



LEIDS UNIVERSITAIR MEDISCH CENTRUM

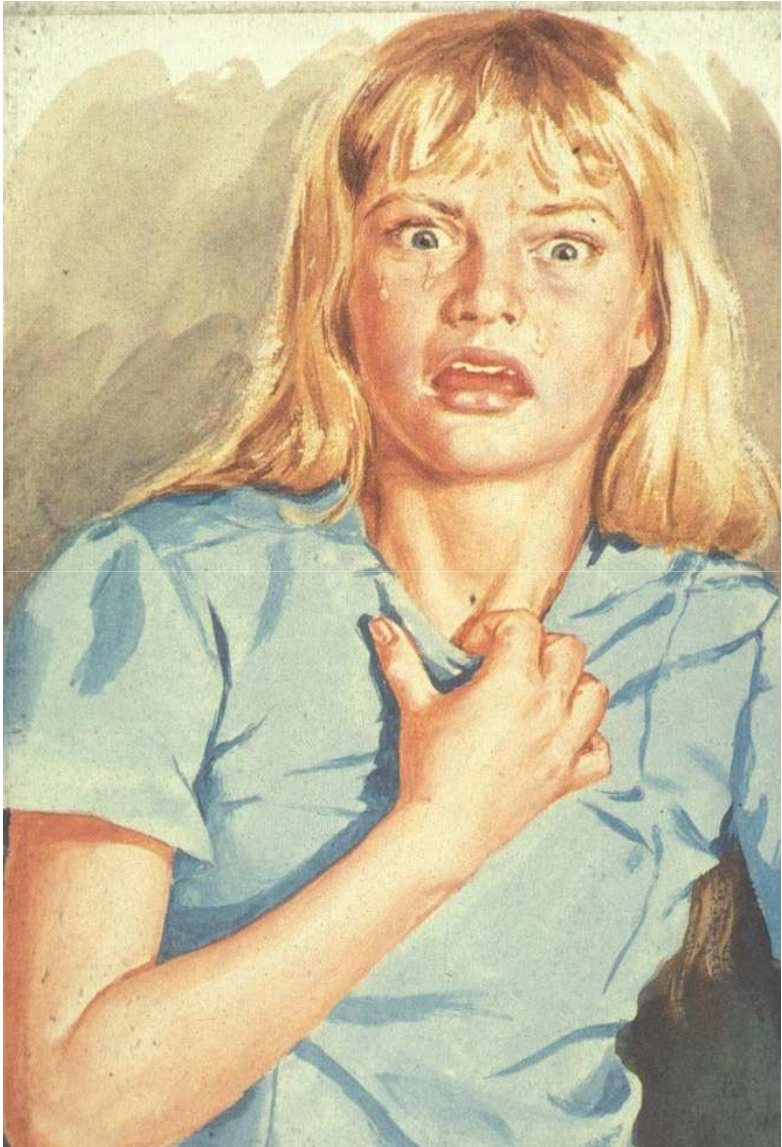
asthma and chronic kidney disease

EMPOWERING PATIENTS

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Medical Psychology

Leiden University Medical Centre LUMC
The Netherlands









Outline presentation

- medical psychology
- quality of life
- behavioural approaches to asthma & CKD in four steps
- research and clinical implications

mental disorders

clinical psychology

psychiatry

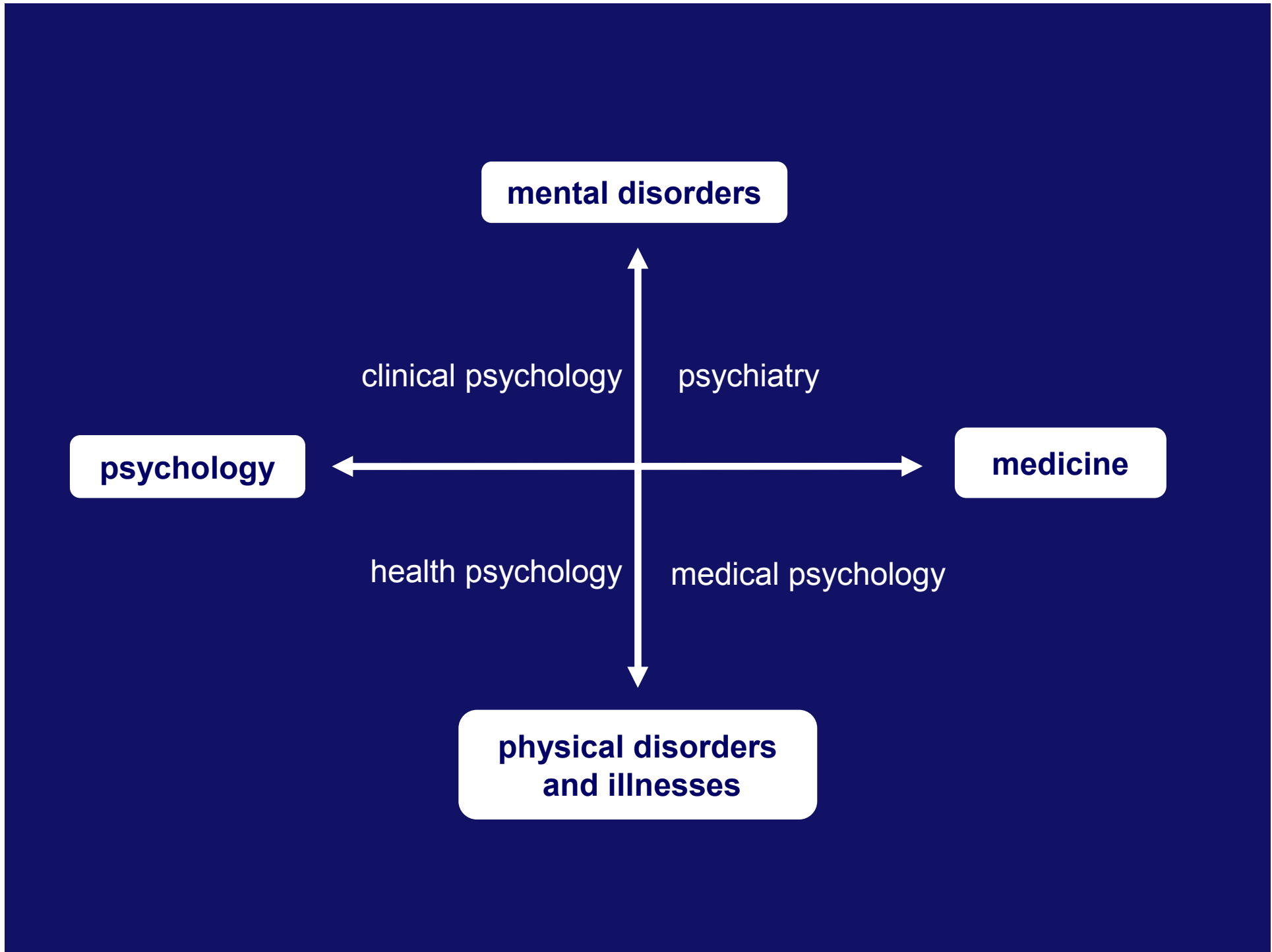
psychology

medicine

health psychology

medical psychology

**physical disorders
and illnesses**





Four psychological approaches to patients with asthma and CKD

- psychoanalytic/psychotherapeutic
- psychomaintenance
- patient education
- self management

□.. the personality structure of asthma patients was similar in a number of essential traits□

Typical for the character of these individuals is the combination of a craving for love with a tendency towards domination (tyranny).

This particularity in their character structure develops in early life□

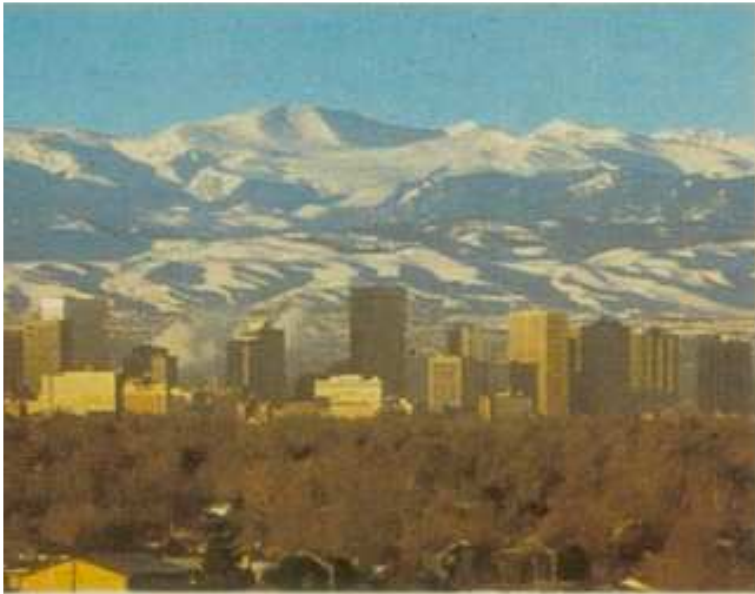
in reaction to a childhood situation in which an overprotective domination (a □loving tyranny□) from one or both parents, especially from the mother, had played an important part□.



Four psychological approaches to patients with asthma and CKD

- psychoanalytic/psychotherapeutic
- psychomaintenance
- patient education
- self management

□ I have a terrible lack of energy. I get terribly, terribly tired and worn out very easily,
□ you're always short of energy □ whether it's getting up in the morning, washing and dressing, anything, you get so damned tired and breathless.□



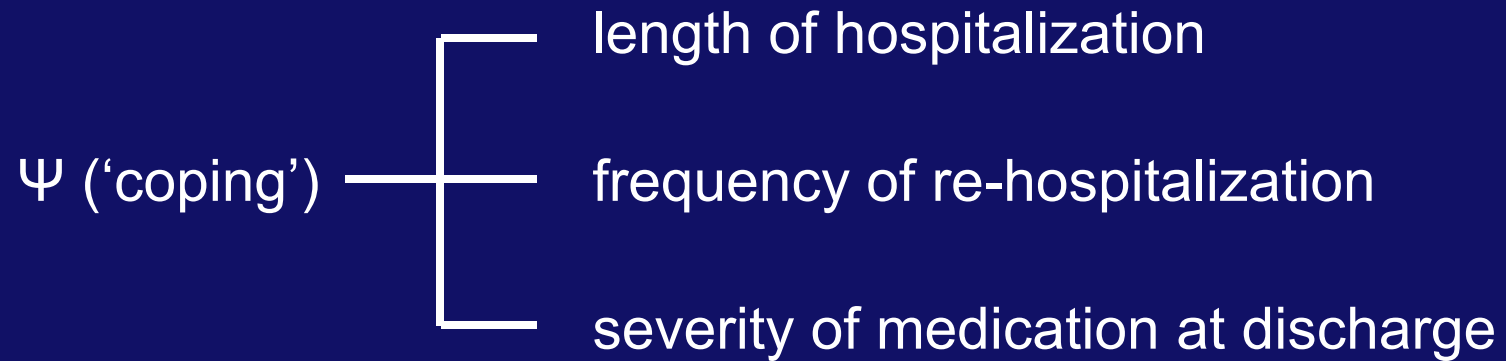
*Hello
from*

DENVER, COLORADO

The Mile High City









Four psychological approaches to patients with asthma and CKD

- psychoanalytic/psychotherapeutic
- psychomaintenance
- patient education
- self management



Limited (information only) patient education programs for adults with asthma (Review)

Gibson PG, Powell H, Coughlan J, Wilson AJ, Hensley MJ, Abramson M, Bauman A, Walters EH

Use of limited asthma education as it has been practiced does not appear to improve health outcomes in adults with asthma although perceived symptoms may improve. Provision of information in the emergency department may be effective, but this needs to be confirmed.

This record should be cited as:

Gibson PG, Powell H, Coughlan J, Wilson AJ, Hensley MJ, Abramson M, Bauman A, Walters EH. Limited (information only) patient education programs for adults with asthma. *Cochrane Database of Systematic Reviews* 2002, Issue 1. Art. No.: CD001005. DOI: 10.1002/14651858.CD001005.



Four psychological approaches to patients with asthma and CKD

- psychoanalytic/psychotherapeutic
- psychomaintenance
- patient education
- self management

Self-management education and regular practitioner review for adults with asthma (Review)

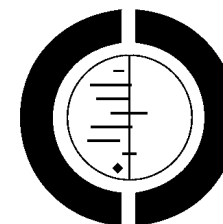
Gibson PG, Powell H, Coughlan J, Wilson AJ, Abramson M, Haywood P, Bauman A, Hensley MJ, Walters EH

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Gibson PG, Powell H, Coughlan J, Wilson AJ, Abramson M, Haywood P, Bauman A, Hensley MJ, Walters EH. Self-management education and regular practitioner review for adults with asthma. *Cochrane Database of Systematic Reviews* 2002, Issue 3. Art. No.: CD001117. DOI: 10.1002/14651858.CD001117.

This version first published online: 22 July 2002 in Issue 3, 2002.

Date of most recent substantive amendment: 12 March 2002



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PLAIN LANGUAGE SUMMARY

Asthma self management education is of significant benefit to patients.

Self-management education and regular practitioner review for adults with asthma (Review)

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No Symptoms, No Asthma*

The Acute Episodic Disease Belief Is Associated With Poor Self-Management Among Inner-City Adults With Persistent Asthma

Halm, Mora Leventhal



Chest, 2006, 129, 573 - 580

Sexuality in patients with asthma and COPD

Kaptein, van Klink, de Kok, Scharloo, Snoei, Broadbent, Bel, Rabe



Respir Med, 2008, 102, 198-204

Medische psychologie

onder redactie van
prof.dr. A.A. Kaptein, dr. R.A.M. Erdman
dr. J.B. Prins, prof.dr. H.B.M. van de Wiel



Bohn Stafleu van Loghum



**Chronic
Kidney
Disease**



What is medical psychology?

Medical psychology: studying man in the medical situation

Describe, explain, change illness behaviour

No psychopathology; usually a healthy response to a difficult medical situation

Strengthening of what patients can do themselves, together with the social system, including nurses, physicians, others

Psychosocial aspects of chronic disease: ESRD as a paradigmatic illness

- stress
- psychopathology
- social support
- family issues
- dialysis unit culture
- SES
- depression
- anxiety
- marital satisfaction



JASN, 2007, 18, 3042-3055

The prediction of self-care behaviors in ESRD patients

Coping, illness perceptions, knowledge and stress predict self management (fluid restrictions, eating)

O'Connor et al.



J Psychosom Res, 2008, 65, 191 -200

Changing illness behaviour: a cognitive behavioural approach, impacting on adherence ↑

- Group approach in patients with HD aimed at increasing adherence with fluid restrictions
- 1 x week, 1hour, 4 weeks
- Self regulation: thoughts, feelings, behaviour
- IWG improved, cognitions changed in desired direction

Sharp et al.



Am J Kidney Dis, 2005, 45, 1046-1057

Effect of a Behavioral Self-Regulation Intervention on Patient Adherence in Hemodialysis

Christensen et al.



Health Psychology, 2002, 21, 393-397



Summary of Self-Regulation Protocol -1-

1. Introduction and rationale for the self-regulation approach and its relation to the dialysis treatment regimen (Session1).
2. Brief review of how and why fluid-intake guidelines are established and the immediate and long-term effects of nonadherence (Session 1)
3. An overview of the association between self-regulatory processes (i.e. self-monitoring, self-evaluation, self-reinforcement) and behavior. Examples of this overview include the effect of self-monitoring on enhancing awareness and perceived control over behavior and the association between reinforcement contingencies and the likelihood of repeating a behavior in the future (Session 2)
4. Instruction in self-monitoring skills and began homework self-monitoring of daily fluid intake, mood, behavior, setting, and the antecedents. A daily diary method was used with entries made each time fluid was ingested (Session 3)



Summary of Self-Regulation Protocol -2-

5. Goal-setting discussion and patient goal setting for fluid intake between treatments. Homework assignment included each patient discussing goals with their renal care providers (Session 4)
6. Establishing self-administered reinforcement strategies. Both covert reinforcers (e.g. positive self-evaluation) and overt reinforcers (e.g. engaging in pleasurable activities) were discussed. Homework assignment included identifying realistic and adaptive reinforcers (Session 5)
7. Teaching stimulus control, self-instruction, and related behavioral coping skills to promote regulation of fluid intake (Session 6)
8. Daily recording and evaluation of target behavior (i.e. fluid intake). Self-monitoring was reviewed and discussed during weekly group meetings (Session 3-7)
9. Weekly self-evaluation of target behavior performance and interdialytic weight gain relative to goals. Patients' use of behavioral self-regulatory coping skills also reviewed and discussed weekly group meetings. Any problems in meeting goals were discussed (Session 3-7)

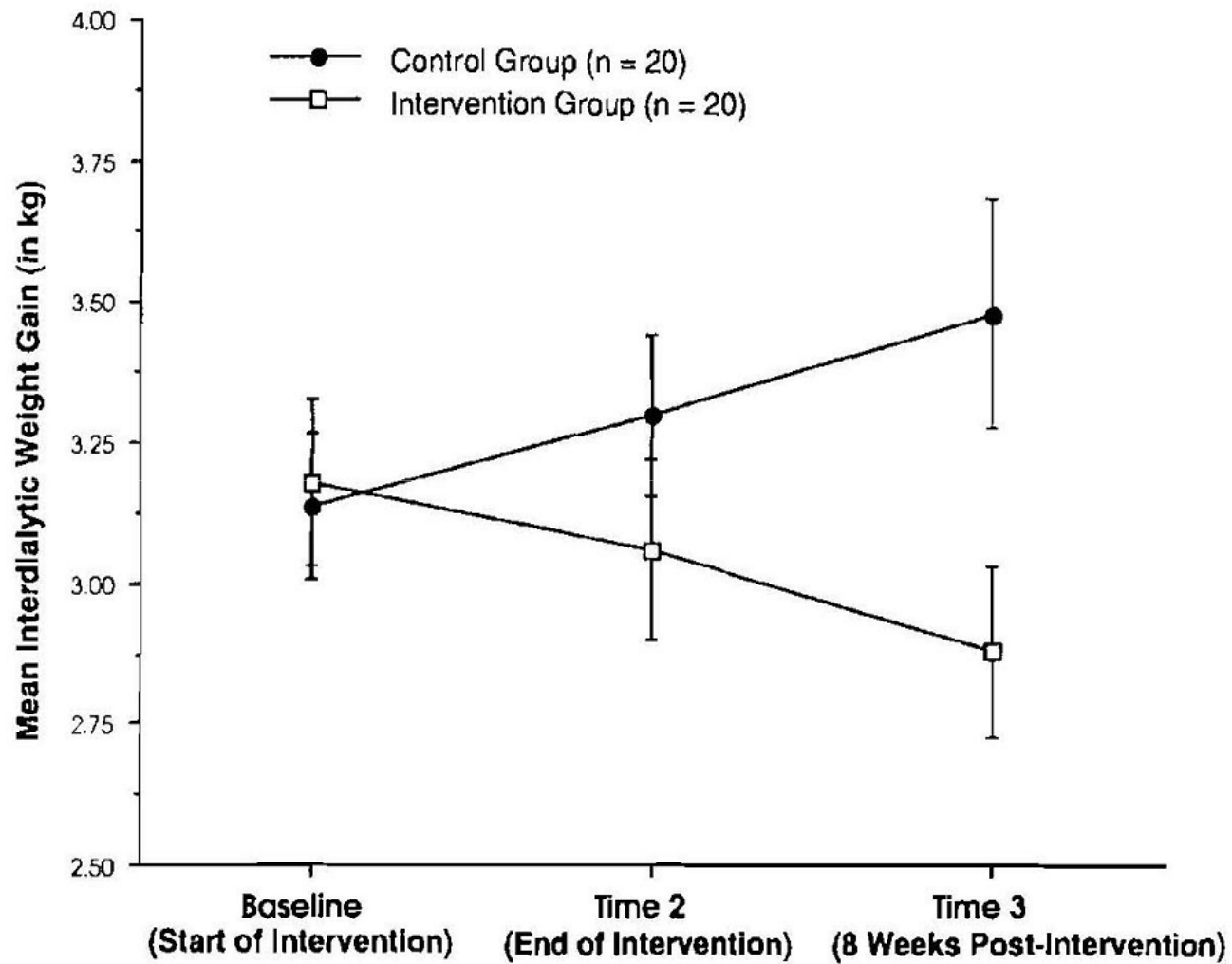
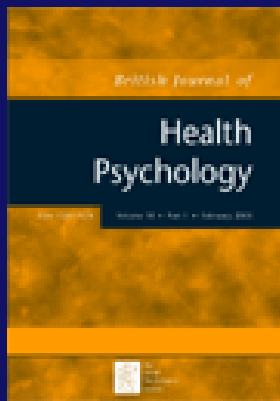


Figure 1. Change in interdialytic weight gain (IWG) values over time as a function of intervention status. Higher IWG values represent poorer patient adherence with the fluid-intake regimen.



- Illness cognitions and treatment cognitions drive self-management
- Experimental vs. Control group; before - 1 month – 4 months after
- Plastic stomach, patients tell what they see
- Knowledge ↑, understanding ↑



Karamanidou et al., Br J Hlth Psychol, 2008, 13, 205-214



The plastic stomach container, Phosphate Binding solution and the Phosphate solution



The plastic stomach container is filled with Phosphate solution. The Phosphate

Binding solution is contained in the glass bottle.



The Binding process!

“A systematic review of psychological interventions for the treatment of nonadherence to fluid-intake restrictions in people receiving hemodialysis ... bias ... larger number of participants ... within controlled designs ... clearer description of intervention protocols...”
 Sharp et al.



Am J Kidney Dis 2005, 45, 15-27

- 124 caregivers:
- emotionality and vitality most affected
- a third depressive
- “... providing information, social support and psychological support must be studied for its contribution to improving caregivers’ QOL”



Belasco et al., Am J Kidney Dis, 2006



Research on CKD in our research group

- Van Dijk et al. Illness cognitions predict mortality (NDT, 2009, 24, 3183 - 3185)
- Thong et al. Social support predicts mortality (NDT 2007, 22, 845 - 850)
Self perceived health predicts survival
(Am J Kidney Dis 2008, 52, 111- 117)
Symptoms and QOL (NDT, 2009, 24, 225 - 230)
- Timmers et al. Illness cognitions and QOL (Psychol Health 2008, 23, 679 - 690)
- Berkhout-Byrne et al. Illness cognitions and self-management (in preparation)
- Daleboudt et al. Drawings of kidneys (submitted)
- Dekker et al. NECOSAD
- Kaptein et al. Behavioural research in patients with CKD: A review and
research agenda (Pt Educ Counsel, 2010, in press)



Research agenda

- Describe
- Explain
- Change

- QOL
- Self management

- Patient

- Partner
- MD/ HCP
- Public/Society



Care agenda

- Describe
- Explain
- Change

- QOL
- Self management

- Patient

- Partner
- MD/ HCP
- Public/Society





Thank you

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