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Health Literacy and Successful Secondary Prevention of Cardiovascular Disease

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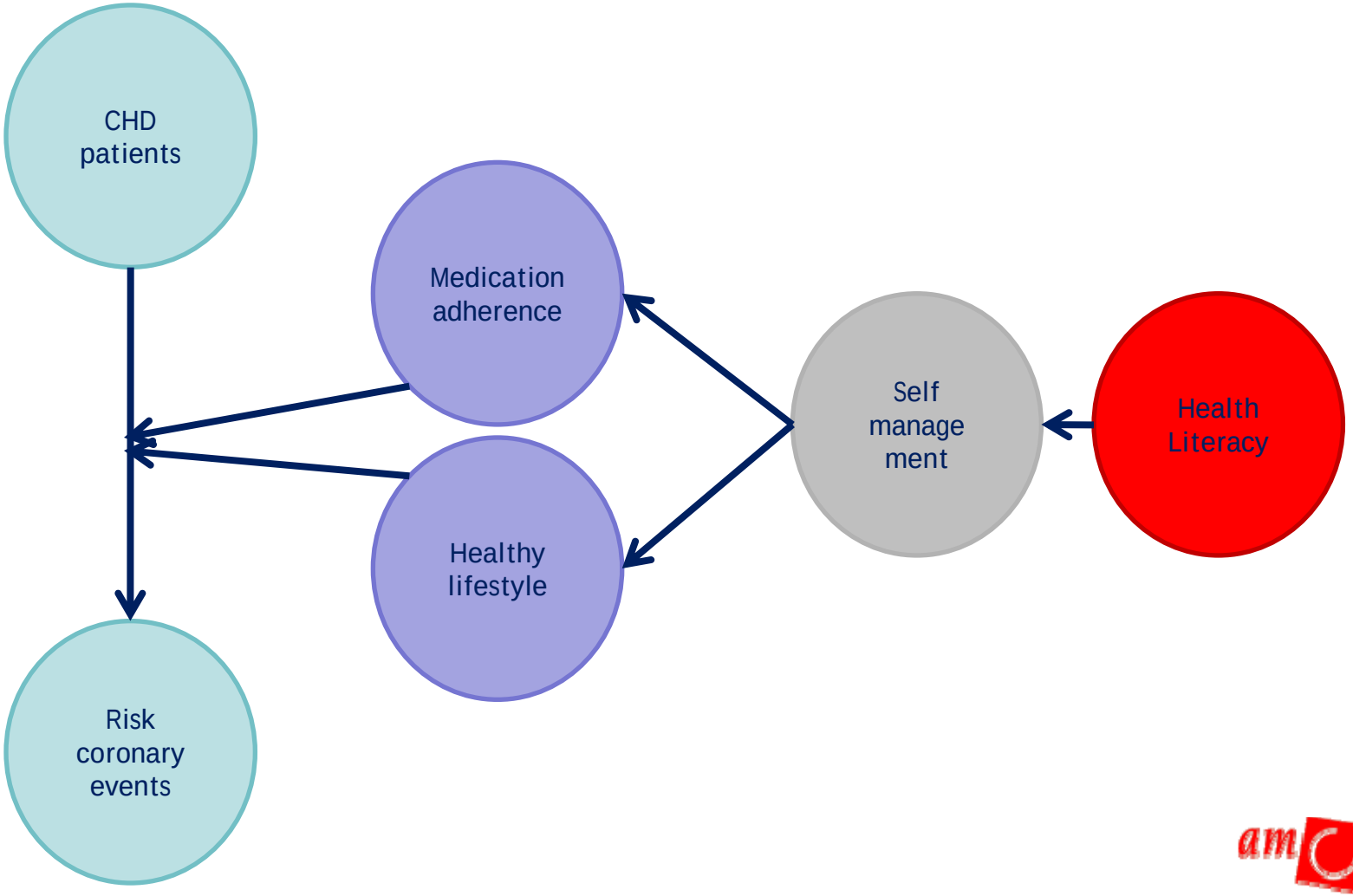
General introduction

- No data available on prevalence of low health literacy
- Adult Literacy and Lifeskills Survey: 10% of the Dutch population is low literate
- Initiation of health literacy research

Background of the study



Study objectives

1. To assess level of health literacy among cardiovascular patients

2. To assess the association between health literacy and cardiovascular risk scores

3. To assess the association between health literacy and the effect of secondary prevention on cardiovascular risk scores

Methods: Embedded in RESPONSE

RESPONSE = 'Randomised Evaluation of Secondary Prevention by Outpatient Nurse SpEcialists'

- Goal: Investigate the effect of a nurse coordinated prevention program on risk of cardiovascular events
- Population: Patients recently hospitalized for acute coronary syndrome
- Nurse program: 4 counseling sessions in 6 months
  Lifestyle, biomedical riskfactors and medication adherence

(Peters et al., 2010)

Methods: Embedded in RESPONSE

- Primary outcome of RESPONSE

Systematic COronary Risk Evaluation (SCORE)

Risk of cardiovascular death in 10 years

Age, gender, cholesterol, blood pressure and smoking status

Baseline, 6 months and 12 months

- Results of RESPONSE

754 patients were randomized

17% relative risk reduction after nurse-coordinated prevention programme (at 12 months)

(Peters et al., 2010)

Methods: Data collection

- AMC-Patients recruited at 12 month follow-up in RESPONSE

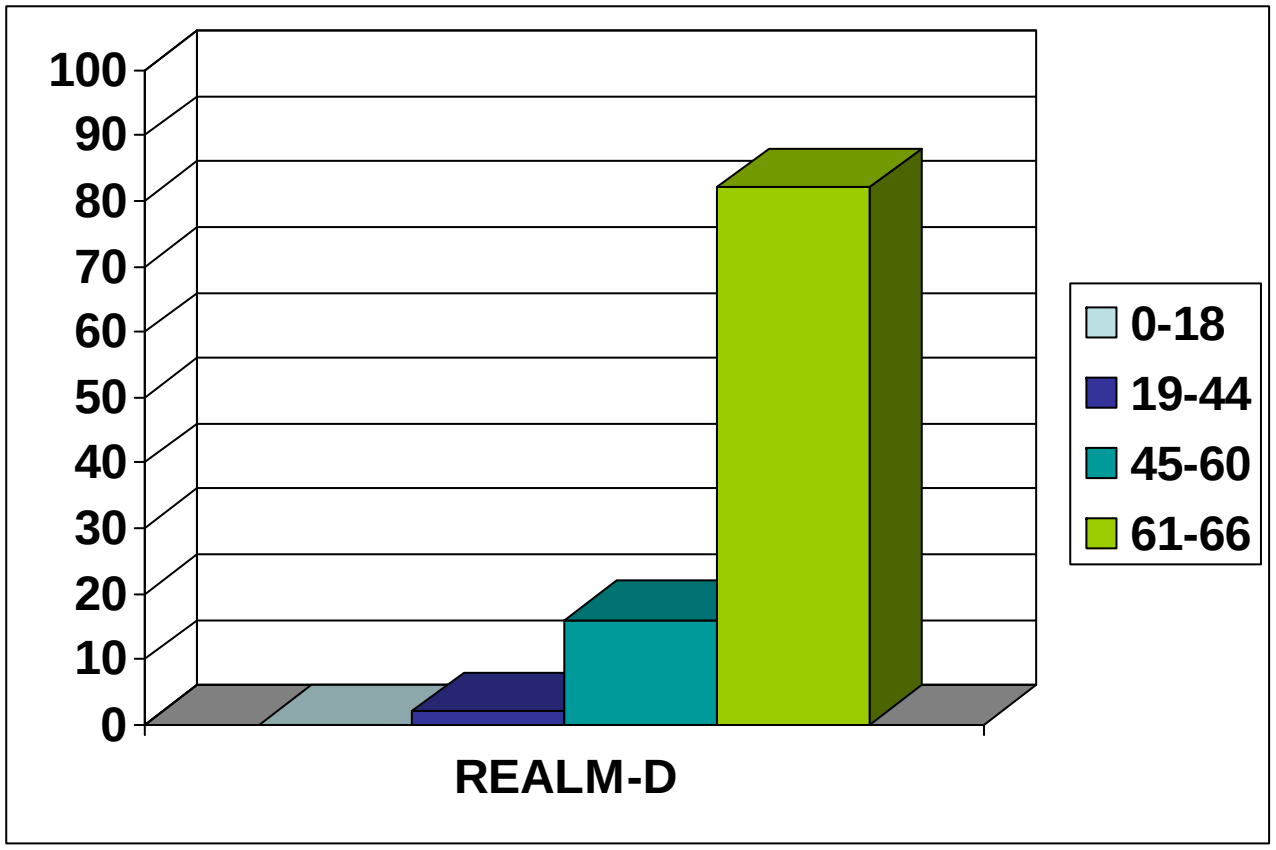
- Health literacy assessed in personal interviews
  Objective measures: REALM-D and NVS
  Subjective measure: Chew's screeningsitems

- Cardiovascular risk profiles from RESPONSE data

Results: Population characteristics (n=113)

Characteristics	n (%)
Gender	
Male	89 (79)
Educational level	
Low	31 (28)
Medium	45 (41)
High	34 (31)
Ethnic origin	
Dutch	86 (76)
Non-Dutch	27 (24)
Intervention in RESPONSE	50 (44)

Results: Health literacy scores (n=113)



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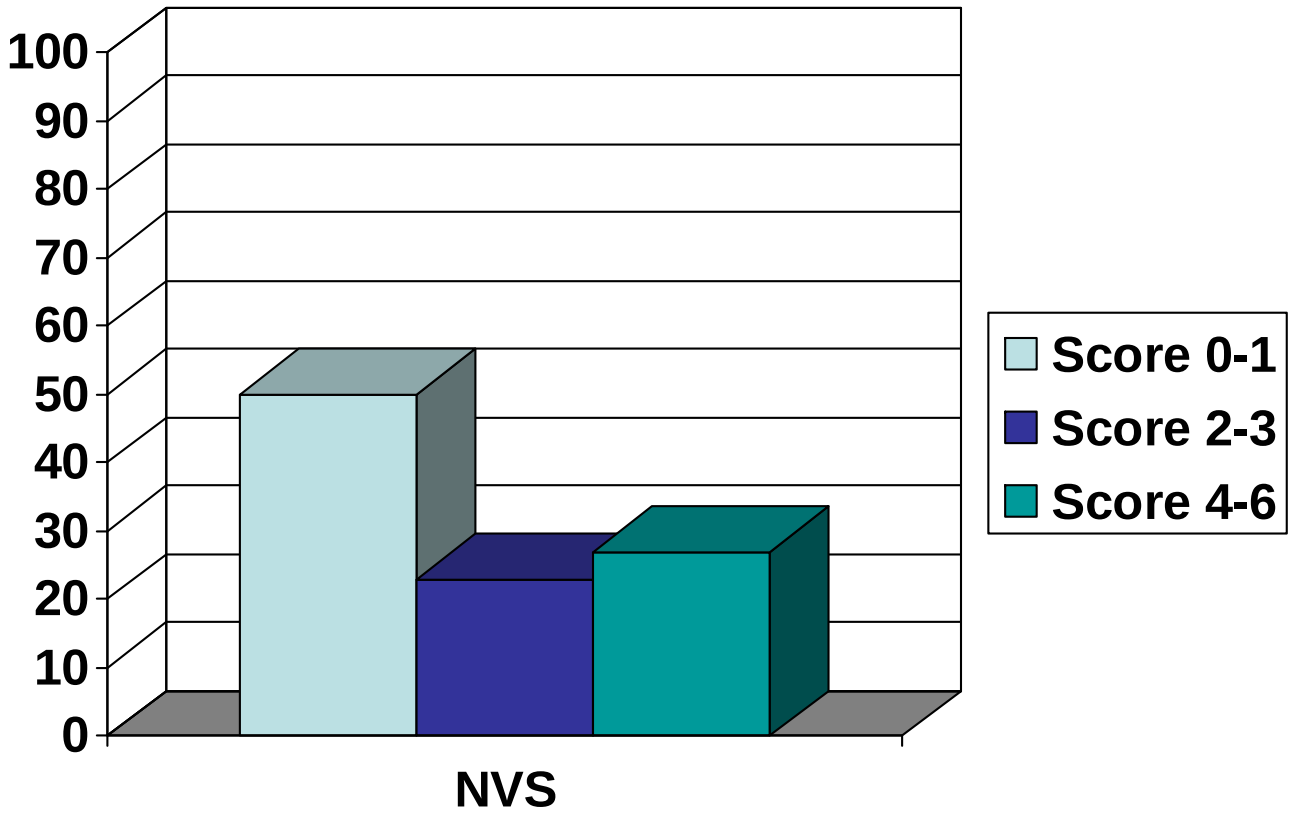

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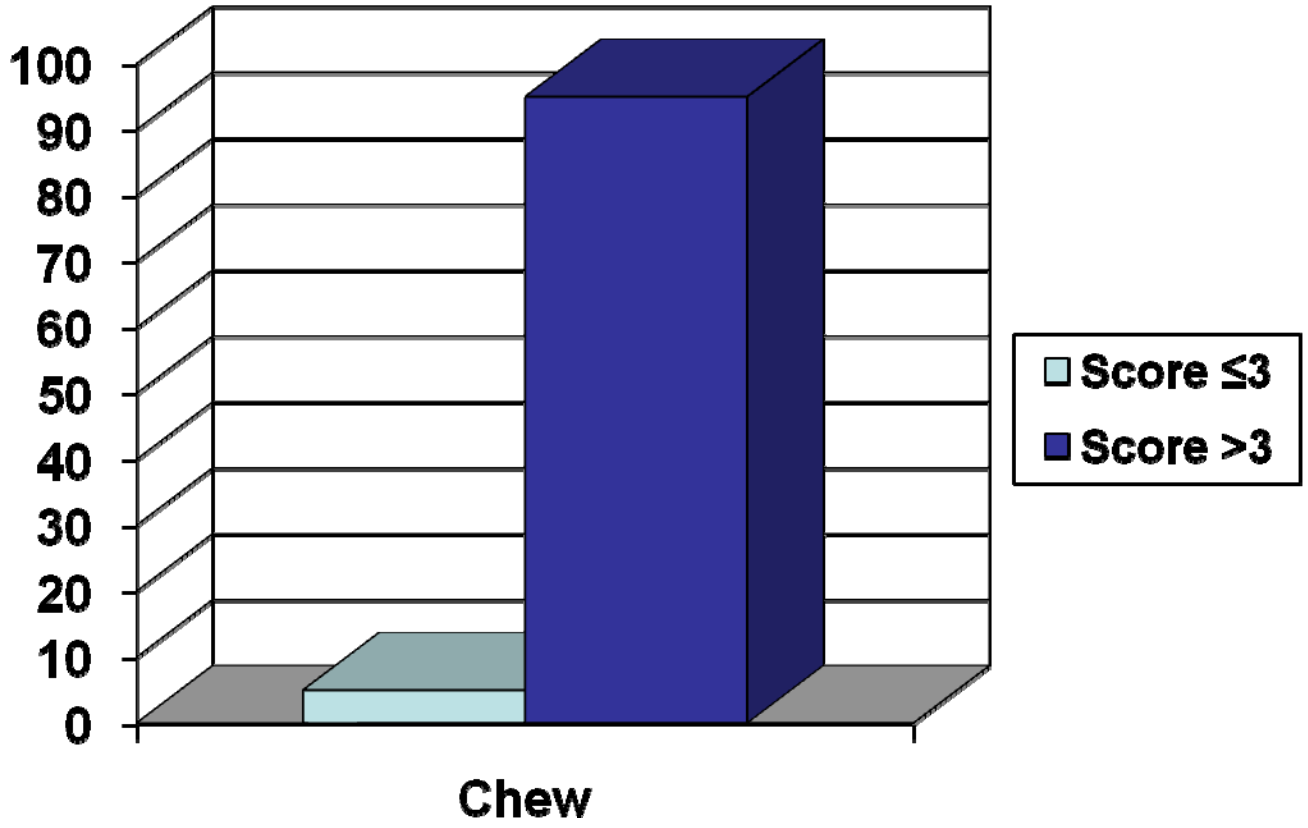

Results: Health literacy and risk of cardiovascular death

Mean SCORE at baseline (n=113)				
	Low HL	High HL	Difference	p-value
NVS	4.7	2.7	2.0	0.01
REALM-D	5.1	3.4	1.7	0.09
Chew	7.6	3.4	4.2	0.01

Results: Effect of prevention program

Mean difference in SCORE between baseline and 12 month follow-up (n=50)				
	Low HL	High HL	Difference	p-value
NVS	-1.05	-0.44	0.61	0.37
REALM-D	-1.79	-0.49	1.29	0.14
Chew	-0.17	-0.71	-0.54	0.69

Conclusion

- Low health literacy is common among cardiovascular patients in the Netherlands (18-50%)
- Low health literacy is associated with worse cardiovascular risk profiles
- Systematic secondary prevention seems most effective among those with low health literacy

Thanks for your attention

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