

Rol van de verpleegkundige bij therapietrouw

De noodzaak van medicatie adherence

CNE 2014

Angelien Sieben;verpleegkundig specialist vaatchirurgie

Definitie *medication* adherence

The extent to which a person's behavior – *taking Medication* (..), corresponds with agreed recommendations from a health care provider

World Health Organization. Adherence to long-term therapies. Evidence for action. 2003.

Prevalentie non adherence

50 % van alle chronische patiënten houdt zich niet aan de behandelvoorschriften. (WHO 2003)

40% van de chronische gebruikers in Nederland is medicatie therapie ontrouw. (NIVEL 2004)

Prevalentie non adherence statines

- Non adherence bij statine adherence onderzoeken varieert tussen de 30%-70%.
- Target cholesterol levels worden in slechts 50% van de patienten die een cholesterolverlager voorgeschreven krijgen bereikt.
- Bij primaire preventie is de non adherence iets groter dan bij secundaire preventie

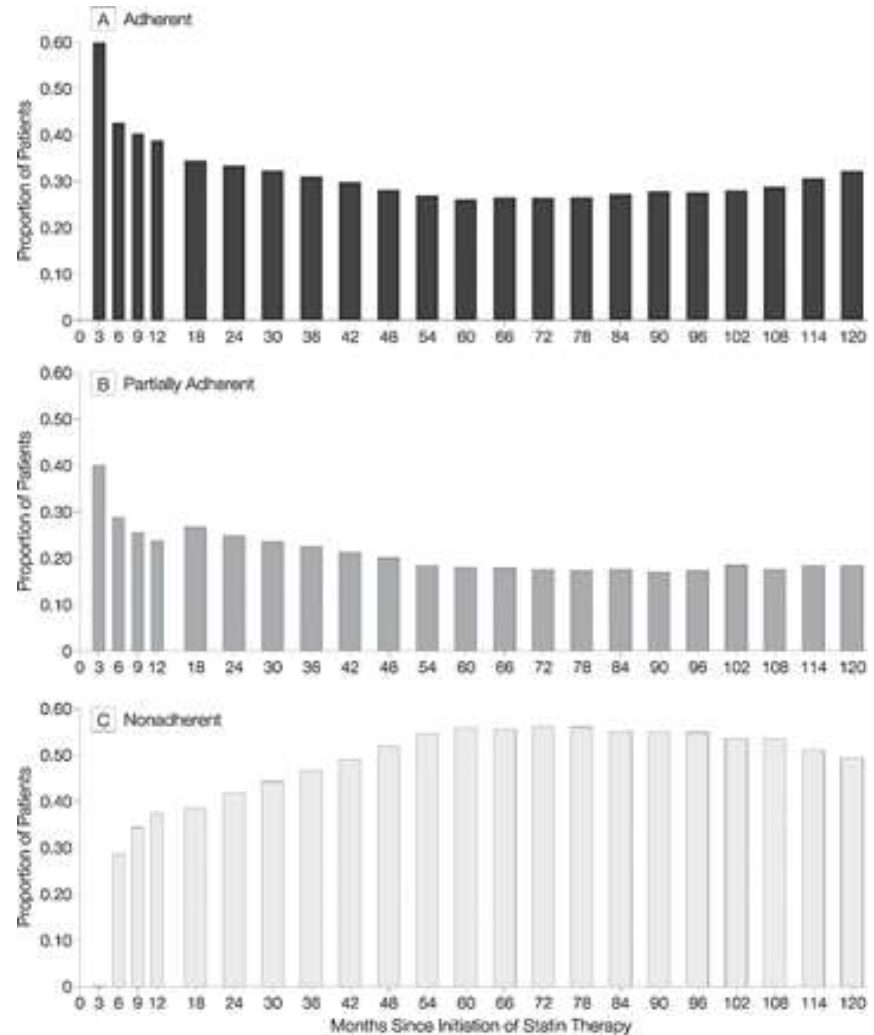
Schedlbauer A, Davies P, Fahey T. Interventions to improve adherence to lipid lowering medication. Cochrane Database Syst Rev 2010;(3)

Proportion of Patients Classified as Adherent, Partially Adherent, and Nonadherent

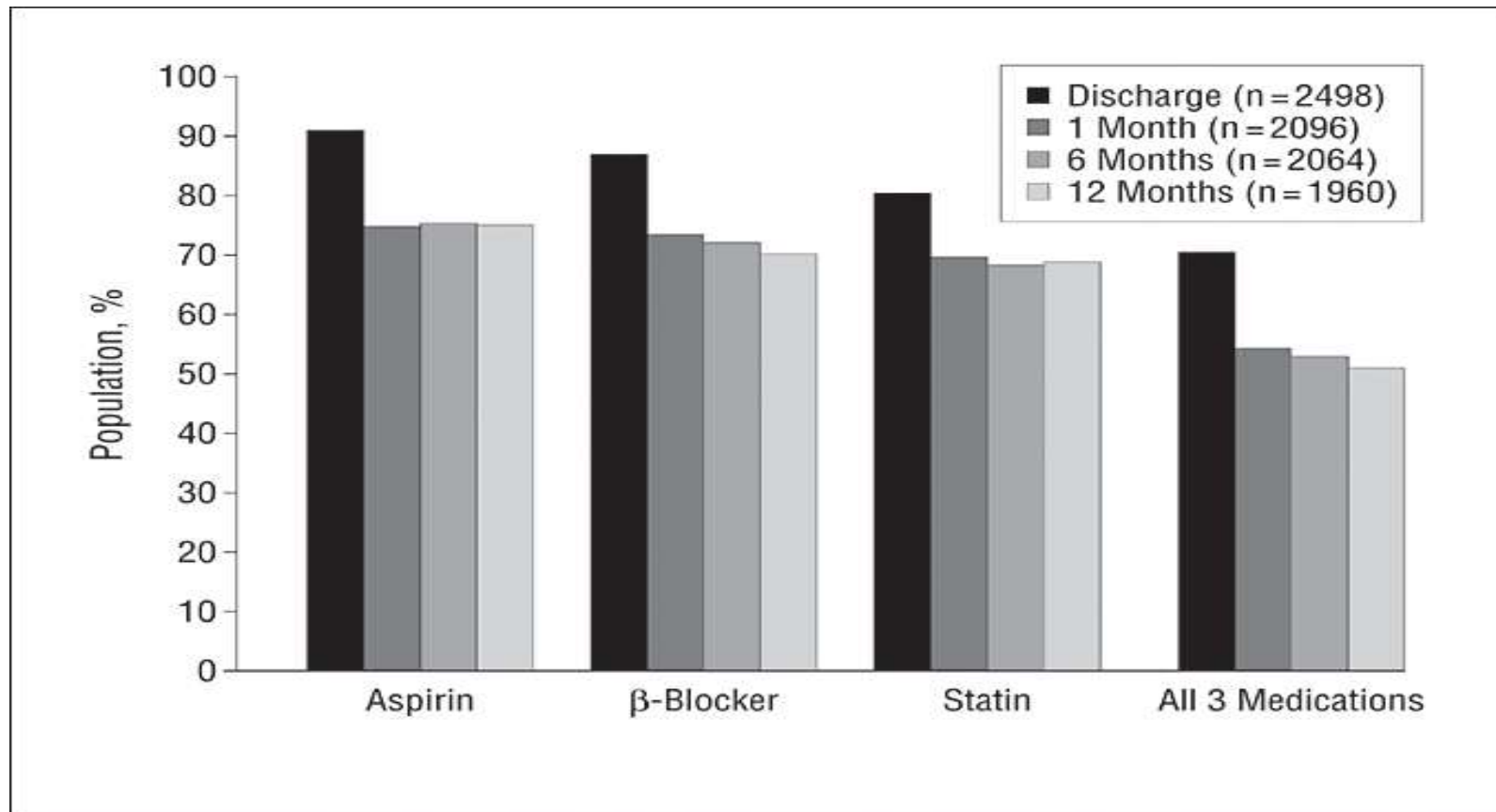
Table 1. Characteristics of Study Population (N = 34 501)*

Characteristic	Proportion of Patients, % [Mean (SD)]
Demographics	
Age, y	[74.4 (6.0)]
65-74	54.1
75-84	39.5
≥85	6.4
Sex (female)	79.9
Race	
White	73.1
Black	13.7
Other	13.2
Payer program	
Medicaid	34.8
PAAD	65.2
Clinical history in prior year	
CHD	
Group 1 (angina or coronary angiography)	22.4
Group 2 (PTCA, CABG, or chronic CHD)	15.2
Group 3 (acute MI)	7.0
Hypertension	66.6
Congestive heart failure	35.3
Diabetes	23.5
Depression	6.9
Dementia	4.2
Stroke	1.7
Charlson score	[1.6 (1.9)]
Health services used in prior year	
No. of medications	[9.2 (6.1)]
Outpatient physician encounters	[16.5 (14.3)]
Hospitalized at least once	28.0
Nursing home residence on index date	2.2
Initial statin therapy	
Year treatment started	
1990	3.5
1991	6.6
1992	10.7
1993	9.3
1994	9.2
1995	10.8
1996	14.1
1997	18.9
1998	17.0
Statin filled at index prescription	
Simvastatin	30.7
Lovastatin	28.2
Pravastatin	19.9
Atorvastatin	13.6
Fluvastatin	6.8
Cerivastatin	0.8

*Proportions may not sum to 100 due to rounding. Race was unknown for 35 (0.1%) subjects. PAAD indicates Pharmaceutical Assistance to the Aged and Disabled; CHD, coronary heart disease; PTCA, percutaneous transluminal coronary angioplasty; CABG, coronary artery bypass graft; and MI, myocardial infarction.

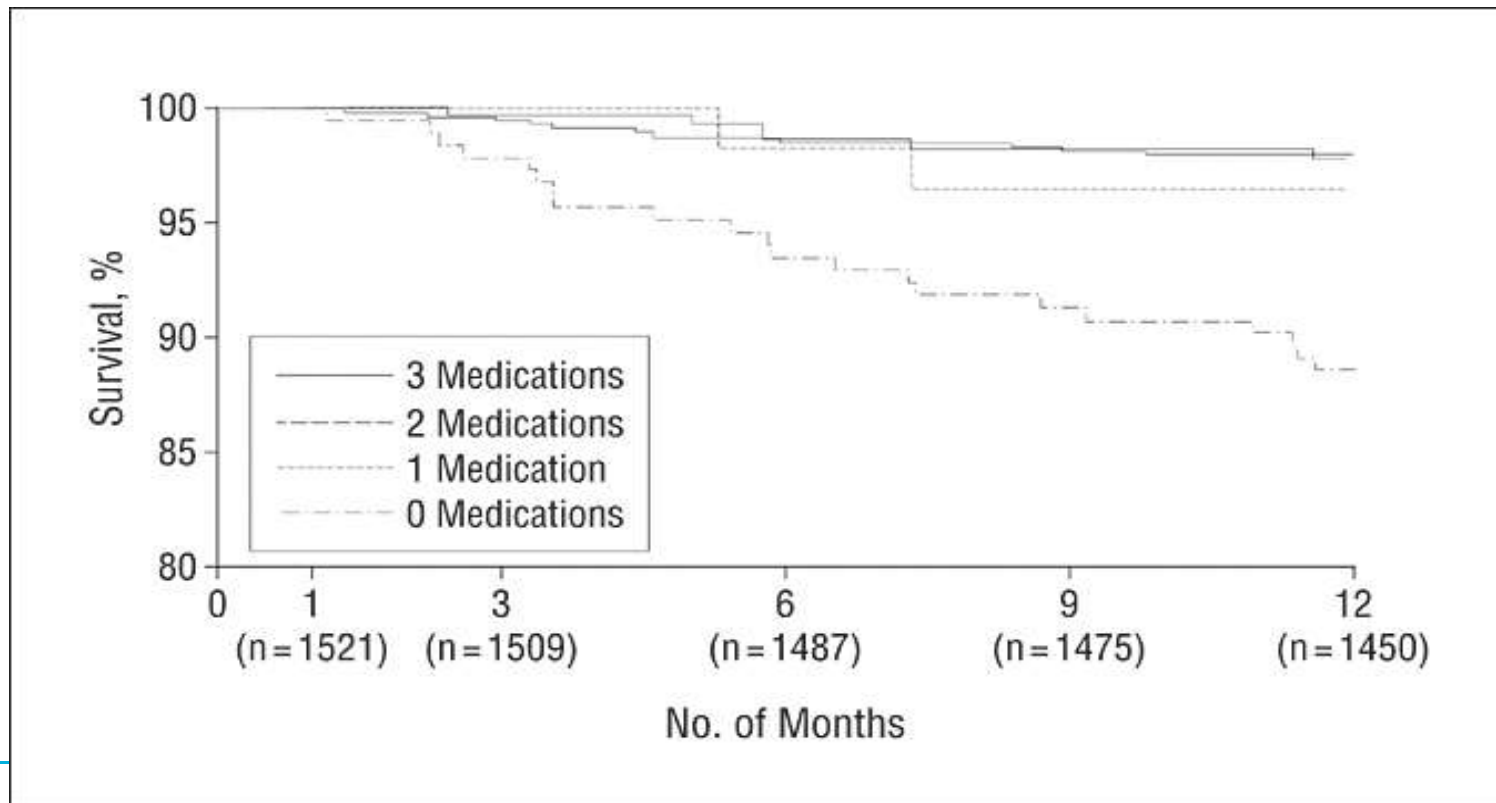


Medicatiegebruik na ontslag ACS



Ho, P. M. et al. Arch Intern Med 2006;166:1842-1847

Noodzaak adherence



Ho, P. M. et al. Arch Intern Med 2006;166:1842-1847

Determinanten non adherence WHO

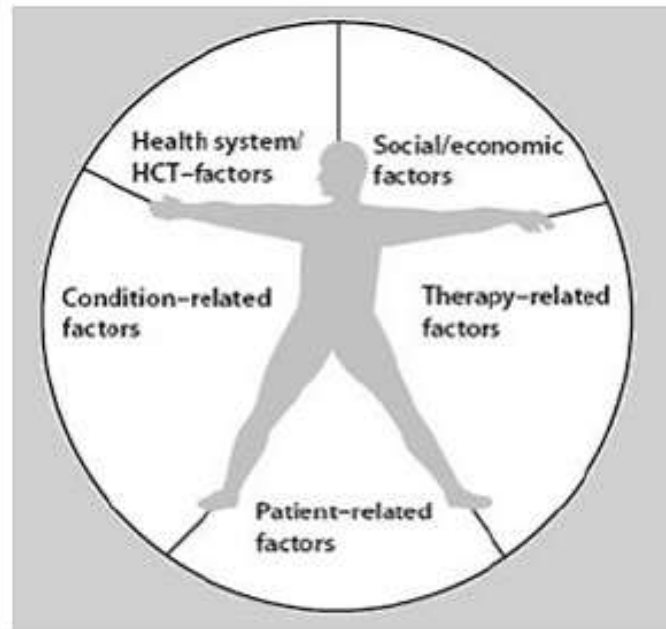
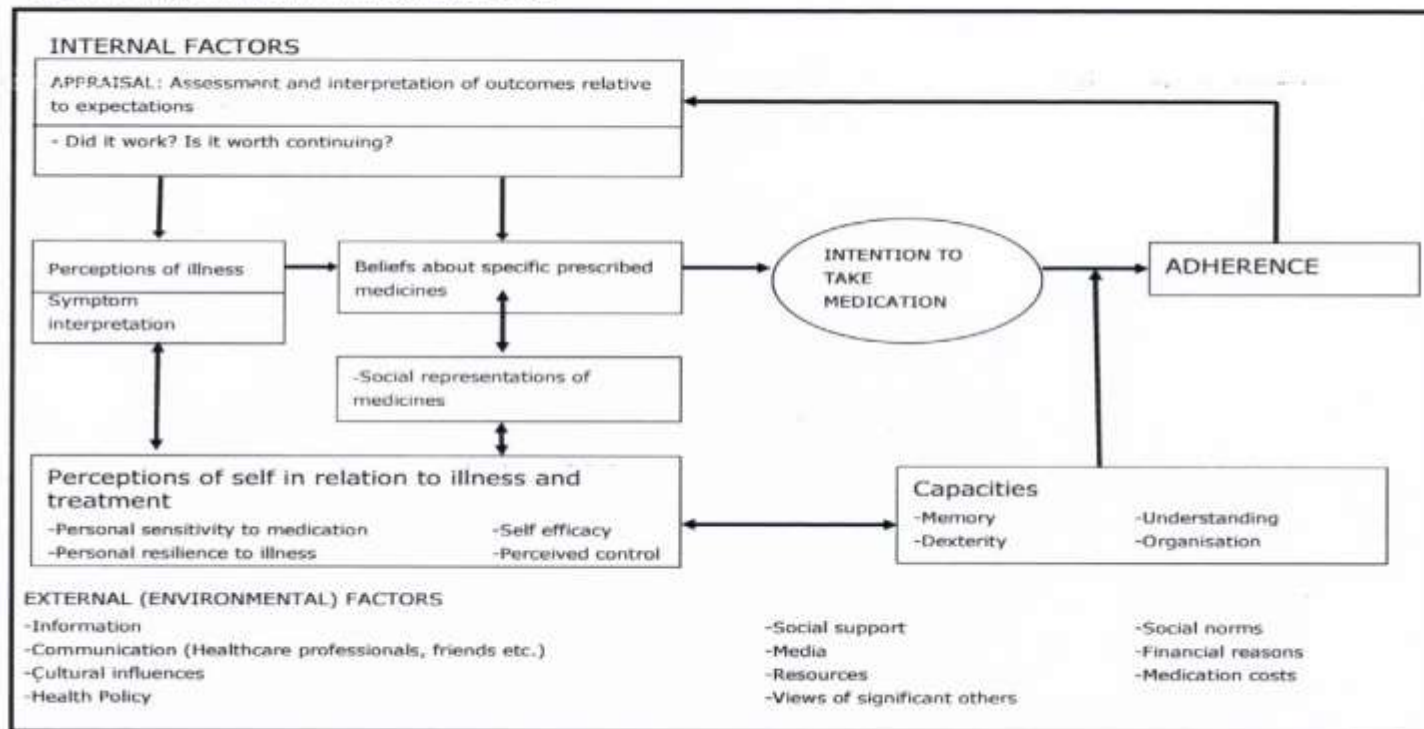


Figure 1. The five dimensions of adherence as suggested by the World Health Organisation

Determinanten non adherence

Concordance, adherence and compliance in medicine taking

Figure 7. Map of determinants of adherence



Voorbeelden intentional en unintentional non adherence

Unintentional	Intentional
I was away from home and forgot to take my medication	I was worried about side effects so I reduced the dose.
I was tired and forgot	I miss doses because I feel I am taking too many
I was in a hurry and forgot	I do not take water tablets when going out of the house
I went out for the evening and forgot to take the medicines with me	I miss the evening dose as it keeps me awake

Clifford C, Barber N, Horne R. Understanding different beliefs held by adherers, unintentional non adherers and intentional non adherers. Application of the necessity-concerns framework.

Meetinstrumenten

Table 1. Methods of Measuring Adherence.

Test	Advantages	Disadvantages
Direct methods		
Directly observed therapy	Most accurate	Patients can hide pills in the mouth and then discard them; impractical for routine use
Measurement of the level of medicine or metabolite in blood	Objective	Variations in metabolism and “white-coat adherence” can give a false impression of adherence; expensive
Measurement of the biologic marker in blood	Objective; in clinical trials, can also be used to measure placebo	Requires expensive quantitative assays and collection of bodily fluids
Indirect methods		
Patient questionnaires, patient self-reports	Simple; inexpensive; the most useful method in the clinical setting	Susceptible to error with increases in time between visits; results are easily distorted by the patient
Pill counts	Objective, quantifiable, and easy to perform	Data easily altered by the patient (e.g., pill dumping)
Rates of prescription refills	Objective; easy to obtain data	A prescription refill is not equivalent to ingestion of medication; requires a closed pharmacy system
Assessment of the patient’s clinical response	Simple; generally easy to perform	Factors other than medication adherence can affect clinical response
Electronic medication monitors	Precise; results are easily quantified; tracks patterns of taking medication	Expensive; requires return visits and downloading data from medication vials
Measurement of physiologic markers (e.g., heart rate in patients taking beta-blockers)	Often easy to perform	Marker may be absent for other reasons (e.g., increased metabolism, poor absorption, lack of response)
Patient diaries	Help to correct for poor recall	Easily altered by the patient
When the patient is a child, questionnaire for caregiver or teacher	Simple; objective	Susceptible to distortion

Osterberg Let al. N Engl J Med 2005;353:487-497

Meetinstrumenten

- The Beliefs about Medication Questionnaire (BMQ)
- Modified Morisky Scale (MMS)
- Pharmacy Refill Dates (PRD)

BMQ

- Gaat over overtuigingen
- Beslaat twee aspecten
 - Overtuiging dat de medicatie noodzakelijk is
 - Overtuiging dat de medicatie schadelijk is
- 18 vragen m.b.t. persoonlijk medicatie gebruik en algemene overtuigingen m.b.t. medicatie
- Balans tussen noodzaak en schade zorgt voor (non) adherence

Horne R, Weinman J, Hankins M. The beliefs about medicines questionnaire: the development and evaluation of a new method for assessing the cognitive representation of medication. *Psychol Health Med* 1997 .

Modified Morisky Scale

- Gaat over gedrag t.a.v. medicatie gebruik
- 8 Vragen
- Geeft indicatie (risico) op (non) adherence

Krousel-Wood M, Islam T, Webber LS, Re RN, Morisky DE, Muntner P. New medication adherence scale versus pharmacy fill rates in seniors with hypertension. Am J Manag Care 2009 Jan.

Pharmacy refill dates

- Computer systeem/data base
- Gegevens van de apotheken van patiënten
- Geeft inzicht in het ophalen van (herhaal)recepten door de patiënt
- Berekening vervolgens mogelijk adherence patient

Vrijens B, Vincze G, Kristanto P, Urquhart J, Burnier M. Adherence to prescribed antihypertensive drug treatments: longitudinal study of electronically compiled dosing histories. *BMI* 2008.

Aanbevelingen voor interventie

- Weinig interventies in deze patiëntengroep onderzocht in een RCT
- Vaak lage power ($N < 80$)
- Vaak maar één aspect van oorzaak non adherence (bv alleen reminders of alleen counseling)
- Interventies complex en moeilijk langdurig uitvoerbaar in de praktijk: thuisbezoeken, pill counts
- Korte follow up

Haynes RB et al. Interventions for enhancing medication adherence. Cochrane Database Syst Rev 2008.

Aanbevelingen voor interventie

“**Increased patient-centredness** with emphasis on the patient's perspective and shared decision-making might lead to more conclusive answers when searching for tools to encourage patients to take lipid lowering medication.”

“Combinations of more convenient care, information, counseling, (..) self-monitoring, reinforcement, family therapy, psychological therapy, mailed communications,(..) and other forms of additional supervision or attention.”

Schedlbauer A, Davies P, Fahey T. Interventions to improve adherence to lipid lowering medication. Cochrane Database Syst Rev 2010;(3)

Haynes RB, Ackloo E, Sahota N, McDonald HP, Yao X. Interventions for enhancing medication adherence. Cochrane Database Syst Rev 2008.

Aanbevelingen voor interventie

- E-health lijkt zeer geschikt en heeft een vlucht genomen
- Ook daar nog weinig evedince
- Recente review:
- Positieve korte termijn effecten vooral bij sms-alerts
- Lange termijn effecten nog geen duidelijke effecten

The effectiveness of interventions using electronic reminders to improve adherence to chronic medication: a systematic review of the literature. Marcia Vervloet, Annemiek J Linn, Julia C M van Weert,2\ Dinny H de Bakker, Marcel L Bouvy, Liset van Dijk; *J Am Med Inform Assoc* 2012.

Visualisatie van risico



Praktische tips voor de verpleegkundige

- Bespreekbaar maken medicatiegebruik
 - Bij vermoeden non adherence ; is er sprake van intentional of unintentional?
 - Stel daar je informatie op in;
 - Unintentional; zoeken naar praktische tips
 - Intentional; uitwisseling doel medicatie
maak gebruik van je MI-competenties!
ook praktische tips (cholesterol controle bij huisarts bij twijfel werking)

**Pills don't work in patients who
won't take them**

