

From Curiosity to Science

Bridging practice and research in Family Medicine

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Radboudumc



Academic
Primary Care Practice
Oosterhout



Waal Bridge



Radboudumc



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Curiosity



Curiosity

- Persistent Somatic Symptoms
- Placebo and nocebo
- Patient-centered care
- Measurement Based Care

Persistent Somatic Symptoms

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Persistent Somatic Symptoms

- Distressing somatic complaints that last several months, regardless of their cause
- Substantial disability and a major burden for patients, health-care professionals, and society
- Medically Unexplained Symptoms
- Neuroplastic Symptoms
- Functional Somatic Syndromes (Fibromyalgia, Irritable Bowel Syndrome)

My own perceptions

- PSS are caused by psychosocial problems
- Patients deny psychosocial background of their PSS
- Patients pressurize GP/FM for medical interventions
- Additional investigations and referrals are harmful

The background of the image is Edvard Munch's famous painting 'The Scream'. It depicts a figure with a pale, screaming face, with arms raised in distress, set against a background of a red and orange sky, a dark, craggy landscape, and a bridge with figures in the distance. The overall mood is one of anxiety and despair.

Trouble

At least for me and my patients

Trouble leads to Curiosity

- Curiosity leads to research
 - What are the perceptions of other GPs ?
 - What are the perceptions of patients ?
 - What happens during consultations?

GPs' perceptions

- Psychosocial stress
- Patients do not understand the background
- There is a problem underneath
- Sceptical towards patients with PSS
- Discongruence between pain and burden
- Patients pressurize for somatic interventions

Patients' perceptions

- Negative judgement of GP
- Symptoms are 'in the head'
- Scepticism of the doctor
- Doctors think the symptoms are not real
- Patients are not satisfied
- Patients have more expertise than the GP

What do patients with PSS want?

1. Explanation of symptoms
2. Emotional support
3. To be taken serious
4. More time then they get from the GP
5. A personal continuing GP-patient relationship

What happens in PSS consultations ?

Doctors

- Less exploration of symptoms, ideas, concerns and expectations
- Suggest all kinds of somatic intervention, even when patients do not ask for it
- Provide patients with ambivalent explanations
- Seldomly show empathy

What happens in PSS consultations ?

Patients

- Do not search for more somatic interventions
- Do search for more emotional support
- Provide often psychosocial cues (> 95% !!)
- Do not ask more often for explanation or reassurance
- Are more worried about not being taken serious

Conclusion

- My thought that mainly patients are the cause of the high medical consumption was wrong !
- My thought that most patients deny a psychosocial background of the symptoms was wrong !

... and so ...

... I think ...

- Doctors have to rethink their prejudgetments about patients with PSS
- Doctors can influence the course of PSS
- We have to focus on consultation behaviour (doctor-patient communication)
- We have to focus on building a therapeutic doctor-patient relationship

The results of Curiosity

- Action
 - My own PhD thesis
 - Change of my own communication style with patients
 - First GP/FP guideline on the management of patient with PSS
 - E-learning “managing PSS” for GPs, medical specialists, psychotherapists, etc.
 - Flourishing research line on PSS



Curiosity



NOCEBO

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Nocebo effects

- The nocebo effect is the opposite of the placebo effect
- Previously defined as the adverse effects of taking an inert substance
- Currently seen as the consequences of “non-specific factors,” also referred to as “common factors” or “context factors”
- Nocebo effects = the adverse effects of context on the effect of treatment.

My own perceptions

- Patient at the reception desk of my practice
- The patient was given a generic version of Ritalin for the first time last week.
According to the patient these pills seems to be less effective. Furthermore, they cause him more discomfort (headache).



The background of the image is Edvard Munch's famous painting 'The Scream'. It depicts a figure with a pale, screaming face, hands on their cheeks, standing on a bridge. The background is filled with swirling, expressive brushstrokes in shades of orange, yellow, and red, representing a screaming sky. The overall mood is one of intense anxiety and distress.

Trouble

At least for me and my patients

Trouble leads to Curiosity

- Curiosity leads to research
 - SIPS (Society of Interdisciplinary Placebo Studies) conference
 - Placebo en nocebo literature

What did I learn ?

- Placebo ≠ fooling someone
- Nocebo ≠ imaginary side effects
- Placebo's and nocebo's mainly affect subjective symptoms:
they relieve, but do not cure
- Mechanisms of placebo/nocebo effects:
 - Through expectations
 - Through conditioning (learning)

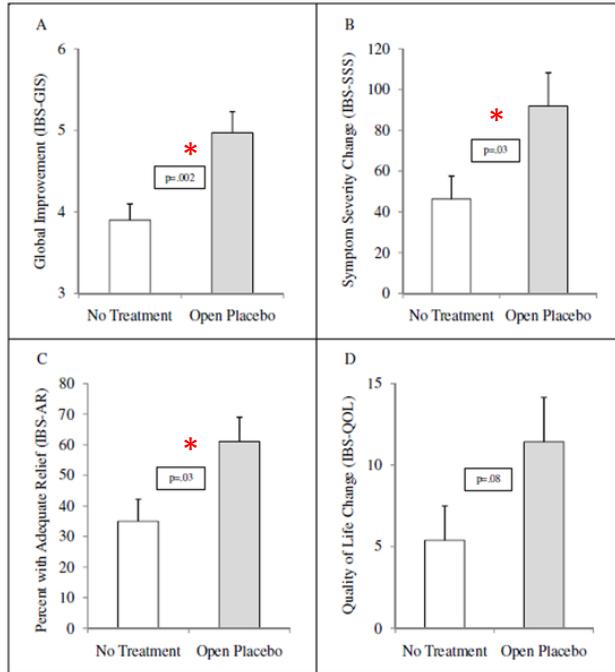
Open-label placebo

- IBS
- Intervention: placebo pill twice daily vs. no treatment

Follow-up: 3 weeks

- Information given to the patient:
 - It is a placebo
 - The placebo effect is important
 - The body can respond to placebo pills on its own
 - A positive attitude helps, but is not necessary
 - Taking the pills regularly is important
- The pills are labeled “placebo pill”

Open-label placebo



- Improvement in IBS
- Decreased severity of symptoms
- Reduction of symptoms
- QOL improved

Conclusion:

Open-label placebo is effective in patients with IBS

Open-label placebo

Low back pain

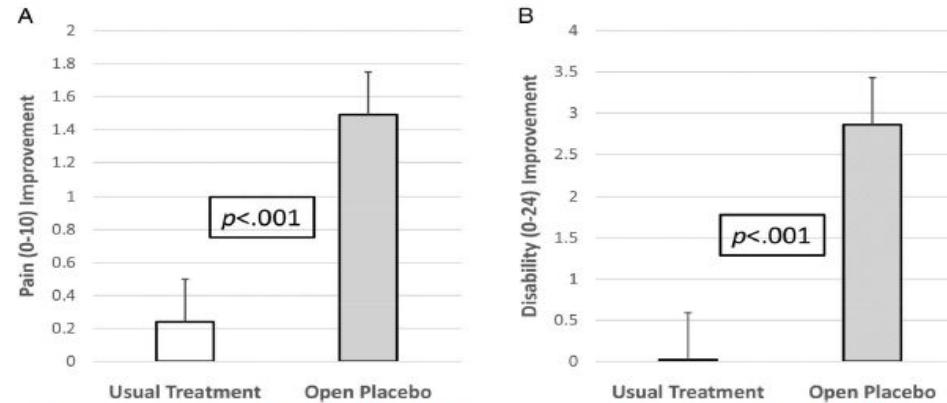


Figure 2. Outcomes by treatment group at 21-day endpoint. (A) Mean adjusted change scores on the composite pain measure. (B) Mean adjusted change scores on the 24-item Roland-Morris Disability Questionnaire. Error bars represent standard errors of the mean.

Reduced use of pain medication during placebo treatment: 64%
Request for new placebo prescriptions after the trial: 25%

Expectations

Painkillers

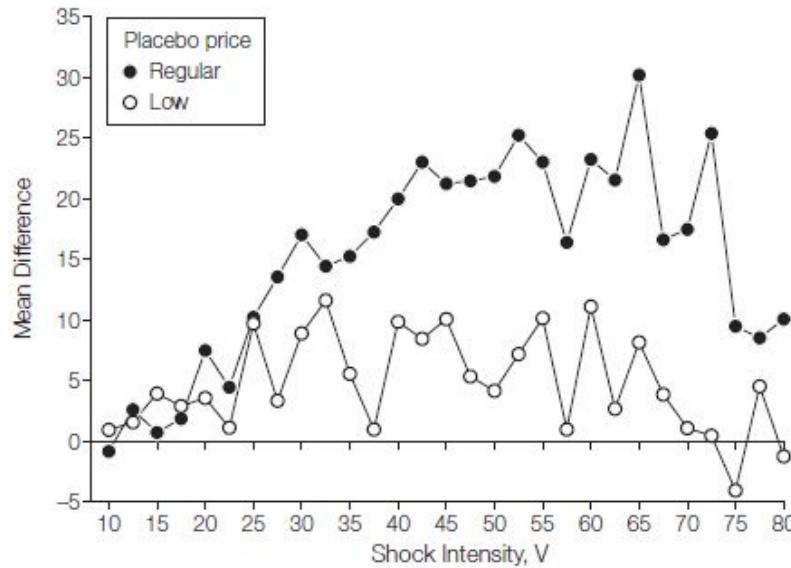
- 82 healthy volunteers
- \$ 2,50 vs \$ 0,10
- Electric shock
- Painscores per shockintensity

Expectations

Painkillers

- 82 healthy volunteers
- \$ 2,50 vs \$ 0,10
- Electric shock
- Painscores per shockintensity

Figure. Pain Ratings by Voltage Intensity



Conclusion

- Open-label placebo is effective
- Communication is key
- Expensive medication is more effective than cheap medication (although the active substance is identical)
- The importance of expectations

The results of Curiosity

- Action
 - Better understanding of the patient at the reception desk
 - Change of my own communication style with patients
 - Scientific paper 'the GP/FP and the nocebo effect' (Dutch Journal of GP)
 - Grant application 'communication enhanced pharmacotherapy'
 - Research idea 'expectation focused therapy'
 - Farmacotherapeutic education (pharmacists, GPs, nurses)



Curiosity



Empty talk

Mission and vision Radboudumc

*“Our ambition is to be the most
person-centered and innovative
university medical center, recognized
and distinguished for it.”*

Mission and vision Radboudumc

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Trouble

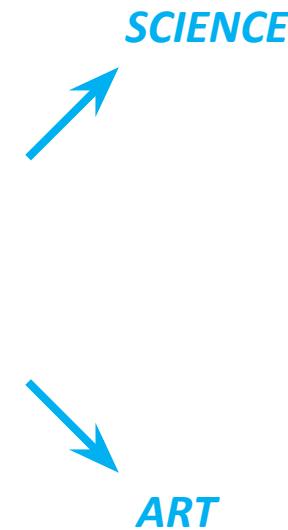
At least for me and my patients

Trouble leads to Curiosity

- Curiosity leads to research
 - What is 'person-centered care'
 - How effective is 'person-centered care'

Patient recovery depends on

- Spontaneous recovery, natural course
- Technological action (pill, surgery): **specific**
 not / only partly available for many conditions
- An interpersonal component: **non-specific**
 available for all conditions !



Importance of doctor-patient relationship

Clinical competence	Relationship	Outcome
Follow guideline		
Does not follow guideline		

Importance of doctor-patient relationship

Clinical competence	Relationship	Outcome
Follow guideline		Good
Does not follow guideline		Poor

Importance of doctor-patient relationship

Clinical competence	Relationship	Outcome
Follow guideline	Good	
	Poor	
Does not follow guideline	Good	
	Poor	

Importance of doctor-patient relationship

Clinical competence	Relationship	Outcome
Follow guideline	Good	Good
	Poor	Poor
Does not follow guideline	Good	Poor
	Poor	Poor

Importance of support

- Homeless patients in the Emergency Department (n = 133)
- Compassionate care **vs** care as usual
 - Volunteers (medical students)
 - Attentive listening
 - Chit-chatting about everyday matters (living situation, family, experiences in hospital, TV)
 - No medical advice
- Follow-up: 1 year
- Outcome: repeat visits, patient satisfaction

Importance of support

	Usual care	Compassionate care	
Total number of ER visits	7	4,5	Relative reduction 28 % (sign.)
Overall quality of care (% excellent – very good)	36	71	P < 0.005

Empathy

Common cold

- Relationship between empathy and common cold
- 350 patients (> 12 years)
- Empathy measured using the CARE questionnaire (patients)
- Outcome:
 - Duration of symptoms
 - Severity of symptoms
 - Response of immune system (IL-8)

Empathie

Common cold

Cold outcome	Low empathy	High empathy	P-value
Duration	8.0 days		
Severity (WURSS-21)	284		
Change in IL-8 (pg/mL)	220		

Empathie

Common cold

Cold outcome	Low empathy	High empathy	P-value
Duration	8.0 days	7.1 days	p = 0.017
Severity (WURSS-21)	284	240	p = 0.037
Change in IL-8 (pg/mL)	220	562	p = 0.015

Conclusion

- Person-centered care is an art
- Person-centered care is available for all conditions
- The doctor-patient relationship as a powerfull instrument
- Support and empathy result in better patient outcomes

The results of Curiosity

- Action
 - Discussion with the Board of Directors of Radboudumc
 - Research grant as Principal Clinician at Radboudumc to study and stimulate the implementation of person-centered care
 - PhD study on 'Empathy in general practice' (Frans Derksen)
 - Radboudumc Educational track 'Person-centered communication for medical specialist residents'



Curiosity



Measurement based care

Measurement based care

- Monitoring treatment effect through routine assessments of symptoms, other parameters and/or treatment goals

My own perceptions

- MBC fully integrated in the care for my patients with Type 2 Diabetes
 - Even routine measurements of bloodtests
 - With lots of attention to lifestyle interventions
- But what do we do with patients with depression?
 - We prescribe antidepressants too quickly and too often
 - We talk with these patients in an unstructured way
 - While comprehensive monitoring of the severity of depression is advised
 - While lifestyle interventions are hardly promoted

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Trouble

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Trouble leads to Curiosity

- Curiosity leads to research
 - Why is MBC in T2DM fully integrated and in depression fully lacking?
 - Why are lifestyle interventions fully integrated in T2DM care and not in depression care?
 - Studying the literature and guidelines on chronic diseases, depression and mental health
 - Talking to research leaders in the field

What did I learn ?

- MBC is effective in chronic conditions as well as in mental health conditions
 - Clinical outcomes (symptoms, HbA1c, bloodpressure)
 - Health related QOL (daily functioning)
 - Healthcare costs
 - Patients' satisfaction and empowerment
- Lifestyle interventions are a powerful treatment for patients with depression in primary care
- Lack of practical and feasible evidence-based MBC tools for depression in primary care

The results of Curiosity

- Action
 - Grant application 'Measurement-based care in the personalized treatment of depression in general practice'
 - Grant application 'Measurement-based care in personalized lifestyle interventions for depression symptomatology in general practice'
 - Developing a (cost)-effective MBC treatment intervention for symptoms of depression in primary care

Overview project

WP-1: Development

Lifestyle questionnaire



Personalized overview



Guided selection for lifestyle intervention



month 1-6

Measurement Based Care



Focus group WP1

WP-2: Surveys, interviews and participatory action research



15 patients and their relatives, 10 professionals

Focus group WP2

month 1-6

WP-3: month 6-12 Feasibility study



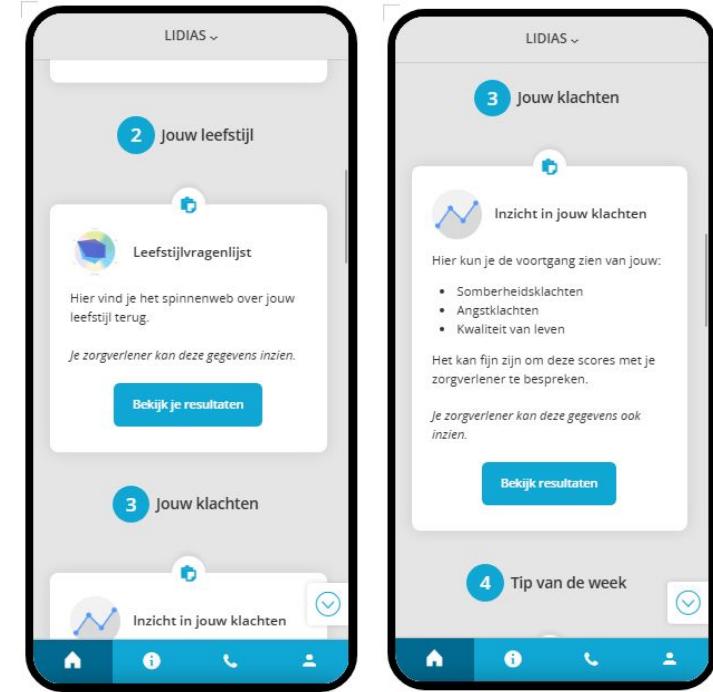
15 patients in total and their relatives in different GP practices in the area of RUMC, AMC and UMCG

Focus group WP3

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Building MBC app

- Features app:
 - Track symptoms
 - Set and track lifestyle goals
 - Receive personalized tips and interventions
- GP or GP-MHN has access to webbased version



- Blended-care tool to evaluate progress during follow-up consultations

Pilot study

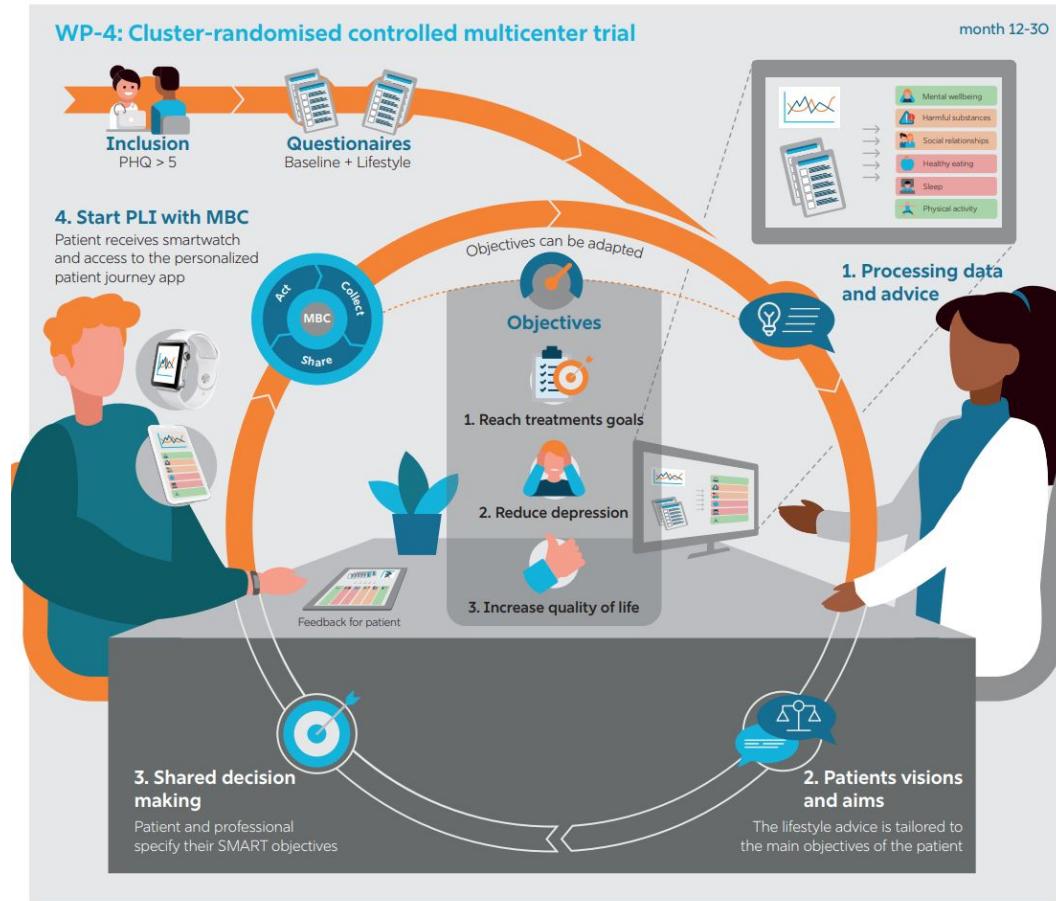
Testing the **feasibility of the app** before using it in the RCT



In **10-15 patients** with depression and their caregivers in GP centers in Nijmegen



Interview by telephone to **evaluate and implement** feedback before RCT



Conclusion

- Is MBC (cost)-effective in patients with depressive symptoms ?
- Is personalized lifestyle intervention (cost-)-effective in patients with depressive symptoms?

The results of Curiosity

- Action
 - Two succesfull research grant applications
 - Two PhD thesis coming
 - When effective – national implementation of MBC



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PSS

Placebo
Nocebo

Person-centered
care

Measurement
based care



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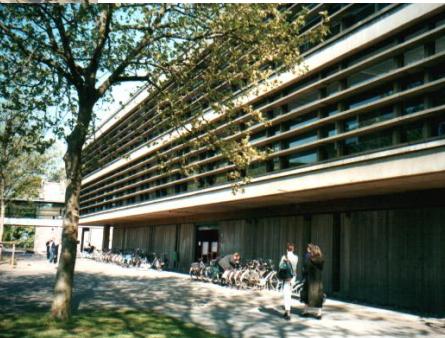
From TROUBLE



To CURIOSITY



to ACTION



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