

Pain and Self-Assessed Health: Does the Association Vary across the Life Course?

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Introduction	Key measures	Main results			
<ul style="list-style-type: none"> Most people will experience episodes of persistent pain at various times in their life. Despite high incidence and prevalence, we know little about how these encounters associate with other indicators of well-being that are mentally, physically and socially constructed. Self-assessed health is a broad indicator of well-being and is predictive of future health outcomes. Knowledge of how pain and self-assessed health associate across age cohorts can help in understanding consequences of pain across the life course. A few studies have examined links between pain and self-assessed health^{1,2,3}, but vital questions remain unanswered. 	Dependent variable: Self-assessed health – excellent, very good, good, fair/poor.	Models 1-3: Pain coefficients (log odds ratios)			
	General Pain: Experienced, in the last month, a pain problem lasting at least 24 hours.	Pain	Model 1	Model 2	Model 3
	Specific Pain: Experienced, in the last three months [#] , site-specific pain (lower back, neck, headache, joint) lasting at least 24 hours.	General	-1.056*	-.744*	-.858*
		Specific	-.760*	-.486*	-.456*
		Model 4: Predicted probability of excellent self-assessed health by pain across age cohorts			
Age cohorts: Young (20-39), Younger-old (60-79), Middle age (40-59), Older-old (80+)					

Research questions	Analysis	Conclusions										
<p>Using NHANES (2003-04; N=5,032), we ask:</p> <ol style="list-style-type: none"> Is there an association between pain and self-assessed health? Does the association diminish after controlling for more objective health covariates as well as demographic, socio-economic and social support characteristics? Do the association vary across age cohorts? 	<p>Ordered logistic regressions predicting self-assessed health.</p> <table border="1"> <thead> <tr> <th>Model</th> <th>Covariates</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>General/specific pain + socioeconomic/demographic characteristics</td> </tr> <tr> <td>2</td> <td>+ 13 chronic conditions, healthcare utilization, mental health</td> </tr> <tr> <td>3</td> <td>+ social support[†]</td> </tr> <tr> <td>4</td> <td>+ pain X age interactions</td> </tr> </tbody> </table>	Model	Covariates	1	General/specific pain + socioeconomic/demographic characteristics	2	+ 13 chronic conditions, healthcare utilization, mental health	3	+ social support [†]	4	+ pain X age interactions	<ol style="list-style-type: none"> Association between pain and self-assessed health is robust even when adjusting for a chronic conditions, mental health healthcare utilization, demographic, socio-economic and social support covariates. But, the association differs across age cohorts. It is strongest in middle-age and non-existent among older-old. Results suggest that the way in which pain is interpreted differs across the life course.
Model	Covariates											
1	General/specific pain + socioeconomic/demographic characteristics											
2	+ 13 chronic conditions, healthcare utilization, mental health											
3	+ social support [†]											
4	+ pain X age interactions											

Citations:
 1. Mäntyselkä, P.T., Turunen, J.H., Ahonen, R.S., & Kumpusalo, E.A. (2003). Chronic pain and poor self-assessed health. *Journal of the American Medical Association*, 290, 2435-2442.
 2. Reyes-Gibby, C.C., Aday, L., & Cleeland, C. (2002). Impact of pain on self-assessed health in the community-dwelling older adults. *Pain*, 95, 75-82.
 3. Siedlecki, S.L. (2006). Predictors of self-assessed health in patients with chronic nonmalignant pain. *Pain Management Nursing*, 7, 109-116.

[#] For joint the reference period is last year.
[†] Model including social support is run only on those age 40+ due to data limitations.