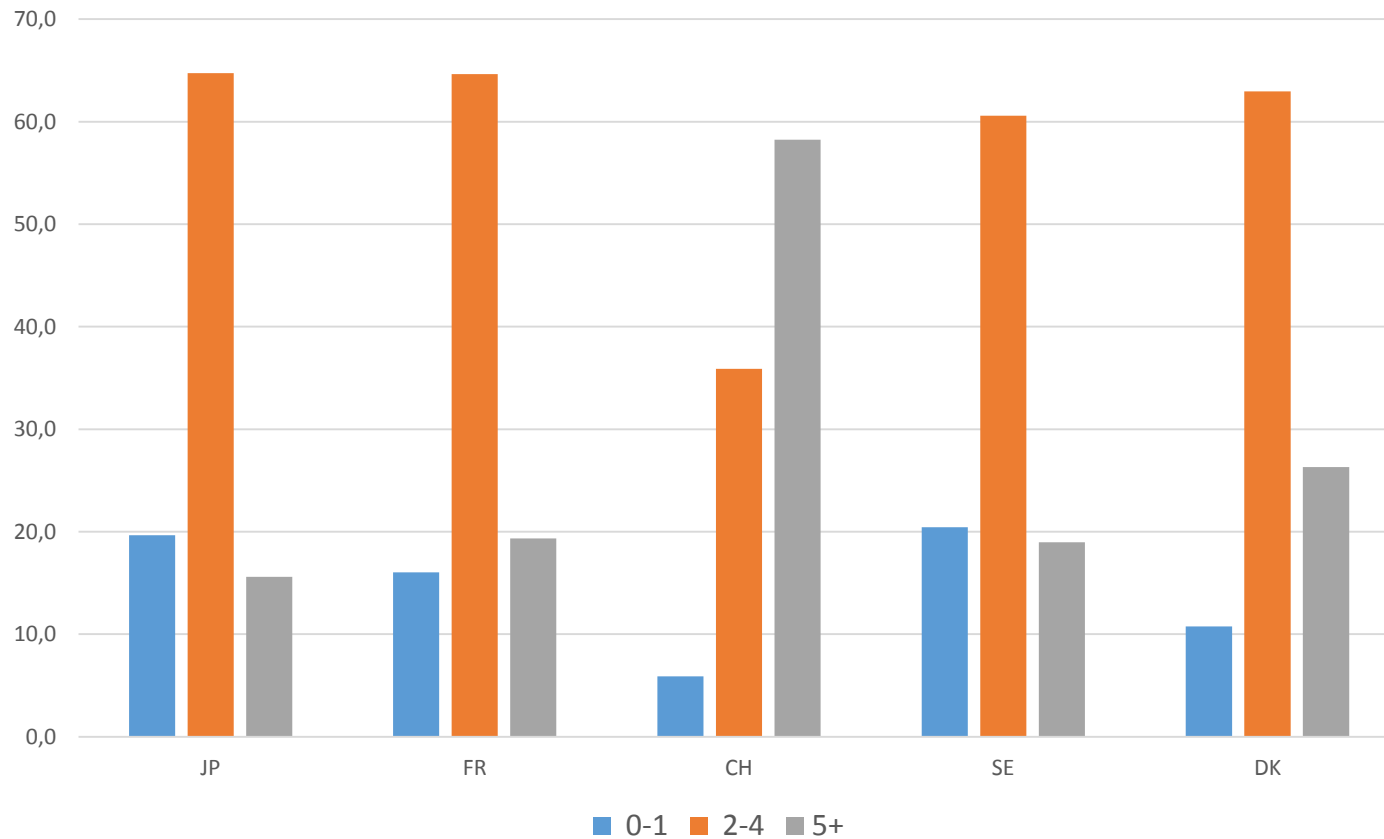


Malignant cancer

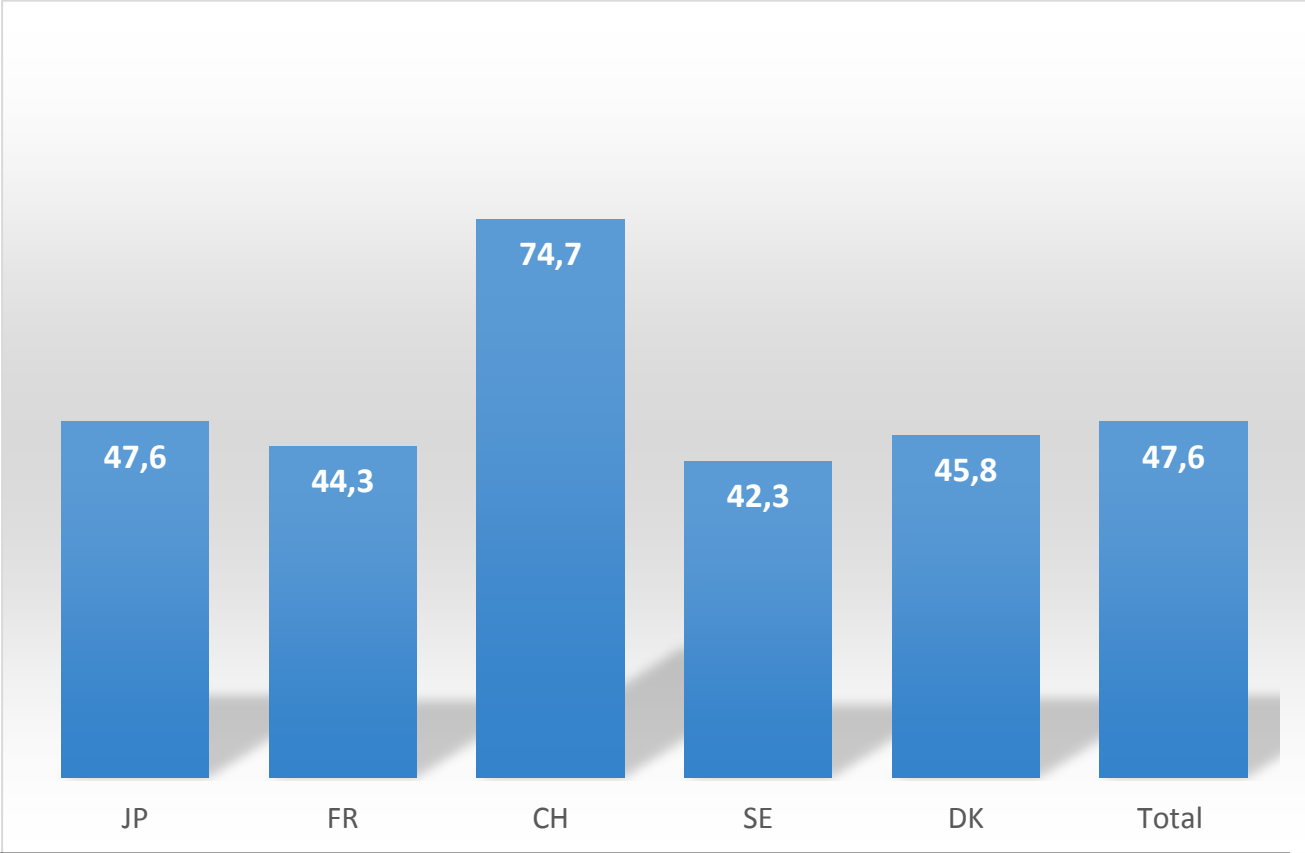


Multimorbidity

$p = 0.00010$



Centenarians living in institution (%)



N

346

212

170

274

251

1253

Results

Diseases and conditions are common in centenarians

- Falls
- Symptoms
- Cardio-vascular diseases
- Multimorbidity

Results

- More common in FRANCE and SWITZERLAND
 - Heart diseases
- Roughly similar across countries
 - Stroke
 - COPD
 - Diabetes
 - Symptoms
 - Falls
 - Multimorbidity
 - High 5+ diseases in CH

Centenarians are not healthy in terms of disease

Multivariate logistic regression

- Adjusting for sex, education, nursing home residency, ADL limitations, and interview mode
- Japan = reference country
- **HYPERTENSION** significantly lower in France, Sweden and Denmark, and borderline significant in Switzerland.
- **CARDIO-VASCULAR DISEASES** significantly higher in France (OR 4.0), Switzerland (5.0), Sweden (1.6) and Denmark (1.5)
- **FALL** within the last 6 months significantly higher in all countries but small effect sizes (OR: 1.8-2.4).
- **MULTIMORBIDITY** (2+ diseases), **DIABETES** no variation across countries.

Explaining differences and similarities

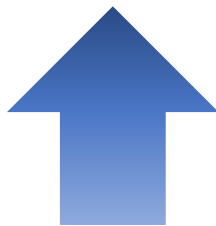
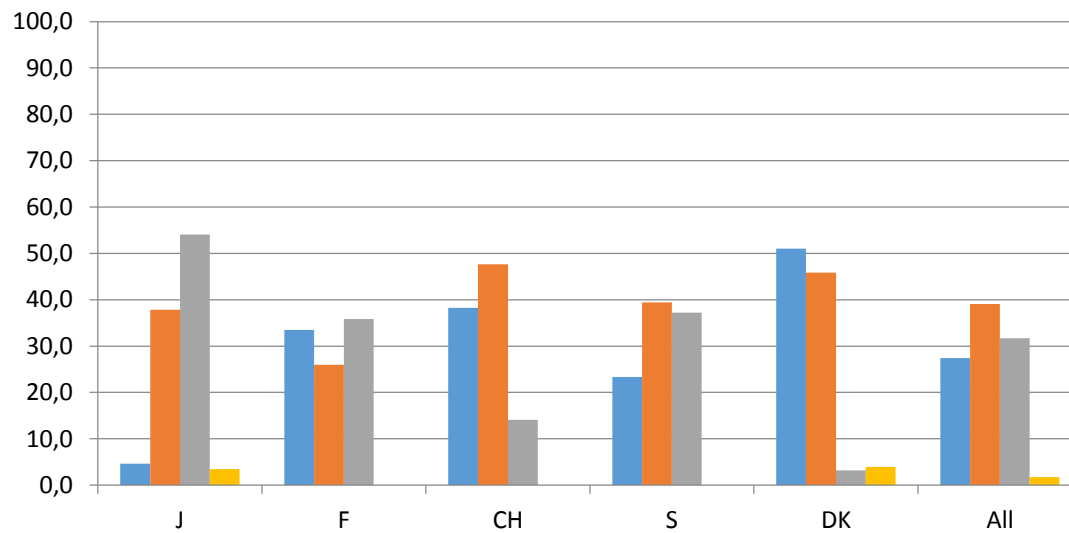
- True differences?
- True similarities?
- Methodological differences?

Methodology

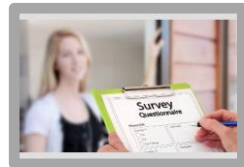
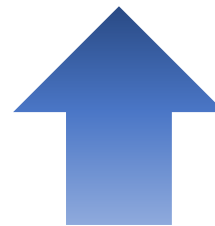
- Ex-ante harmonized questionnaire
- But interviewers have different backgrounds

	N	J	F	CH	S	DK	All
Anthropologist			1				
Sociologist		1					
Psychologist		3		5			
Nurse						3	
Physician		5					
Lay interviewer		1	1		9		
Graduate students		5					
Survey agency interviewer							
		15	2	5	9	3	34

Response modes

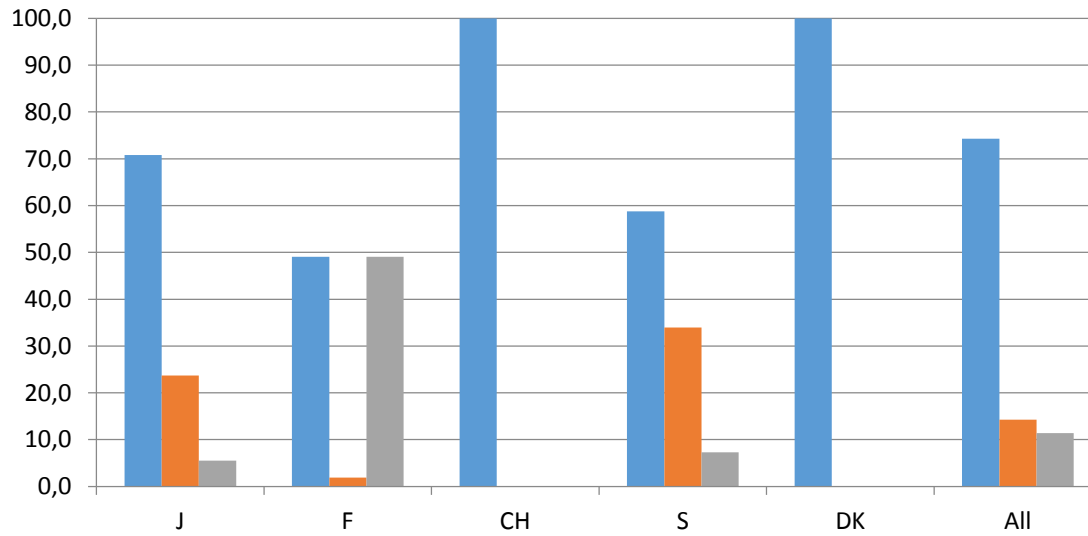


Direct
interview

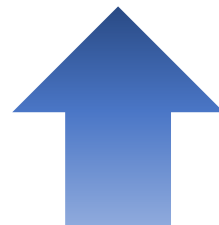


- Direct interviews
- Mixed interviews
- Proxy interviews
- Missing

Response types



- Visit
- Phone
- Mailing only



Visit

Conclusion

- Variation in morbidity and symptoms between the 5 countries
- Some of the variations are likely caused by differences in methodology
- However, the 5-COOP study is the first cross-national study on centenarians using an ex-ante harmonized survey questionnaire
- Further studies emphasizing harmonization of methodology are needed