

Accessible preconception counseling for women with low health literacy

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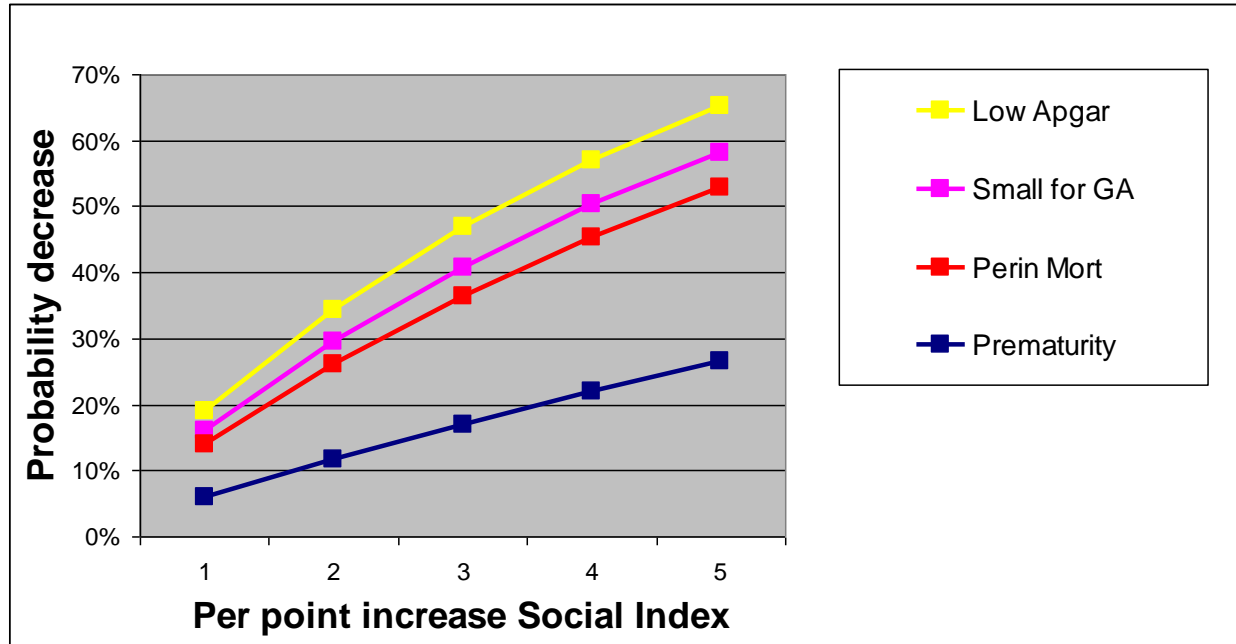
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The Netherlands



Socioeconomic inequalities in perinatal health



Source: Municipal Health Services Rotterdam Rijnmond, The Netherlands



Preconception care in the Netherlands



Healthy Pregnancy 4All (2011-2016)



- Written or personal invitation
- Online riskassessment <https://www.zwangerwijzer.nl>
- Individual counseling



Low health literacy barrier in accessibility



Women with low socioeconomic status:

- Do not search for support or information
- Consider information as irrelevant
- Are unaware of relation between behaviour and perinatal outcomes

Source: Aalhuizen, I. *Research on preconception care among ethnic Dutch women with a low socioeconomic status* [Onderzoek naar preconceptiezorg voor autochtone vrouwen met lage SES] Tijdschrift voor Verloskunde, 2008



Aim of research project

To improve the accessibility and effectiveness of preconception counseling for women with low health literacy within HP4All.

- a) Provision of preconception counseling
- b) Online risk assessment 'ZwangerWijzer'
- c) Preconception counseling by health care providers



Systematic intervention development

Stage 1: Problemanalyses among women with low HL and care providers

Stage 2: Intervention development for provision, counseling and risk assessment

Stage 3: (Pilot) implementation and evaluation



A) Problemanalysis written provision

72 personal interviews with women with low health literacy

- Awareness of offer preconception care
- Knowledge, considerations, attitude and intention



Research population (n=72)

Age



30 (mean)

Non-Western



82%

Pregnant before

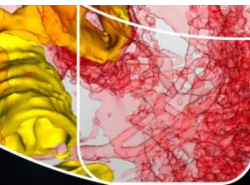
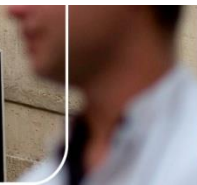


92%

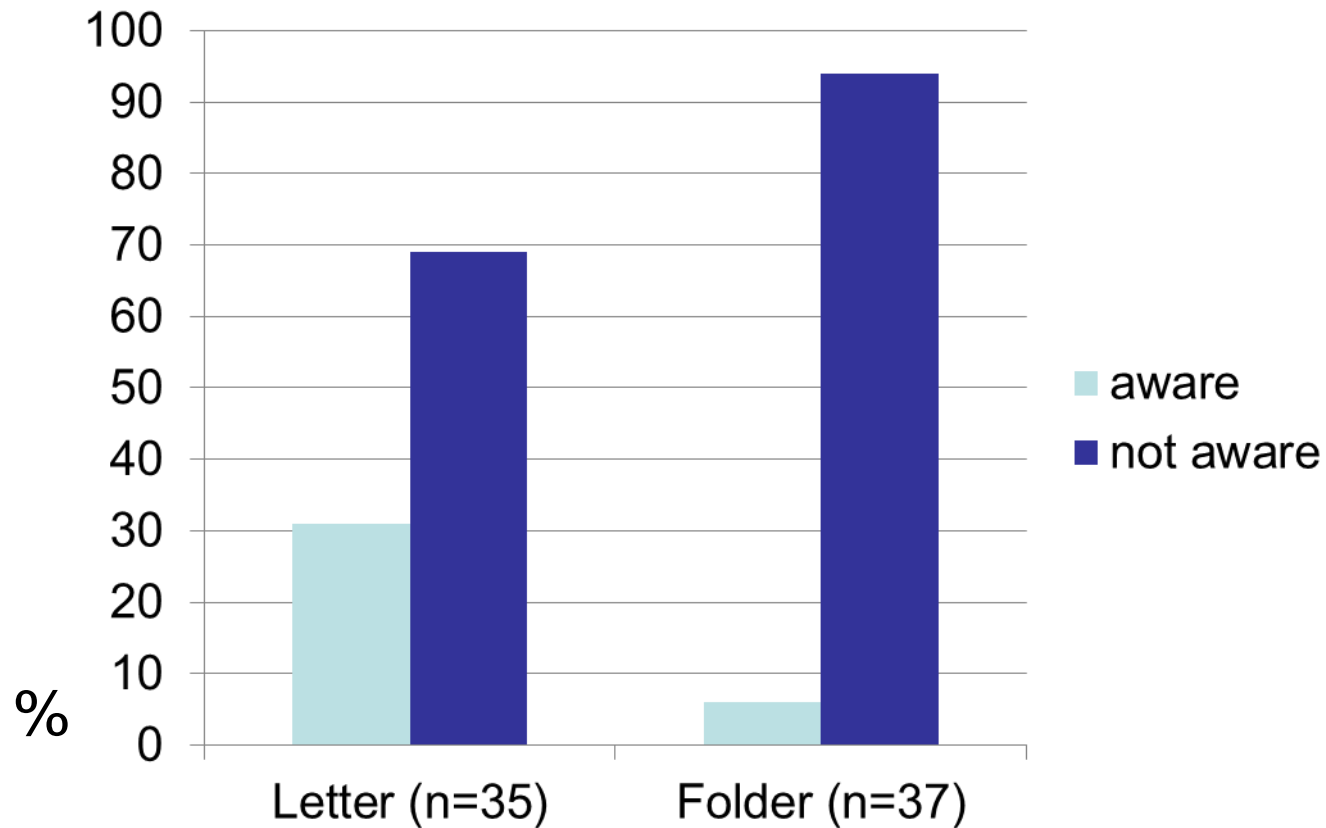
Unplanned pregnancy



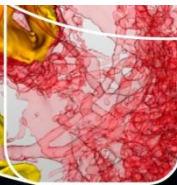
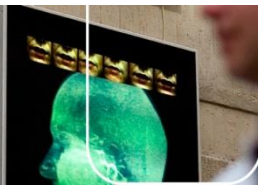
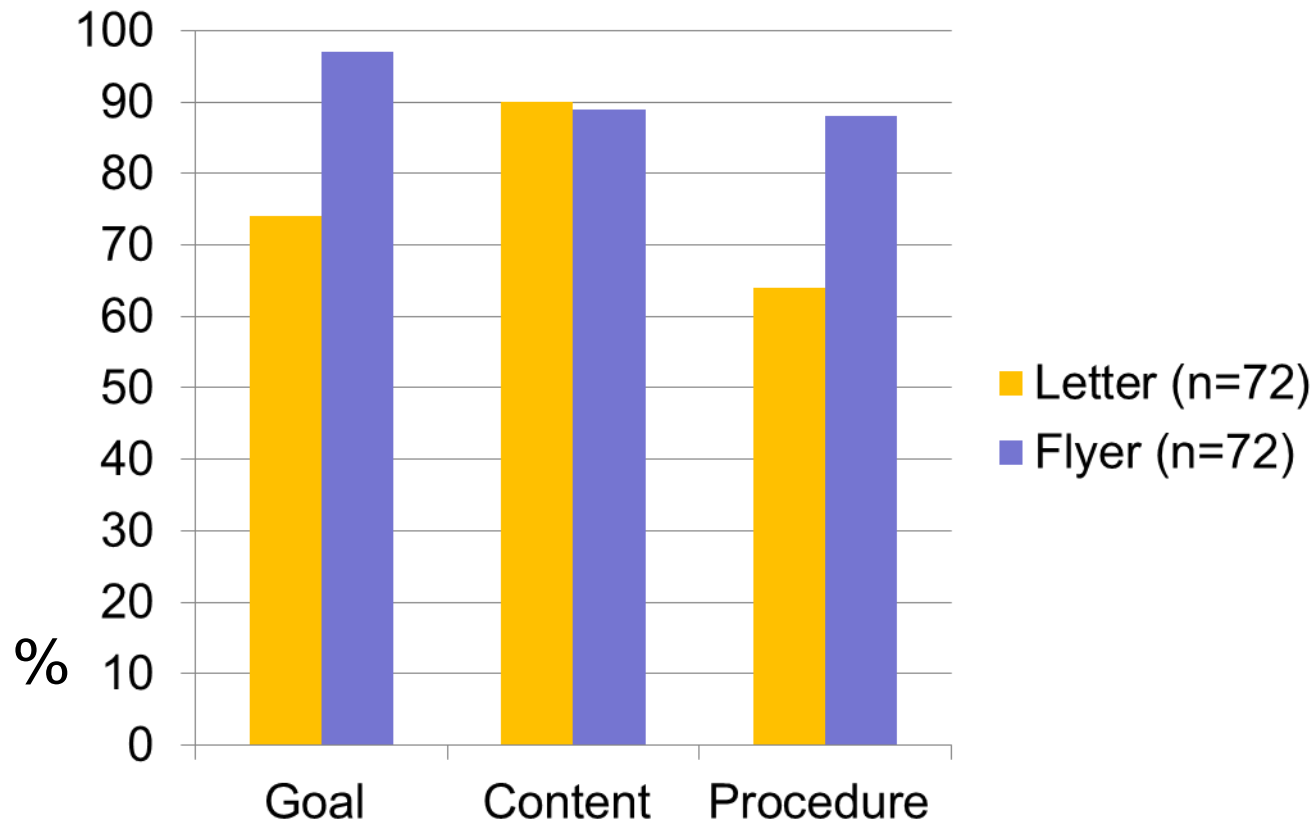
53%



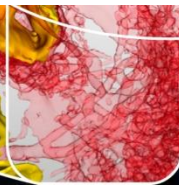
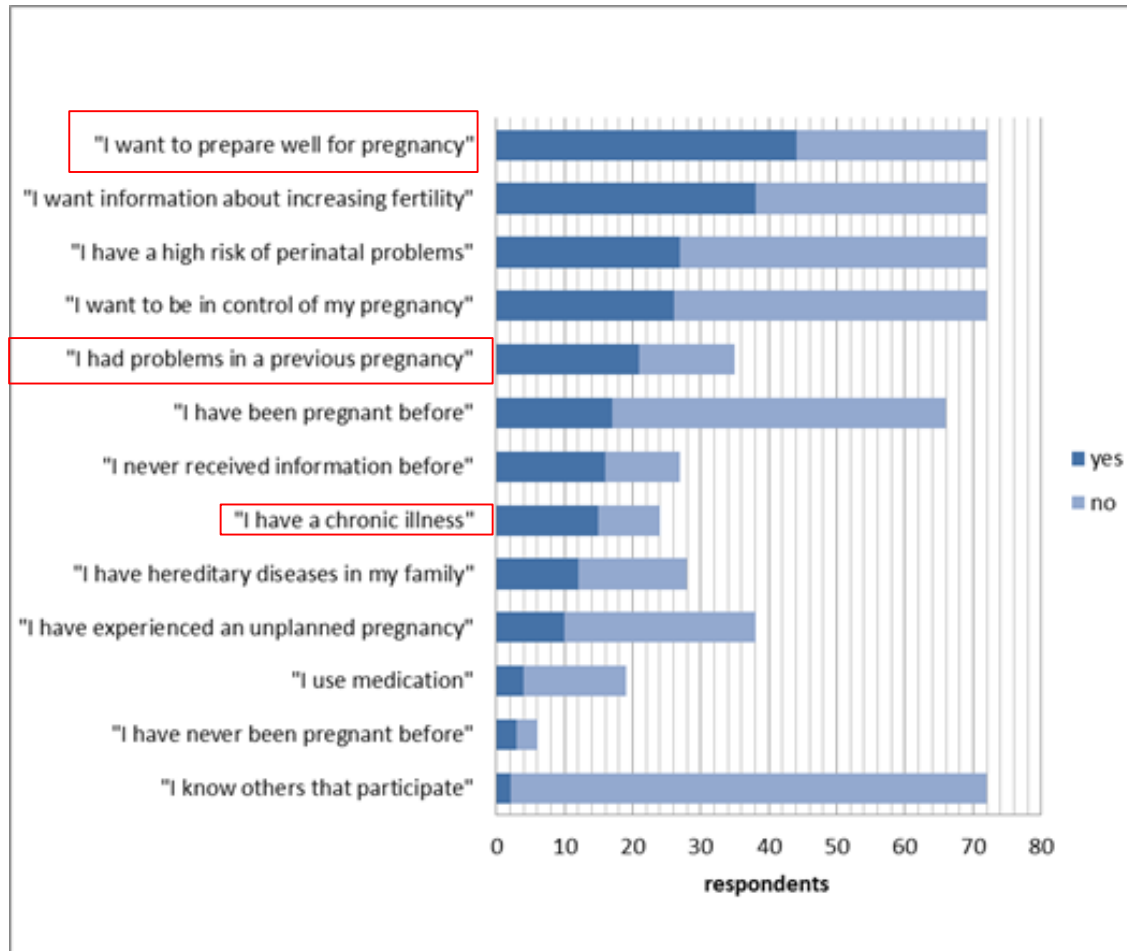
Aware of offer in Amsterdam (n=72)



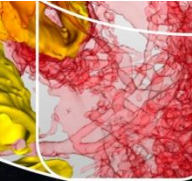
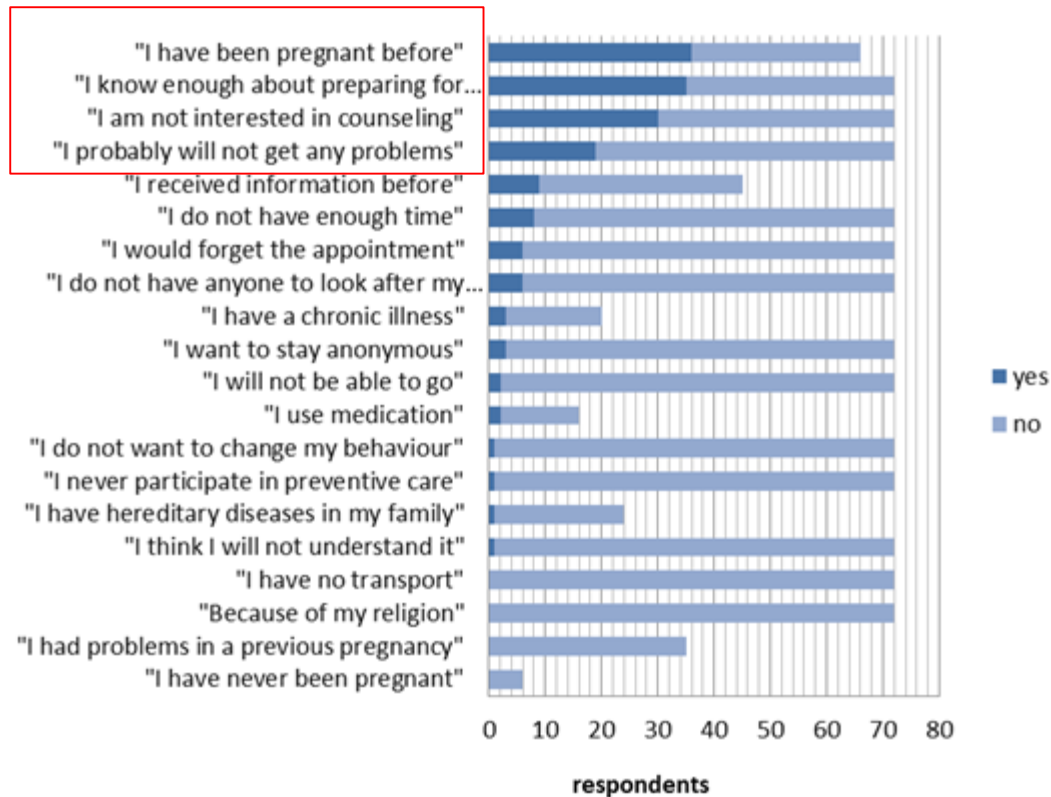
Comprehension counseling after reading (n=72)



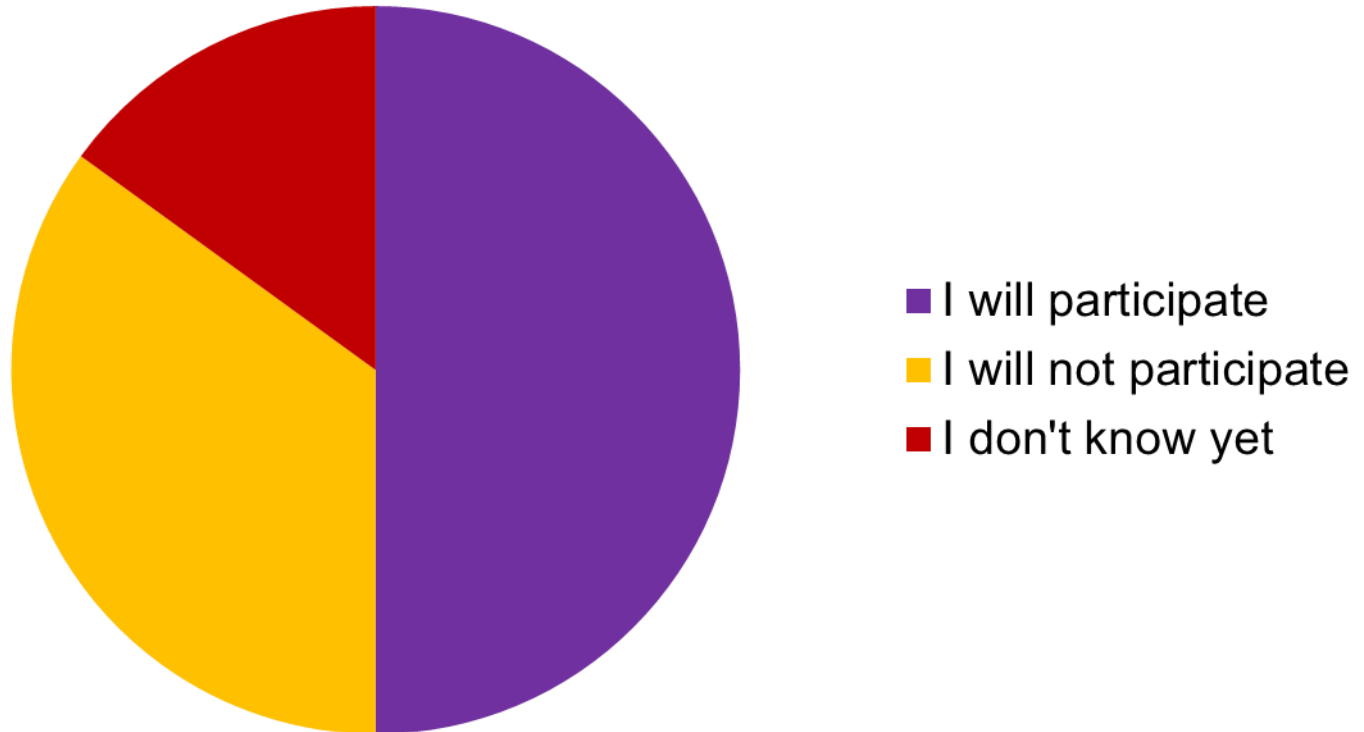
Reasons to participate in counseling (n=72)



Reasons not to participate in counseling (n=72)



Intention to participate in counseling (n=72; %)



Conclusion problem analysis provision

Unaware of written offer in Amsterdam

- Do not read letter?
- Do not receive letter?

If they read letter, women with low health literacy understand purpose of counseling, but they do not always know where to go and what to expect.

Positive attitude and intention, but low risk perception.



B) Problemanalysis online risk assessment

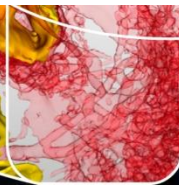
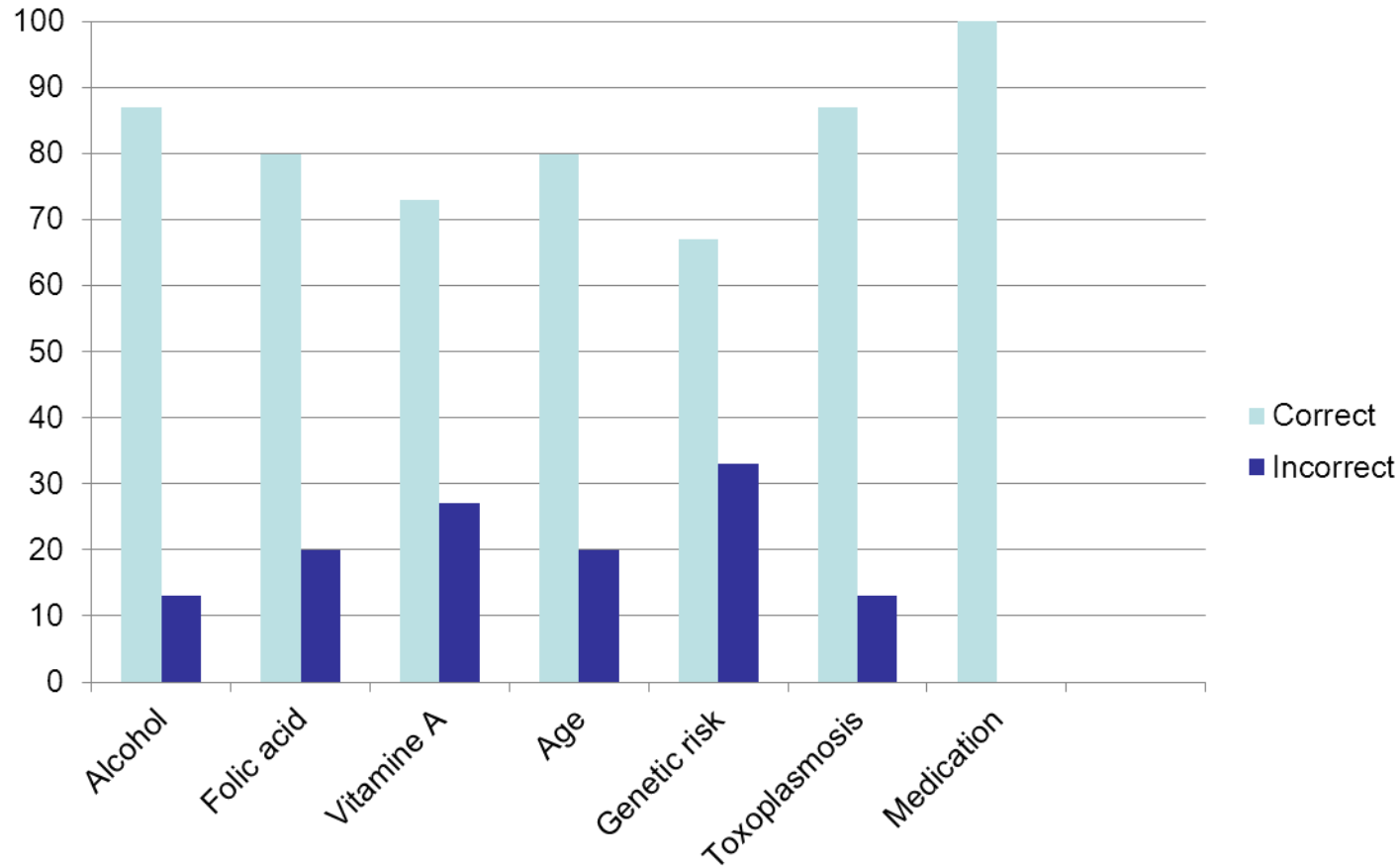
15 personal interviews with women with low health literacy

- Comprehensible
- Usable
- Relevant

<https://www.zwangerwijzer.nl/>




Comprehension ZwangerWijzer (n = 15)



Usability ZwangerWijzer (n=15)

System Usability Score* (0-100) = 72

Information button not found

Ben je ingeënt  tegen rodehond? Of heb je deze ziekte gehad?

- ☐ Ja
- ☐ Nee
- ☐ Weet niet

* Bangor A, Kortum PT, Miller JT. An empirical evaluation of the System Usability Scale. *Int J Hum-Comput Interact.* 2008;24(6):574-94.



Conclusion problemanalysis ZwangerWijzer

Relevant and usable, but not all questions and answer options were sufficiently comprehensible

Information button is needed, but not used



C) Problem analysis care providers

Interviews (n=15) and observations (n=28)

- Awareness of low health literacy
- Communication strategies



Results interviews

Low awareness of health literacy

‘....people who say yes to the person and no to the task’

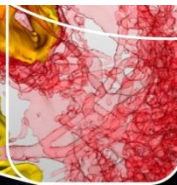
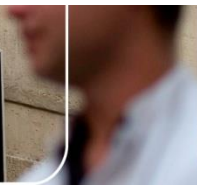
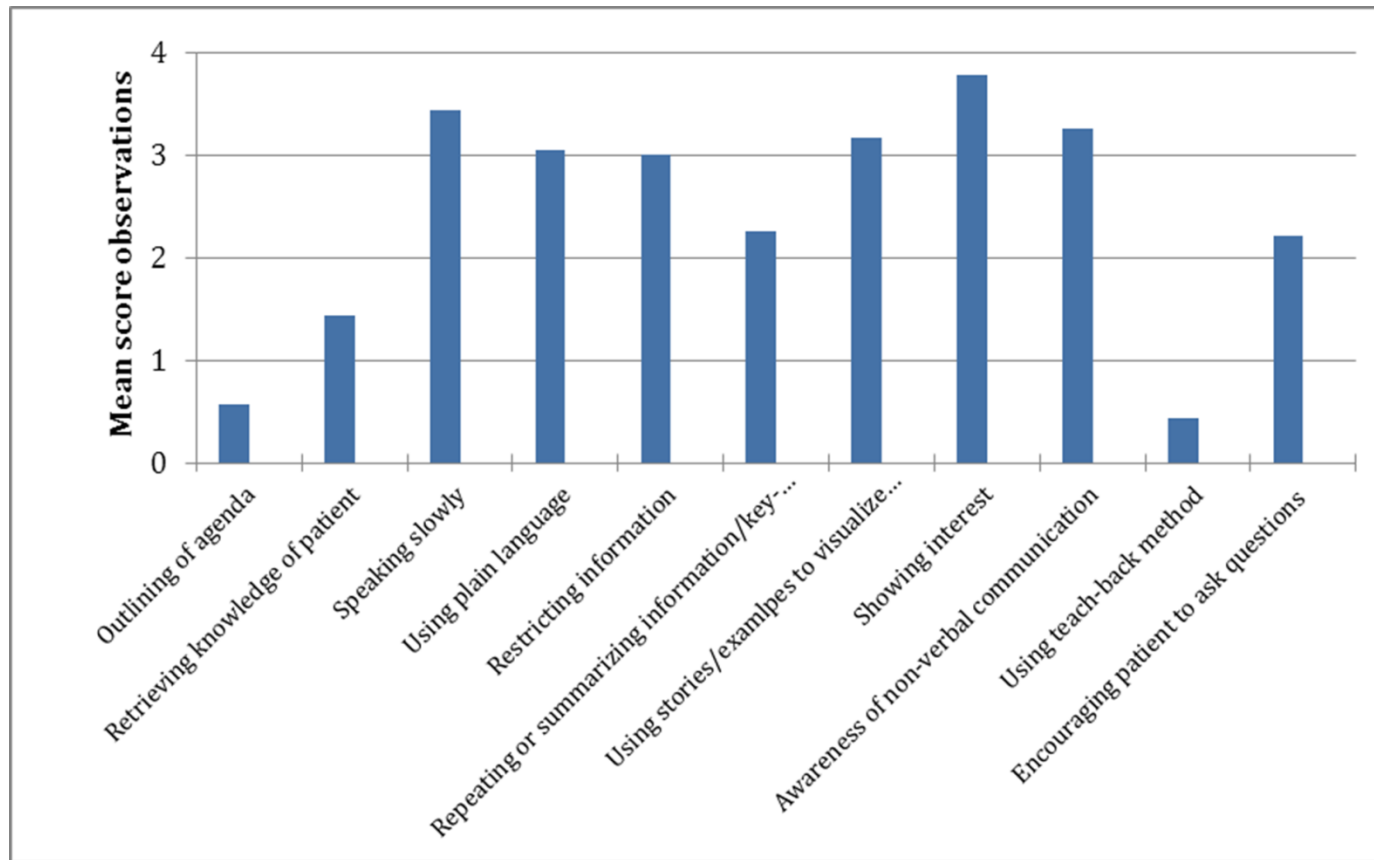
‘...people with language problems’

Do not identify patients with low health literacy

No specific communication strategies



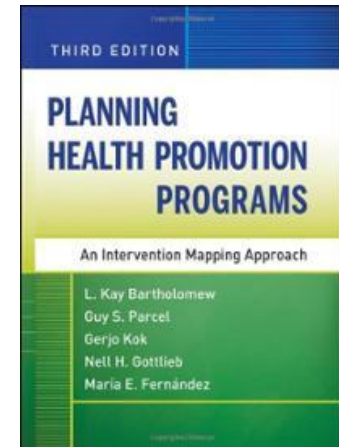
Use of communication strategies (n=28)



Stage 2 Strategy development

‘Intervention Mapping’

- Formulate goals
- Select theories and methods
- Develop strategies
- Plan for implementation and evaluation



Example: Matrix care providers

Performance objective	Change objective	Theoretical models	Methods	Strategies
Caregivers identify clients with low health literacy	(1) Caregivers are aware of the problem of low health literacy and their own competences	Precaution adoption process model; Weinstein; 2002	Scenario information	-Powerpoint about low HL -Video about low HL (NIGZ) -Role model story -Facilitate e-learning
		Conscious competence matrix' model; Gordon T; 1970	Reflection	-Explain conscious competence ladder -Evaluation own behavior
Caregivers identify clients with low health literacy	(2) Caregivers have a positive attitude to identify low health literacy	Precaution adoption process model; Weinstein; 2002	Increase awareness	
		Persuasive communication model; McGuire; 1976	Persuasive communication	-Emphasize the importance of interventions aimed at low HL -Share successes of others -Show experiences of patient (Video NIGZ)
Caregivers identify clients with low health literacy	(3) Caregivers search actively for signs of low health literacy	Kolb's learning cycle; Experiential learning; Kolb D.A.; 2014	Concrete Experience	-Roleplay -Discuss personal cases
			Reflective Observation	-Teamwise feedback
			Abstract Conceptualization	-Share guidelines on low HL -Provide handles on low HL -Providing HL measurement tools
			Active Experimentation	-Roleplay -Practice with (simulated) patient -Facilitate e-learning

In proces...



Stage 3 Implementation and evaluation

Pilot implementation (2016)

Adapted written offer

Adapted ZwangerWijzer 2.0

Training HP4All for care providers

Evaluation (proces- and effect)

Interviews women with low health literacy

Interviews care providers

Observations care providers



Thank you!



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