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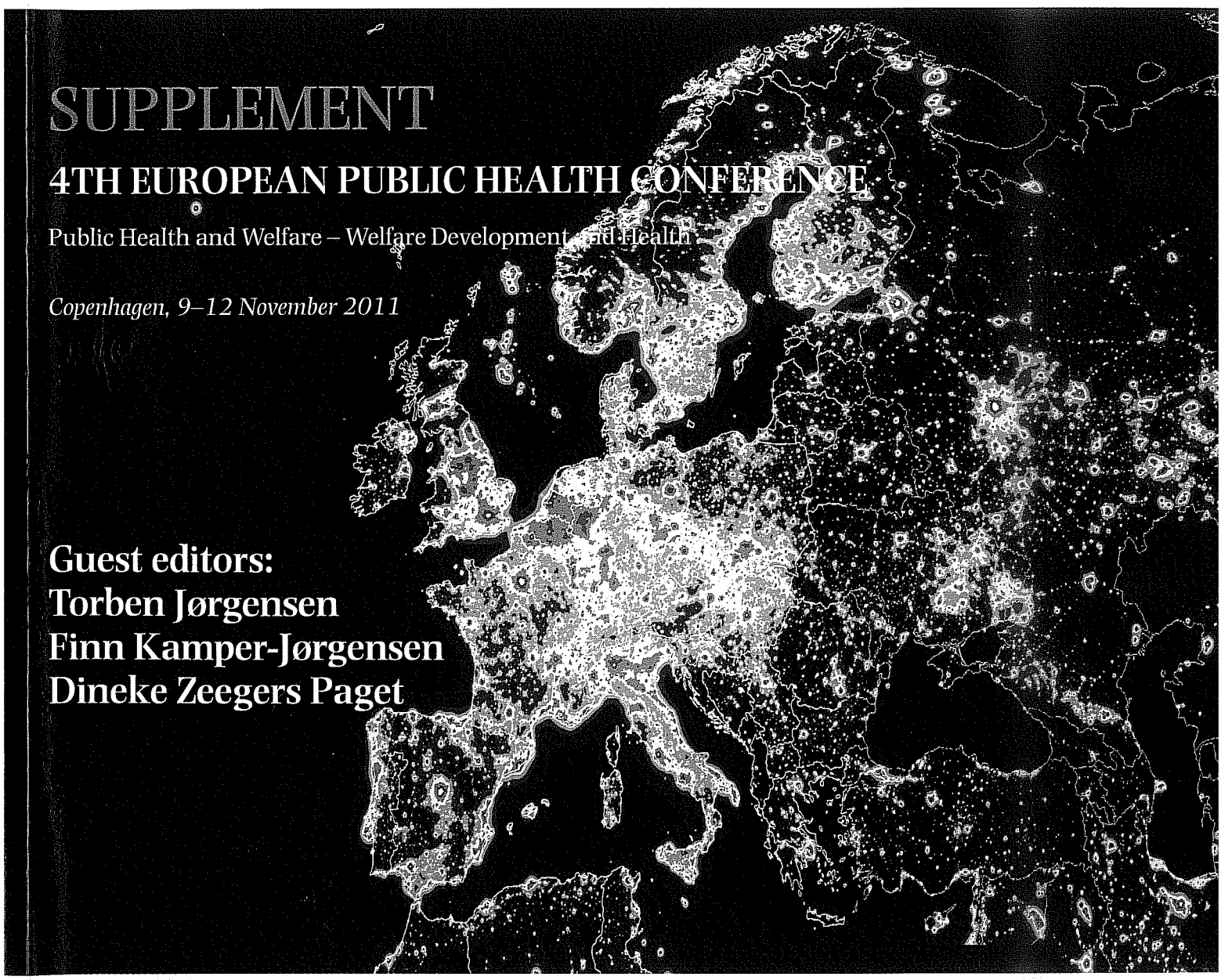

SUPPLEMENT

4TH EUROPEAN PUBLIC HEALTH CONFERENCE

Public Health and Welfare – Welfare Development and Health

Copenhagen, 9–12 November 2011

Guest editors:
Torben Jørgensen
Finn Kamper-Jørgensen
Dineke Zeegers Paget

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EUROPEAN PUBLIC HEALTH ASSOCIATION

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The Association of Schools of Public Health in the European Region

Danish Society of Public Health

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ABSTRACT SUPPLEMENT

***Guest editors*: Torben Jørgensen, Finn Kamper-Jørgensen, Dineke Zeegers Paget**

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EUPHA EUROPEAN PUBLIC HEALTH ASSOCIATION
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National Institute of Public Health University of Southern Denmark
RESEARCH CENTRE FOR PREVENTION AND HEALTH

and to check whether the Belgian health policy succeeds in guaranteeing an equal distribution of healthcare among elderly persons with equal needs. Therefore we analysed the associations between GPs and specialists contacts, and SES (household income, highest level of education within the household, and housing tenure).

Methods

In this cross-sectional study based on 4494 elderly participants (≥ 65 years) in the Belgian Health Interview Surveys of 2001 and 2004, socioeconomic gradients in contacts (yes or no) with a GP or specialist were explored using multiple logistic regressions, based on the socio-behavioural model of Andersen.

Results

After adjustment for age and sex, the elderly with a household income in the categories €750–1000 and €1000–1500 are more likely to contact a GP than those with the highest income (OR 2.16, 95% CI 1.19–3.93 and OR 1.91, 95% CI 1.11–3.31, respectively). Those without a degree or with primary education as the highest educational level are more likely to contact a GP than others (OR 1.77, 95% CI 1.12–2.80). After adjustment for age and sex, tenants are more likely to contact a specialist than home-owners (OR 1.42, 95% CI 1.02–1.98). After adjustment for age, sex, health status (self-assessed health, functional restrictions, and comorbidity), region, and living situation, no more differences remain in contacts with a GP and specialist between the SES groups.

Conclusions

Successive adjustment for the determinants of healthcare utilisation among the Belgian elderly nullified the socioeconomic gradients in contacts with a GP and specialist that initially existed. The initial gradient in having a contact with a GP and specialist or not can be explained by differences in the health status of the respondents. The Belgian healthcare system seems to effectively minimise socioeconomic inequalities contacts with a GP and specialist among a the elderly population with high healthcare needs.

Patient preferences in patient education for patients with type 2 diabetes

Ingrid Willaing

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Background

Little is known about patient preferences for diabetes patient education. The objectives of this study were to determine the preferences of patients with type 2 diabetes for format and contents of patient education. Patients were asked to value information, participation and competence development, involvement of social network, and group based versus individual education.

Methods

A questionnaire including sociodemographics, BMI, self-management behaviors and HbA1c-level as well as choice games concerning patients' preferences for patient education were sent autumn 2010 to patients from two different populations: 1) patients from a specialist diabetes clinic (n = 1081, response rate 54%) and 2), patients derived from a web panel consisting of a representative sample of the Danish population (n = 1461). In total N = 2542. Choice game answers were analyzed using the conditional logit model. Willingness to pay for the attribute levels was calculated by dividing the estimated coefficients, β for each attribute by the coefficient of payment. For deriving confidence intervals we used bootstrapping. Analyses were stratified in subgroups using a 5% level of significance.

Results

All included attributes were significant predictors of choice ($p < 0.01$) and all parameters had a positive value. Patients consistently valued acquiring competency in the included topics more than receiving information about them. Difference in valuation between becoming competent and acquiring information was large: willingness to pay was up to 92% higher for competency. Becoming able to adjust diet and exercise habits and to prevent complications were valued 35% and 46% higher than being informed about these topics. Patients were willing to pay €199 to be educated individually compared to education in a group of 12. The ranking of the attributes and levels were similar for subgroups. Women had a higher valuation of attributes. Patients with HbA1c < 7% exhibited higher willingness to pay for all attributes and levels.

Conclusions

Patients with type 2 diabetes significantly value participation in patient education, development of competencies for prevention of complications and support from the social network in disease management. Patients prefer an individually targeted approach.

Factors associated with adherence levels in kidney transplant recipients

Lucia Prihodova

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Background

Adherence with medication is an inevitable part of treatment after kidney transplantation (KT) in order to keep a transplanted graft functioning well. In this study we focused on medical and psychological variables associated with different levels of adherence.

Methods

169 KT patients (64.5% male; 49 ± 11.5 years) were split according to adherence, as rated by themselves and their physicians, into three groups: excellent (49.7%), good (43.2%) and average/bad (7.1%) adherence. The patients provided sociodemographic data, medical data (glomerular filtration, Davies' comorbidity index, number of late rejection episodes) and completed a side-effects symptom checklist (ESRD-SCL-TM) and questionnaires on psychological distress (GHQ-12) and social support (SSL). Binary and ordinal logistic regressions were used to identify factors associated with excellent, good and average/bad adherence.

Results

The excellent adherence group reported significantly less severe side effects (ESRD-SCL-TM). Younger (Exp(B) = 0.95*; CI95%:0.91–0.99) female (Exp(B) = 0.28*; CI95%:0.09–0.85) patients with a history of late rejection (Exp(B) = 3.27*; CI95%:1.00–10.72) and higher social support (Exp(B) = 1.08*; CI95%:1.02–1.15) were more likely to behave excellently in adherence over the past month and the model explained 41.1% of variance. Being male (Est = 0.99***; CI95%:0.40–1.58) and divorced/widowed (Est = 1.23**; CI95%:0.24–2.21) with fewer rejection episodes (Est=-0.73*; CI95%:-1.37–0.09) and longer post-transplantation time (Est = 0.01*; CI95%:0.00–0.02) increased the probability of belonging to the good or average/bad adherence group and the model explained 33% of the variance.

Conclusions
The factors associated with different levels of adherence need to be considered when planning an intervention program focused on an increase in adherence. This study offers a more detailed insight into adherence and considers different perspectives of the two key components in the prevention of poor adherence: the patient and the nephrologist. The differences between the adherence groups should be considered in clinical practice in order to prevent under evaluation or underreporting of poor adherence and most importantly, when planning an intervention program in order to ensure its efficiency.

Online learning tools in evidence-based practice: changes in skills across cultures

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Background
Commissioned in 2006 by National Institutes of Health, the interprofessional Evidence-Based Behavioral Practice (EBBP) project creates online learning resources to help bridge the gap between behavioral research and practice.
Objectives
Seven interactive learning modules that target trainees and practitioners are available free of charge at www.ebbp.org. The site hosts 2,000–3,000 users per month from 128 countries, suggesting global interest in evidence-based practice training tools. Learners complete online pre and post-tests that assess knowledge, attitudes, and skills. In this abstract we discuss self-reported change in learner skills across modules. Learners rated skills statements using Likert scales (1 = not at all confident, 5 = very confident).
Results
Learners showed the following self-reported changes in skills from pre- to post-test: EBBP Process: 0.91 scale increase ($F(1,1847) = 1536.72$, $p = .000$); Searching for Evidence: 0.73 scale increase ($F(1,455) = 218.74$, $p = .000$); Introduction to Systematic Reviews: 1.15 scale increase ($F(1,469) = 426.8$, $p = .000$); Critical Appraisal: 0.84 scale increase ($F(1,289) = 102.65$, $p = .000$); RCTs: 0.77 scale increase ($F(1,189) = 105.74$, $p = .000$); Shared Decision-Making with Individual Clients: 0.76 scale increase ($F(1,96) = 77.93$, $p = .000$); Collaborative Decision-Making with Communities: 0.71 scale increase ($F(1,58) = 21.12$, $p = .000$).
Conclusions
All modules showed a significant increase in learner-reported skills. This indicates that improvement in self-reported skills in evidence-based practice can be achieved across cultures through online learning modules.

1.E. Workshop: REsearch into POlicy in Physical Activity - which theories and methods are applicable?

Chairs: Arja R Aro, Denmark and Nancy Edwards, Canada
Organiser: REPOPA Consortium and EIRA Network
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The expression 'Research into Policy' signals the intention to help policymakers make evidence-informed decisions in policy development and implementation. Scientific research has produced abundant knowledge on the physical activity (PA) -health link, PA levels and trends, cost-effective interventions, and policies in many EU countries. Thus, there is knowledge and know-how about improving patterns of PA both from research and policy making. Challenges remain, however, in integrating this knowledge and know-how into policy making. Based on scientific literature and other documents, the evidence-base of many PA policies developed has not often been made explicit (research evidence and 'other kind of evidence' i.e. expert know-how, organizational culture and political pressures. Further, policies are mostly not cross-sectoral although we know that multi-sector structures facilitate physical activity of individuals and groups. Still, evaluation of PA policies remains often at a generic level of combined groups and without concrete steps and indicators of implementation. Finally, accountability has mostly not been agreed upon. All this calls for: a) comprehensive cross-disciplinary frameworks for understanding how evidence can inform policy processes in PA; b) developing feasible and effective tools and indicators for PA policy implementation in different contexts; and, c) feasible evaluation frameworks. This roundtable takes up this challenge, discusses and debates the state of the art in the field. REPOPA consortium (REsearch into POlicy in Physical Activity) includes institutes from six EU countries and Canada, a leading country in knowledge integration development. EIRA (Evidence In Research and Action) is a global health promotion network. The workshop participants represent REPOPA, EIRA and European Community (EC).

Arja R Aro (DK): The main theories in guiding evidence-informed policy development and evaluation.
Timo Stål (FI): Dissemination and translation of research on the policy for physical activity in Finland: good intentions need a proper implementation framework.
Ien van de Goor (NL): Collaborative decision making across sectors and organizations: can gaming simulation help?
Bonnie Spring (USA): Online Training for Evidence-Based Behavioral Practice (EBBP): Introduction and Evaluation Across Cultures
Comment: Kevin Mccarthy (EC): Public Health, DG Research&Innovation, Health Directorate: European Union Research facilitating knowledge transfer.

The main theories in guiding evidence-informed policy development and evaluation: towards a meta-framework

Arja R. Aro

AR Aro[1], N Edwards[2]
[1]University of Southern Denmark, Unit for Health Promotion Research, Esbjerg, Denmark
[2]University of Ottawa, School of Nursing and Department of Epidemiology and Community Medicine, Ottawa, Canada

Evidence-informed policy development consists of decision making processes by stakeholders from academia, community and political contexts. Reflecting this complexity, research on this theme has been scattered and split into separate disciplinary approaches. To enhance coherent, theory and evidence-informed policy development and evaluation, there is a need to integrate and develop theories, which can capture the complex policy development process in different contexts. The main theories used to study evidence-informed policy development and evaluation will be reviewed and debated, especially when applied in different cultural and country contexts and in

Factors associated with adherence levels in kidney transplant recipients

Lucia Prihodova[1], Jaroslav Rosenberger[1,2,3,4], Iveta Nagyova[1,5], Maria Majernikova[1,2], Robert Roland[2, 3], Johan W Groothoff[6], Jitse P van Dijk[1, 6]

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Kidney transplantation and adherence

Kidney transplantation (KT)

- best treatment modality for patients with end-stage renal disease
- associated with strict lifelong immunosuppressive medication which necessarily requires adherence

- Adherence prevents
  - poor outcome or even failure of a therapy (1)
  - rejection and loss of a transplanted graft
  - consequent impairment of physical or mental functions
  - higher number of hospitalisations
  - consequently, higher costs of treatment (2-6).

1. Dickenmann MJ, et al. Why do kidney grafts fail? A long-term single-center experience. Transplant International 2002;15(9-10):508-14.
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4. Laederach-Hofmann K, et. al. Noncompliance in organ transplant recipients: A literature review. General Hospital Psychiatry 2000;22(6):412-24.
5. Brickman AL, et al. Noncompliance in end-stage renal disease: A threat to quality of care and cost containment. Journal of Clinical Psychology in Medical Settings 1996;3(4):399-412.
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Adherence

- No standard definition & variability of the methods used for assesment(7;8)
- Rates 50-90%
- Assesment
  - electronic monitoring
  - drug levels
  - biologic markers
  - prescription refills
  - self-reporting
  - patient observation
- In clinical environment: self-reported method and its combination with the reports of physicians may be a valuable and reliable approach (9-11)

7. Goldfarb-Rumyantzev AS, et al. Factors Associated with Nonadherence to Medication in Kidney Transplant Recipients. Nephron Clinical Practice 2011;117(1):C33-C39.
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The aim of this study

- To explore the association of sociodemographic, medical and relevant psychosocial factors with different levels of adherence, assessed by the method most commonly used in the clinical environment: patient-rated and clinician-rated adherence.

Methods

- Sample
  - Transplantation centre in Kosice, Slovakia
  - Inclusion criteria:
    - a functioning graft,
    - three months - seven years after transplantation,
    - no psychiatric disease including severe dementia and mental retardation
    - signed an informed consent form before the study
  - RR: 169 (78%).
  - 64.5% male; 49±11.5 years
- Adherence
  - Combined self and nephrologist's evaluation
  - Defined as skipping a dose or change the timing of a dose
  - Rate on a scale from 1 to 5 over the past month, where
    - 1 - patient did not break the prescribed regimen over the past month
    - 2 - once over the past month
    - 3 - 2-3 times over the past month
    - 4 - once per week over the past month
    - 5 - the patient breaks the prescribed regimen more than 3 times a week

Methods

- Sociodemographic data
  - Age
  - Gender
  - Education
  - Average income
  - Marital status
- Medical data
  - Glomerular filtration
  - Davies' comorbidity index
  - Number of late rejection episodes (over 90 days post KT)
- ESRD symptom checklist (ESRD-SCL-TM)
  - Limited physical capacity
  - Limited cognitive capacity
  - Cardiac and renal dysfunction
  - Side effects of corticosteroids
  - Increased growth of gum and hair
  - Transplantation-associated psychological distress
- General Health Questionnaire (GHQ-12)
- Social support (SSL)
- Statistics
  - Binary and ordinal logistic regressions to identify factors associated with excellent vs good/average/bad adherence

Results: Adherence levels

			Patients evaluation		
			1 Excellent (no deviation from prescribed regimen over past month)	2 Good (forgot or delayed one dose over past month)	3 Average (forgot or delayed 2-12 doses over past month)
			71.6%	27.2%	1.2%
Nephrologists evaluation	1 Excellent (no deviation from prescribed regimen over past month)	62.7%	84 49.7%	22 13%	0
	2 Good (forgot or delayed one dose over past month)	30.2%	35 20.7%	16 9.5%	0
	3 Average (forgot or delayed 2-12 doses over past month)	7.1%	2 1.2%	8 4.7%	2 1.2%

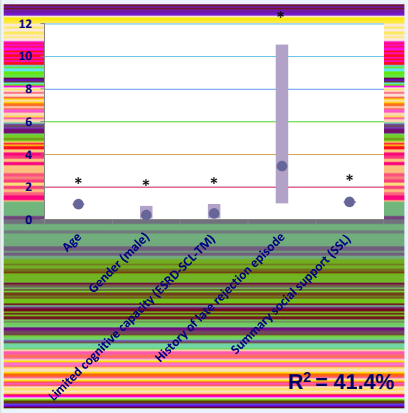
Differences between the adherence groups

In comparison with the excellent adherence group

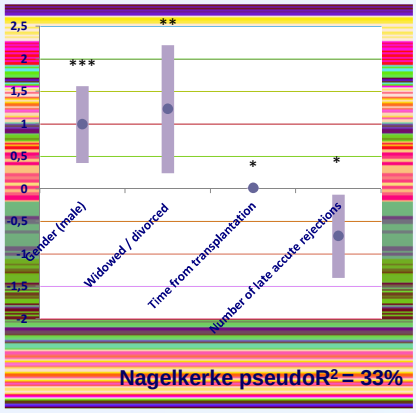
- the good/average adherence groups
  - significantly more males (p≤0.001)
  - significantly higher levels of limited physical capacity (p≤0.001)
  - significantly higher levels of KT-related psychological distress (p≤0.001)
- the good adherence group
  - significantly higher severity of limited cognitive limitation (p≤0.001)
  - significantly higher cardiac and renal dysfunction (p≤0.001)
  - significantly higher side effects of steroids (p≤0.05)

Results

Factors associated with excellent adherence



Factors associated with good/average adherence



Discussion

- More likely to entirely adhere:
  - Younger
  - Female
  - Lower cognitive capacity limitation
  - With a history of late rejection
  - Higher social support
- Tendency to break the regime up to 3 times in a month
  - Male
  - Divorced/widowed
  - Lower number of late rejection episodes
  - Longer time from KT

Discussion

- Excellent adherence
  - Associated with a history of previous late rejection episodes
  - Associated with only one psychosocial factor - Social support

Acknowledgement

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