



EXAMEN 2006-2007 EERSTE ZIT

Partim methodologie

1. De beste manier om een causaliteit aan te tonen is:
 - ❑ prospectieve cohortestudie
 - ❑ retrospectieve cohortestudie
 - ❑ case-control studie
 - ❑ experimentele studie
 - ❑ cross-sectionele studie
2. Geef de karakteristieken waaraan de populatie voor een onderzoeker moet voldoen in een randomised clinical trial.
3. In een observationele studie bij COPD (een chronische longaandoening die ontstaat na roken), wordt vastgesteld dat een verbetering is inzake mortaliteit bij een onderhoudsbehandeling door inhalatiecorticosteroiden (ICS). Bij een interventionele studie waarbij een groep ICS patiënten wordt vergeleken met een controle groep, is er geen effect op de mortaliteit. Geef drie mogelijke verklaringen voor deze discrepantie.
4. Wat betekent het acroniem PICO?
Pas dit acroniem ook toe op onderstaande wetenschappelijke studie.

Effectiveness of telephone counselling by a pharmacist in reducing mortality in patients receiving polypharmacy: randomised controlled trial

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Abstract

Objective To investigate the effects of compliance and periodic telephone counselling by a pharmacist on mortality in patients receiving polypharmacy.

Design Two year randomised controlled trial.

Setting Hospital medical clinic.

Participants 502 of 1011 patients receiving five or more drugs for chronic disease found to be non-compliant at the screening visit were invited for randomisation to either the telephone counselling group (n = 219) or control group (n = 223) at enrolment 12-16 weeks later.

Main outcome measures Primary outcome was all cause mortality in randomised patients. Associations between compliance and mortality in the entire cohort of 1011 patients were also examined. Patients were defined as compliant with a drug if they took 80-120% of the prescribed daily dose. To calculate a compliance score for the

whole treatment regimen, the number of drugs that the patient was fully compliant with was divided by the total number of prescribed drugs and expressed as a percentage. Only patients who complied with all recommended drugs were considered compliant (100% score).

Results 60 of the 502 eligible patients defaulted and only 442 patients were randomised. After two years, 31 (52%) of the defaulters had died, 38 (17%) of the control group had died, and 25 (11%) of the intervention group had died. After adjustment for confounders, telephone counselling was associated with a 41% reduction in the risk of death (relative risk 0.59, 95% confidence interval 0.35 to 0.97; $P = 0.039$). The number needed to treat to prevent one death at two years was 16. Other predictors included old age, living alone, rate of admission to hospital, compliance score, number of drugs for chronic disease, and non-treatment with lipid lowering drugs at screening visit. In the cohort of 1011 patients, the adjusted relative risk for death was 1.61 (1.05 to 2.48; $P = 0.029$) and 2.87 (1.80 to 2.57; $P < 0.001$) in patients with compliance scores of 34-66% and 0-33%, respectively, compared with those who had a compliance score of 67% or more.

Conclusion In patients receiving polypharmacy, poor compliance was associated with increased mortality. Periodic telephone counselling by a pharmacist improved compliance and reduced mortality.

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5. Wanneer kan kwalitatief onderzoek gebruikt worden?
6. Leg uit waarom kwalitatief onderzoek in onderstaande studie gebruikt werd en wat de beperkingen zijn van deze vorm van wetenschappelijk onderzoek.

Lay constructions of a family history of heart disease: potential for misunderstandings in the clinical encounter?

BACKGROUND: Family history is recognised as a risk factor for coronary heart disease (CHD) by epidemiologists, health professionals, and the public, and could act either as a spur or barrier to changing health behaviour. However, there has been no systematic investigation of which factors affect whether people regard themselves as having a family history of CHD or not. **METHODS:** We used purposive sampling to select 61 men and women who were middle class or working class from a large cross-sectional survey. Half the respondents had indicated in this previous survey that they had heart disease in their family. The range of understanding of the meaning of having a family history was explored in detailed qualitative semistructured interviews. **FINDINGS:** Perception of a family history of heart disease depended on knowledge of the health of family members, the number and closeness of relatives with heart conditions, the age of affected relatives, and the respondent's sex and social class. Men, particularly working-class men, required a greater number of close relatives to be affected to perceive that they had a family history. Even when respondents judged that heart disease ran in their family, they did not always perceive themselves as at increased risk because they felt different in crucial ways from affected relatives. **INTERPRETATION:** The factors that people and epidemiologists judge as relevant to establish presence of a family history can differ. We suggest that these differences could lead to misunderstandings between doctor

and patient, which could undermine advice on CHD risks and associated behavioural changes.

Partim epidemiologie

1. Welke epidemiologische parameter geeft het sterkste verband tussen blootstelling en ziekte?
 - absoluut risicoverschil
 - relatief risico
 - attributief risico van de blootgestelden
 - incidentiecijfer
 - prevalentiecijfer

2. In een populatie is het incidentiecijfer voor mannen vijf keer hoger dan voor vrouwen, maar het prevalentiecijfer is gelijk in beide populaties. Hoe komt dit?
 - hogere letaliteit bij de vrouwen
 - lager letaliteit bij de vrouwen
 - vrouwen worden meer blootgesteld aan risicofactoren
 - mannen gaan sneller dood
 - vrouwen leven langer

Partim statistiek

1. Wat is een hypothesetest. Van welke karakteristieken ga je de keuze van je hypothesetest laten afhangen?
2. Wat is de juiste betekenis van de P-waarde bij een hypothesetest?