



The development of a gender continuum for large-scale studies on health

Sarah S. Vader, W.M. Monique Verschuren and H. Susan J. Picavet

National Institute of Public Health and the Environment, The Netherlands



Introduction

- Better understanding of male and female differences in health related research.
- The integration of gender related aspects in (quantitative) health research has proven to be quite a task.

(Johnson, Greaves and Repta 2009; Smith and Koehoorn 2016)



Aim of the study

- The aim of this study was to develop a gender continuum based on already existing data from a large scale study on health and disease, and to study this gender continuum in relation to self-perceived health and pain.

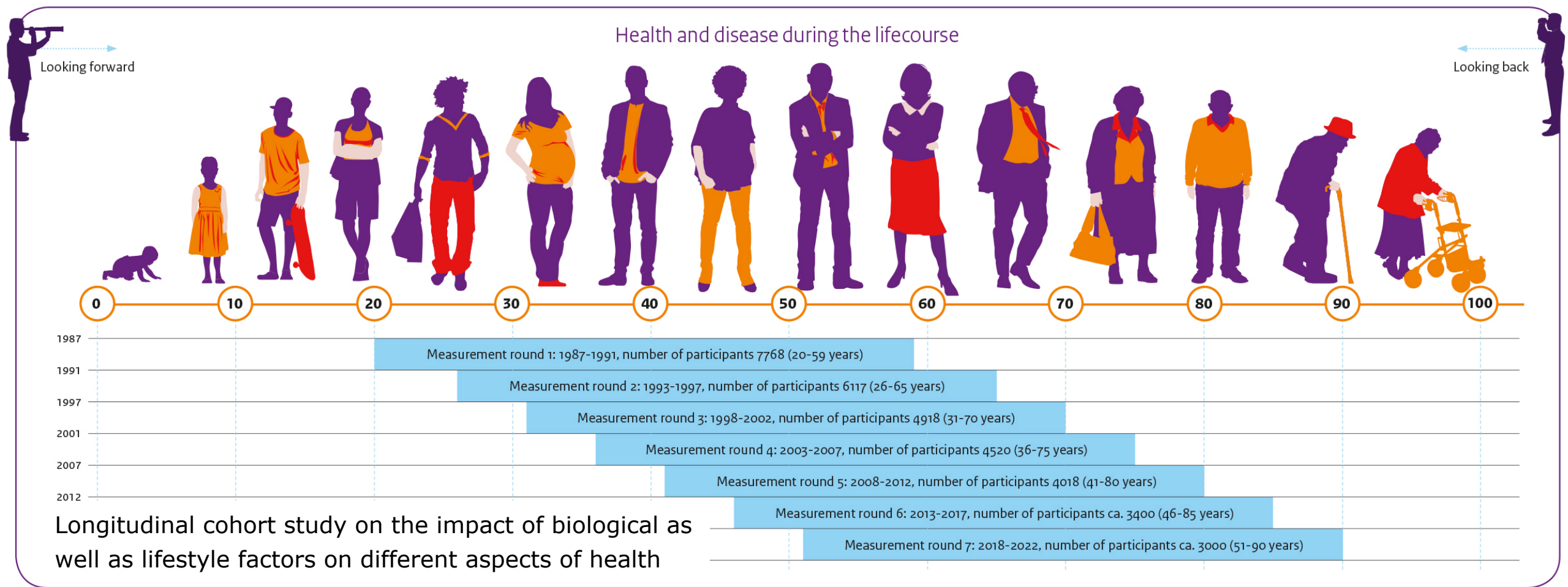


Research Methods and design

- Doetinchem Cohort Study



Doetinchem Cohort Study





Research Methods and design

- Doetinchem Cohort Study (DCS)
- Gender continuum:
 - A sample of 4011 participants (1897 women, 2114 men) of round 5 of the DCS, completed between 2008 and 2012.
 - Already existing questions relating to work, informal care work, lifestyle, emotional experiences.
 - The gender continuum is based on traditional male and masculine connoted gender aspects and behaviours.



The traditional division of labour, male-breadwinner model		
Paid work	As an employee	+1
	Self-employed paid work	+2
	Retired	+1
	Having a partner that is not employed	+2
Household chores (cleaning, cooking, attending children)	Less than 10 h/w	+0
	More than 10 h/w	+2
Gendered behaviour based on statistical data		
Smoking	Pipe	+2
	Cigarettes	+1
Alcohol consumption	More than 1 glass p/w	+1
	More than 5 glasses of beer p/w	+1
Gender (stereotypical) connoted aspects and behaviours		
Sports	Doing sports	+2
	Doing activities involving heavy sweating	+2
Travelling (to and from work)	More than 15 h/w travelling (car, motorcycle, public transport)	+1
Activities executed on a regular basis	Doing odd jobs	+1
	Doing odd jobs for other people	+1
Activities not executed at all or on a highly irregular basis	Babysitting	+1
	Taking care of a sick partner	+1
	Taking care of a sick person (other than partner)	+1
Emotional experiences	No effect of emotional problems on the ability to work	+1
	Person reported no feelings of nervousness	+1
	Person reported no feelings of being exhausted	+1
	Person reported a to be feeling full of life	+1
	Person reported to experience a high level of energy	+1



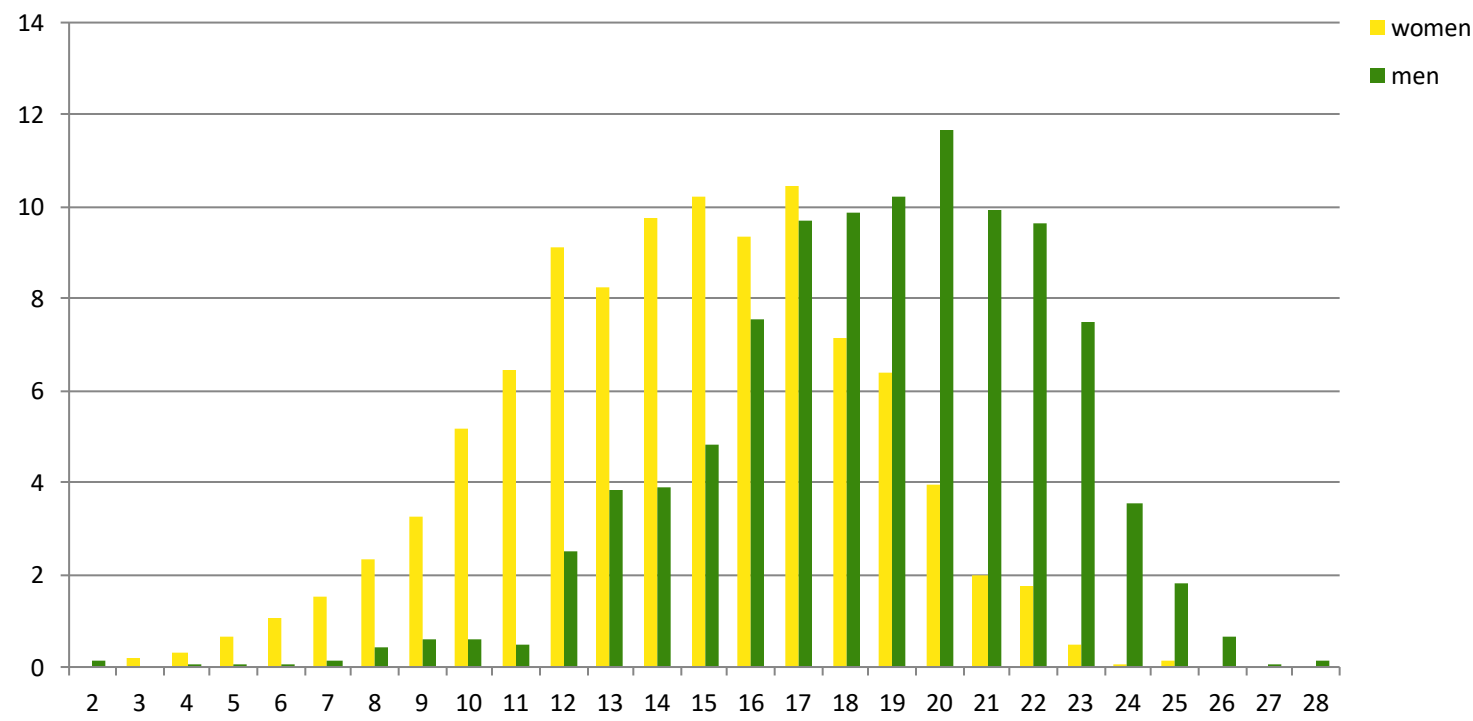
Research Methods and Design

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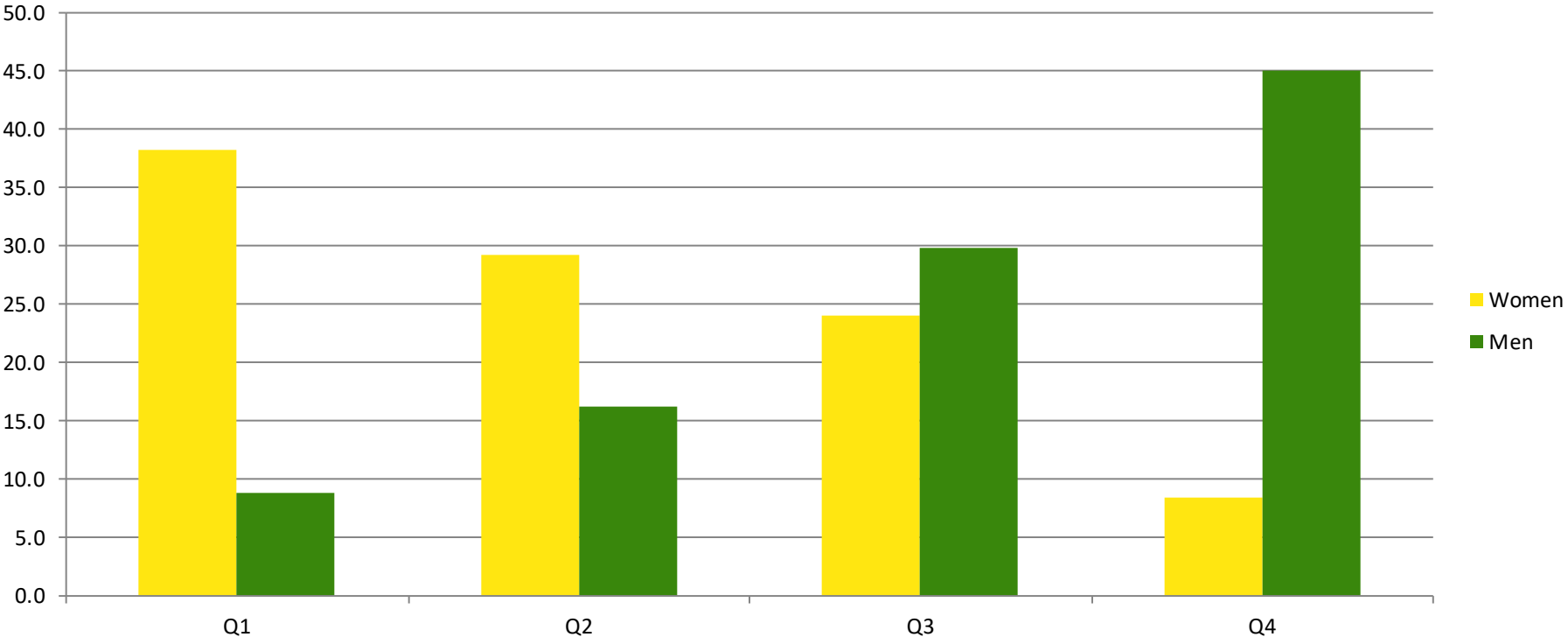
Results

- Distribution of women and men on the gender continuum





Results





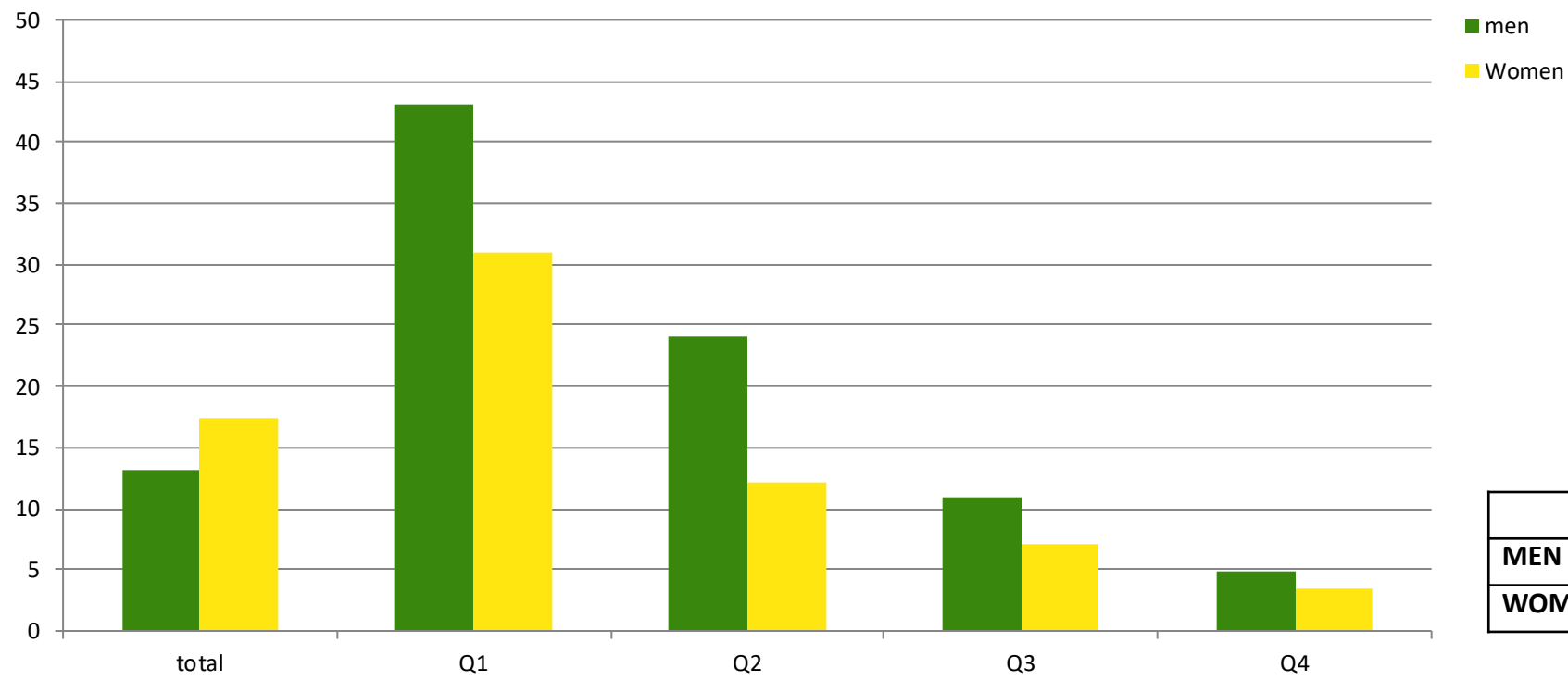
Results

- Self-perceived health
 - **17%** of the **women** report less than good self-perceived health.
 - **13%** of the **men** report less than good self-perceived health.



Results

- Gender continuum and less than good self-perceived health



	TOTAL	Q1	Q2	Q3	Q4
MEN	13,1	43,1	24	11	4,8
WOMEN	14,7	30,9	12,1	7,1	3,4



Results

- Gender continuum and self-perceived health
 - When corrected for gender, men instead of women score lower on self-perceived health.



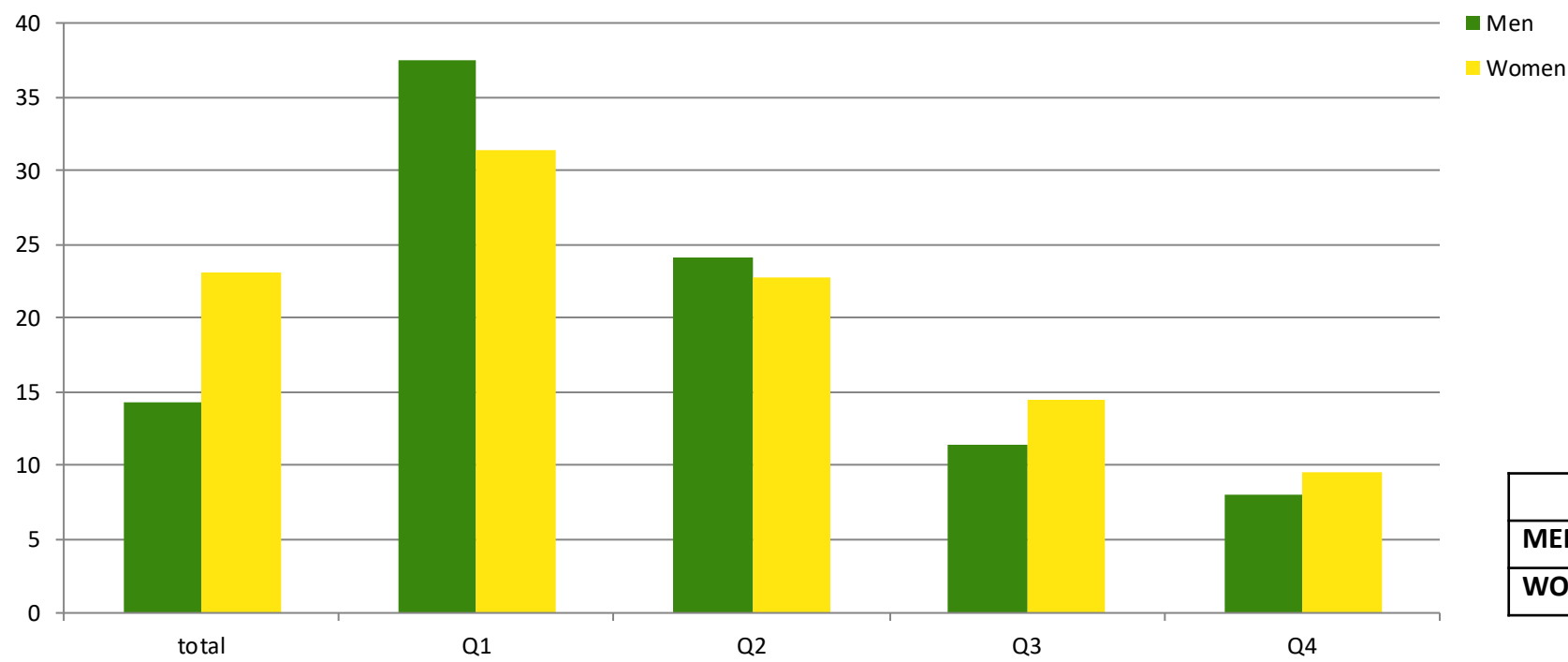
Results

- Chronic pain
 - 23% of the women report to experience chronic pain.
 - 14% of the men report to experience chronic pain.



Results

- Gender continuum and reported experience of chronic pain



	TOTAL	Q1	Q2	Q3	Q4
MEN	14,2	37,4	24,1	11,4	8
WOMEN	23	31,3	22,8	14,4	9,6



Results

- Gender continuum and chronic pain
 - When corrected for gender, the difference between men and women decreases.



Conclusion

- According to this study, differences between men and women in self-perceived health and chronic pain is largely due to gender instead of biological differences.
- Thus, gender related aspects, roles and behaviours have an influence on health outcomes for men and women.
- Could this kind of research help to better understand health differences between men and women?



Discussion

- Flaws and difficulties:
 - Work with already existing data
 - Gender continuum is not a perfect account or reflection of gender roles, behaviours and identities
- However, integrating gender results in different outcomes for different groups of men and women.
- First step in thinking how gender can be integrated in the analysis of longitudinal cohort data.



References

- Johnson, Joy, Lorraine Greaves and Robin Repta (2009): Better science with seks and gender: facilitating the use of a seks and gender based analysis in health research. *International Journal for Equity in Health* 8(14).
- Smith, Peter M. and Mieke Koehoorn (2016): Measuring gender when you don't have a gender measure: constructing a gender index using survey data. *International Journal for Equity and Health* 15(82).