



*EGPRN is a network organisation within  
WONCA Region Europe - ESGP/FM*

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## **European General Practice Research Network**

**Tartu - Estonia**

**20th – 23rd October, 2005**

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**SCIENTIFIC and SOCIAL PROGRAM**

***THEME:* Research on Diabetes in General Practice**

**Freestanding Papers**

**One slide/Five minutes Presentations**

**Posters**

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### **Place**

**Assembly Hall of the University of Tartu  
Ülikooli 18; 50090 Tartu-Estonia  
<http://www.kylalisele.ut.ee/museums/assemblyhall>**

**This EGPRN Meeting has been made possible thanks to the unconditional support of the following sponsors:**



**University of Tartu**



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The meetings of the European General Practice Research Network (EGPRN) have earned accreditation as official postgraduate medical education activities by the Norwegian, Slovenian, Irish and Dutch College of General Practitioners.

Those participants who need a certificate can contact Mrs. Hanny Prick at the EGPRN-Coordinating Office in Maastricht, The Netherlands.

## **“RESEARCH ON DIABETES IN GENERAL PRACTICE”.**

Dear friends and colleagues,

It is the honour and pleasure of the Estonian Society of Family Doctors and the Department of Polyclinic and Family Medicine of the University of Tartu to welcome you at the European General Practice Research Network congress in Tartu, Estonia. The theme of the meeting is “Research on Diabetes in Primary Care”. Type 2 diabetes has attained proportions of the epidemic in Europe. Primary care providers are increasingly responsible for diabetes prevention and management as well as patient education. The importance of improvement of quality of care for people with diabetes mellitus within the primary health care setting preserves actuality. Emphasis should be placed on incorporating evidence based medicine into daily practice by promoting research in primary care.

The aim of the meeting is to stimulate general practice research by engaging new as well as experienced researchers from whole Europe. You are encouraged to exchange theory, methods and results of research with your colleagues, to share your successes and, even more important, your questions, problems and failures in a friendly and fruitful atmosphere as EGPRN meetings are used to have. Pre-conference workshops, led by experts, are aimed to learn more about specific methodological issues.

Tartu is the second largest city of Estonia and one of the oldest university towns in Europe. The University of Tartu was established by King Gustav II Adolph of Sweden in 1632. For centuries, the University has contributed to the transformation of our town into an internationally recognised centre for the exchange of knowledge hosting researchers and students from many countries of the world. Contemporary Tartu unites the spirit of academic peace and rapid development since the regaining of Estonia’s independence in 1992 and becoming a new EU member state in 2004.

We are looking forward to meet you in Tartu!

Marje Oona  
National Representative EGPRN-Estonia.

**MEETING EXECUTIVE BOARD**

**GENERAL COUNCIL MEETING**

**Executive Boardmeeting**  
***Thursday 20<sup>th</sup> October, 2005***

**09.30 - 10.00: Welcome and Coffee for Executive Board**

**10.00 - 12.30: Executive Board members**

**(location : Conference Centre Atlantis, Narva mnt 2)**

**General Council meeting with the National Representatives**  
***Thursday 20<sup>th</sup> October, 2005***

**17.00 - 19.00 : Executive Board members and National Representatives**

**(location : Conference Centre Atlantis, Narva mnt 2)**

## **PRE – REGISTRATION FOR PARTICIPANTS AT PRE-CONFERENCE WORKSHOPS:**

**Thursday 20th October 2005:**

**13.00 – 13.30 h.                      Location: Conference Centre Atlantis, Narva mnt 2**

**For Participants of Pre-Conference Workshops only.**

**For participating at pre-conference workshop Euro 25,=**

**Non-EGPRN-Members are also asked to pay the undermentioned membershipfee.**

### **For non-EGPRN-members:**

**The following payments are requested:**

- ▶ EGPRN Membership fee for 3 years 120 € or congress fee 50 €**
  - Eastern European countries: 45 or 20 €**
  - WONCA direct members: 60 or 50 €**
  
- ▶ Pre-conference workshops: additional 25 €**

**Lunches and coffee breaks are included in the conference packages.**

**Participants who have not paid for the conference package will have to pay an additional fee of 60 € for lunches and coffee breaks.**

**Social night (dinner and dance in Atlantis Restaurant and Night Club): 35 €**

**Please address to EGPRN Registration Desk.**

**PROGRAMME OF THE  
EUROPEAN GENERAL PRACTICE RESEARCH NETWORK  
IN TARTU - ESTONIA**

**THURSDAY 20th OCTOBER, 2005:**

**10.00 - 12.30 :** Executive Board Meeting in: Conference Centre Atlantis, Narva mnt 2.  
(only for Executive Board Members)

**13.30 - 16.45 :** Pre-Conference Workshops (only for participants who have registered beforehand)

Two Parallel workshops on :

1. “Qualitative Studies: how to define a research question and design the study”  
and

2. “Conference Abstracts: how to write a good abstract?”

Location: Conference Centre Atlantis, Narva mnt 2

**17.00 - 19.00 :** General Council Meeting.

Meeting of the Executive Board Members with National Representatives  
(only for Council Members).

Location: Conference Centre Atlantis, Narva mnt 2.

**Social Program:**

**20.00 - ... :** For ALL EGPRN-participants who are present at this time.  
Welcome Reception at Tartu University Meuseum of History, Lossi 25.  
(Entrance Free)

**FRIDAY 21<sup>st</sup> OCTOBER, 2005:**

*Location: Assembly Hall of the University of Tartu, Ülikooli 18*

**08.00 - 08.30 : Registration at EGPRN Registration Desk.**

**08.30 - 08.45 : Welcome.**

**Opening of the EGPRN-meeting by the Chairman of the EGPRN, Prof.Dr. Paul van Royen.**

**08.45 - 09.10: 1<sup>st</sup> Keynote Speaker Prof. Guy Rutten, The Netherlands.  
Theme: "Diabetes Primary Care Research in Europe"**

**09.10 – 09.35: 2<sup>nd</sup> Keynote Speaker Prof. Heidi-Ingrid Maarros, Estonia.  
Theme: "Development and future trends of family medicine in Estonia"**

**09.35 – 10.35 : Themepapers**

- 1. Erwin Klein Woolthuis (The Netherlands)**  
Opportunistic screening for type 2 diabetes using the gp's electronic medical record: the diabscreen study.
- 2. Andreas C. Sönnichsen (Germany)**  
Early Detection of Diabetes mellitus and Cardiovascular Risk in Patients Participating in the Check-up-35 Program of Public Health Insurance in Germany: Evaluation of Risk-adjusted Treatment.

**10.35 - 11.00 : Coffee Break**

**11.00 – 12.30 : Themepapers**

- 3. Kees Gorter (The Netherlands)**  
Increased risk of community acquired respiratory and urinary tract infections and how to predict complicated urinary tract infections in patients with diabetes in primary care.
- 4. Etiënne Vermeire (Belgium)**  
Enhancing adherence to treatment recommendations in type 2 diabetes: a meta-analysis.
- 5. Hilde Bastiaens (Belgium)**  
Implementing a model of shared care for patients with type 2 diabetes in a Belgian region: evaluation of a complex intervention.

**12.30 - 14.00 : Lunch**

**After lunch, the meeting continues with parallel sessions till 17.30 h.**



**14.00 – 15.30 : A. Parallel session Themepapers**

- 6. Jolanda Meeuwissen (The Netherlands)**  
Screening and focussed intervention for comorbid anxiety and depression in patients with diabetes by trained nurses - a pilot study.
- 7. Filippo D'Addio (Italy)**  
Primary Care Management of Type 2 Diabetic Patients in Europe: Differences in Diagnostic and Therapeutic Tools and in GPs' Patients Records in Neighbouring Mediterranean Countries.
- 8. Ozlem Cigerli (Turkey)**  
Type 2 diabetic patients diagnosed in primary care; are they different from follow-up patients?

**14.00 – 15.30 : B. Parallel session Themepapers**

- 9. Pinar Topsever (Turkey)**  
Which is more indicative of different stages of peripheral diabetic neuropathy: glycaemic or haemodynamic control?
- 10. Alain Moreau (France)**  
Difficulties of Adherence Among Type 2 Diabetic Patients in Primary Care.
- 11. Mehmet Akman (Turkey)**  
What do physicians do for IGT or IFG?: knowledge, attitude and behaviours.

**15.30 – 16.00 : Coffee/Tea Break**

**16.00 – 17.30 : C. Parallel session Freestanding papers**

- 12. Johannes Hauswaldt (Germany)**  
Sensation of Alarm during Clinical Encounter.
- 13. Roelf Norg (The Netherlands)**  
Which way to go in the 'gents'? Differences between voiding positions in the elderly male with moderate lower urinary tract symptoms.
- 14. Hay Derkx (The Netherlands)**  
'Can you help me? My baby is sick'. How to assess telephone-communication skills of personel who handles incoming phonecalls in medical centres?

**16.00 – 17.30 : D. Parallel session Freestanding papers**

- 15. Martin Beyer (Germany)**  
An anonymous error-reporting system for general practitioners in Germany.  
[www.jeder-fehler-zaehlt.de](http://www.jeder-fehler-zaehlt.de)
- 16. Marco Zoller (Switzerland)**  
Obesity management: Empowerment of practitioners in a physician-network.

**17. Grainne Ni Uallachain (Ireland)**

The RAMBLER Study: The Role of Ambulatory Blood Pressure Measurement in Routine Clinical Practice.

**18.00 – 19.30 : Meeting of EGPRN Working Groups**

- Research Strategy Committee
- Electronic Website Committee
- Educational Committee

*Location:* Puusepa 1a

*Meeting point:* main building of the University of Tartu,  
Ülikooli 18

**Social Program :**

**18.00 – 19.00 h. :** Practice Visits to local family doctor's practices

*Meeting Point:* main building of the University of Tartu,  
Ülikooli 18

**SATURDAY 22<sup>nd</sup> OCTOBER, 2005:**

*Location: Assembly Hall of the University of Tartu, Ülikooli 18*

**08.35 - 09.00: 3<sup>rd</sup> Keynote Speaker Dr. Hilary Hearnshaw, United Kingdom.**  
**Theme: "Diabetes Research involving psychology and people who live with diabetes"**

**09.00 – 10.30 : Theme Papers.**

- 18. Anneli Rätsep (Estonia)**  
Patients' perspective of the obstacles in adherence to type 2 diabetes treatment.
- 19. Henk van Dam (The Netherlands)**  
Patient-empowerment in terms of patient activation is more effective in improving diabetes care than changing provider behaviour.
- 20. Kay Wright/Hilary Hearnshaw (United Kingdom)**  
Validation of a Questionnaire on Obstacles to Living with Type 2 Diabetes.

**10.30 - 11.00 : Coffee Break**

**11.00 – 12.45 : Posters**  
**In four parallel sessions (4 groups of 5/4 posters)**

**11.00 – 12.45 : Parallel group Posters 1.**

- 21. Jean-Karl Soler (Malta)**  
Diagnosis of diabetes mellitus in Malta. The contribution of patients' reasons for encounter and doctors' interventions to the final diagnosis of diabetes.
- 22. Ferdinando Petrazzuoli (Italy)**  
Inequalities in diabetes control in a rural practice.
- 23. Erwin Klein Woolthuis (The Netherlands)**  
Capillary blood glucose meters are useful in step-wise screening for type 2 diabetes in general practice.
- 24. Pilar Gayoso Diz (Spain)**  
Predictive value of Gestational Metabolic Syndrome for the development of diabetes and vascular risk short and long term in mother and child.
- 25. Nicola Buono (Italy)**  
Diabetes mellitus and Erectil disfunction: What are the most prevalent risk factors in these patients?

**11.00 – 12.45 : Parallel group Posters 2.**

- 26. Ebru Celik Guzel (Turkey)**  
Follow-up Characteristics of a Type 2 Diabetic Patient Population in Primary Care.

27. **Beatriz Pascual de la Pisa (Spain)**  
Diabetologic education for individuals with type 2 diabetes: a systematic review about effectiveness.
28. **Imre Rurik (Hungary)**  
Do our elderly diabetic patients keep the diet?
29. **Moshe Schein (Israel)**  
Treating hypertension in diabetics with device-guided breathing: a randomized controlled study.
30. **Nevenka Vinter-Repalust (Croatia)**  
Who knows more see more.

### 11.00 – 12.45 : Parallel group Posters 3.

31. **Hilde Bastiaens (Belgium)**  
Development and implementation of a self-management education programme for patients with type 2 diabetes in primary care in Belgium.
32. **Teresa Pawlikowska (United Kingdom)**  
Exploring patient enablement in primary care consultations: the patient's view.
33. **Athanasia Papathanasiou (Greece)**  
Assessing the quality of life of patients with diabetes in general practice: a systematic review on disease-specific instruments and published research.
34. **Pemra Ünalın (Turkey)**  
Illness perception in elderly diabetic patients. A qualitative study.
35. **Arzu Uzuner (Turkey)**  
Diabetic patients' perceptions of their illness: Validation of the Turkish brief illness perception questionnaire.

### 11.00 – 12.45 : Parallel group Posters 4.

36. **Beatriz Pascual de la Pisa (Spain)**  
Standard breakfast validity in the Gestational Diabetes diagnosis.
37. **Tatjana Cikac (Croatia)**  
Gp's intervention in changing lifestyle behaviour of adipose patients.
38. **Robert Scully (Ireland)**  
What determines patients' satisfaction with out of hours primary medical care?
39. **Tatjana Cvetko (Slovenia)**  
Self-assessment of family practice organization in Slovenia.

12.45 – 14.00 : Lunch

**14.00 - 14.40 : Chairman's report : Report of Executive Board and Council Meeting.  
Introduction on the next EGPRN-meeting in Denmark/Sweden by the Danish  
and Swedish national representatives.**

**14.40 – 15.30 : 5 One-Slide/Five Minutes Presentations**

- 40. Daniele Kempkens (Germany)**  
Enhancement of decision making and responsibilities in primary care in Germany: new ideas for service delivery for patients with depression – an international perspective.
- 41. Andreas Sönnichsen (Germany)**  
Absolute and Relative Risk - Information as a Basis to prevent Atherosclerosis (ARRIBA): a Decision Aid in Cardiovascular Prevention.
- 42. Patrick Chevallier (France)**  
Evaluation of glycemetic control in patients with type 2 diabetes (T2DM) receiving insulin glargine (glargine) initiated by general practitioners (GPs) – study design from the IMPACT study.
- 43. Gwenola Levasseur (France)**  
Care supply and pathways: a function of local area. A case study in rural western France.
- 44. Filippo D'Addio (Italy)**  
Does the role of gate-keeper of Health Expenditure, entrusted to the General Practitioners, change heavily their distinguishing marks?

**15.30 – 16.00 : Coffee/Tea Break**

**16.00 – 17.30 : E. Parallel session Freestanding papers**

- 45. Johannes Hauswaldt (Germany)**  
Drug use by older patients in general practice and the effect of medication record charts.
- 46. Richard Hobbs (United Kingdom)**  
Survival in patients with prevalent all-cause heart failure and borderline left ventricular asystolic dysfunction: mortality sub-study of the Echocardiographic Heart of England Screening Study (ECHOES).
- 47. Helen Boardman (United Kingdom)**  
Preliminary results from the electronic health indicator data (eHID) project.

**16.00 – 17.30 : F. Parallel session Freestanding papers**

- 48. John Leahy (Ireland)**  
Implementation of European Guidelines in Cardiovascular Disease Prevention – The Irish General Practice Experience.
- 49. Jochen Gensichen (Germany)**  
A RCT on Case Management for patients with Major Depression in primary care in Germany (ISRCTN66386086).

- 50. Kristin Hendrickx (Belgium)**  
Flemish Moslem girls and sexual health.

**Social Program :**

- 20.00 - : Social Night**  
**Dinner and Dance in Atlantis Restaurant and Night Club, Narva mnt 2, Tartu.**  
**Entrance fee: Euro 35,= per person.**

**SUNDAY 23<sup>rd</sup> OCTOBER, 2005:**

*Location: Puusepa 1a, Tartu*

**09.30-12.00 EGPRN Executive Board**

PRESENTATION 1: Friday 21<sup>st</sup> October, 2005  
09.35 – 10.05 h.

THEME PAPER  
Finished Study

TITLE: Opportunistic screening for type 2 diabetes using the gp's electronic medical record: the diabscreen study.

AUTHOR(S): Erwin P. Klein Woolthuis  
W.J.C. de Grauw, W.H.E.M. van Gerwen,  
H.J.M. van den Hoogen, E.H. van de Lisdonk,  
J.F.M.<sup>1</sup> Metsemakers, C. van Weel  
*Department of General Practice, University Medical Centre St Radboud, Nijmegen, The Netherlands*  
<sup>1</sup>Department of General Practice, University Maastricht, Maastricht, The Netherlands

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*Background:* Screening for type 2 diabetes mellitus is recommended in at-risk patients. The GP's electronic medical record (EMR) might be an attractive tool for identifying people at risk for undiagnosed type 2 diabetes during usual care.

*Research question:* What is the feasibility of opportunistic screening for type 2 diabetes using the GP's EMR, and which diabetes risk factors can predict having undiagnosed type 2 diabetes best?

*Methods:* Cross-sectional analysis of the practices' EMR, identifying and labeling all patients aged  $\geq 45$  and  $< 75$  years, not known with diabetes mellitus, with one or more diabetes risk factors derived from the ADA recommendations. During a regular consultation, risk information was checked and retrieved from the patient if missing. At-risk patients and a number of non-risk patients were invited for capillary fasting plasma glucose (FPG) measuring. This was repeated on another day if too high and confirmed by a venous FPG if appropriate.

*Results:* Of 13,581 patients, 28% were at risk for undiagnosed type 2 diabetes according to EMR information. Half of the remaining 72% had at least one risk factor when checked during consultation. About 90% of the at-risk patients invited for FPG measuring returned for the measurement. Within 3,335 at-risk patients and in 430 non-risk patients a first capillary FPG was measured. Ultimately, 3% of at-risk patients and only 0.6% of non-risk patients were diagnosed as having diabetes. Mainly obesity was a good predictor for having undiagnosed type 2 diabetes. A screening model is being developed at the moment.

*Conclusions:* Opportunistic screening for type 2 diabetes using the information stored in the GP's EMR is feasible and much more effective within at-risk patients than in people without diabetes risk factors. Especially patients with obesity are at risk for having undiagnosed type 2 diabetes.



PRESENTATION 2: Friday 21<sup>st</sup> October, 2005  
10.05 – 10.35 h.

THEME PAPER

TITLE: Early Detection of Diabetes mellitus and Cardiovascular risk in Patients Participating in the Check-up-35 Program of Public Health Insurance in Germany: Evaluation of Risk-adjusted Treatment.

AUTHOR(S): Andreas C. Sönnichsen, Muriel Rambeck  
Jona Vandenesch, Norbert Donner-Banzhoff, Erika Baum

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*Background:* Cardiovascular disease is one of the leading causes of morbidity and mortality. In primary prevention public health insurance in Germany encourages participation in a check-up for the detection of cardiovascular risk factors and diabetes every two years from the age of 35 onward. Newer studies suggest that the detection of individual risk factors is not sufficient to predict global risk. Therefore nowadays it is preferred to base treatment on the calculation of global risk by tools like the Framingham risk calculator.

*Research Question:* Does the detection of diabetes and cardiovascular risk factors by the check-up-35 lead to treatment decisions adequate to global risk as calculated by a risk calculator?

*Methods:* In 12 randomly selected surgeries we evaluated retrospectively all consecutive participants in the check-up-35-programme from July 1 to December 31 2004 (> 1500 patients). This screening program includes the measurement of total cholesterol, HDL-cholesterol (if total cholesterol > 200 mg/dl), fasting glucose and blood pressure. Also, a history of cardiovascular events, smoking-status and family history for coronary heart disease are recorded. From these data we calculated global cardiovascular risk using the ARRIBA-tool, an adjusted Framingham-based risk calculator. We then evaluated the medication prescribed in a six months period following the check-up examination.

*Results:* Evaluation of the data shows inadequate prescription of drugs in a high percentage of cases. Overtreatment of patients with low cardiovascular risk can be observed as well as undertreatment of patients already in secondary prevention. Inconsistent drug prescription that is started directly after the check-up and discontinued after weeks or months reveals a lack of patient information and compliance.

*Conclusions:* Drug prescription as well as life style intervention in primary prevention of cardiovascular disease should be based on global risk evaluated by a validated risk calculator rather than single risk factors. In secondary prevention it is necessary to increase awareness of high global risk independent from individual risk factors. Better patient information and shared decision making may improve compliance, consistency of drug prescription and adherence to life style changes.

PRESENTATION 3: Friday 21<sup>st</sup> October, 2005  
11.00 – 11.30 h.

THEME PAPER

**TITLE:** Increased risk of community acquired respiratory and urinary tract infections and how to predict complicated urinary tract infections in patients with diabetes in primary care.

**AUTHOR(S):** Kees J. Gorter, L.M.A.J. Muller, E. Hak, G.E.H.M. Rutten

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University Medical Center Utrecht, The Netherlands  
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*Background:* The association of diabetes mellitus and common infections lacks conclusive and non-biased clinical data. We aimed to determine relative risks of community acquired respiratory (RTI) and urinary tract (UTI) infections in patients with type 1 [DM1] and type 2 [DM2] diabetes mellitus and to develop a prediction rule for complicated UTIs in DM2 patients in primary care.

*Methods:* We compared 705 adult DM1 and 6,712 DM2 patients with 18,911 control patients who had hypertension without diabetes during a 12-month prospective nationwide cohort study in primary care. Outcome measures were episodes of infections of the respiratory tract (RTI) and urinary tract (UTI). Independent risks of infections and their recurrences in patients with diabetes compared to controls were determined by logistic regression analysis (adjusted odds ratio [adj OR], 95% confidence interval [95% CI]). To derive the prediction rule we defined complicated course of UTI (recurrent cystitis, or an episode of acute pyelonephritis or prostatitis) as a combined outcome measure.

*Results:* Upper RTI were equally common in diabetes patients compared to controls. Diabetes patients had a higher risk of lower RTI (adj OR for DM1 1.42; 95% CI: 0.96-2.08 and for DM2 1.32, 95% CI: 1.13-1.53) and UTI (1.96, 95% CI: 1.49-2.58 and 1.24, 95% CI: 1.10-1.39). Risks increased with recurrences of common infections. Independent predictors for a complicated course of UTI (n=179; 3%) were increasing age, male sex, number of physician contacts, incontinence of urine, cerebro vascular disease or dementia and renal disease. The area under the receiver-operating curve (AUC) was high.

*Conclusions:* Patients with type 1 and type 2 diabetes are at increased risk for lower RTI and UTI. An accurate model to predict complicated UTIs in DM2 patients in primary care has been developed. Studies are warranted into tailored management of common infections in patients with diabetes.

PRESENTATION 4: Friday 21<sup>st</sup> October, 2005  
11.30 – 12.00 h.

THEME PAPER  
Finished Study

TITLE: Enhancing adherence to treatment recommendations in type 2 diabetes: a meta-analysis.

AUTHOR(S): Etiënne Vermeire  
Johan Wens, Paul Van Royen  
Y. Biot, Hilary Hearnshaw, A. Lindenmeyer

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*Background:* Research suggests adherence to treatment recommendations is low. In type 2 diabetes, which is a chronic condition leading to serious vascular, nephrologic, neurologic and ophthalmologic complications. It can be assumed that enhancing adherence to treatment recommendations may lead to a reduction of complications.

*Research question:* To assess the effect of interventions for improving adherence to medical treatment recommendations in people living with type 2 diabetes.

*Methods:*

Search strategy

Studies were obtained from searches of, multiple electronic bibliographic databases supplemented with hand searches of references. Date of last search: November 2002.

Selection criteria

Randomised controlled trials, controlled trials, before-after studies and epidemiological studies, assessing changes in adherence to medical treatment recommendations, as defined in the objectives section of the protocol, were included in the review.

Data collection and analysis

Two teams of reviewers independently assessed the trials identified for inclusion. Three teams of two reviewers assessed trial quality and extracted data. The analysis for the narrative part was performed by one reviewer (EV), the meta-analysis by two reviewers (EV, JW).

*Results:* Twenty-one studies assessing interventions aiming at improving adherence to medical treatment recommendations, in people living with type 2 diabetes in primary care, outpatient settings, community and hospital settings, were included. Outcomes evaluated in these studies were heterogeneous; there was a variety of adherence measurement instruments. Nurse-led interventions, home aids, diabetes education, pharmacy led interventions, adaptation of dosing and frequency of medication taking showed a small effect on a variety of outcomes including metabolic control. No data on mortality and morbidity, nor on quality of life could be found.

*Conclusions:* Current efforts to improve or to facilitate adherence of people living with type 2 diabetes to treatment recommendations do not show significant effects nor harms. The question whether any intervention enhances adherence effectively, thus still remains unanswered.

*Points for discussion:*

1. What are the implications of the conclusions of this meta-analysis for GPs?
2. Are systematic reviews/meta-analyses a feasible research method for primary health care?

PRESENTATION 5: Friday 21<sup>st</sup> October, 2005  
12.00 – 12.30 h.

THEME PAPER

TITLE: Implementing a model of shared care for patients with type 2 diabetes in a Belgian region: evaluation of a complex intervention.

AUTHOR(S): Hilde Bastiaens<sup>1</sup>, Johan Wens<sup>1</sup>, Patricia Sunaert<sup>2</sup>  
Luc Feyen<sup>2</sup>, Boris Snauwaert<sup>2</sup>, Jan de Maeseneer<sup>2</sup>  
Paul van Royen<sup>1</sup>, Frank Nobels<sup>3</sup>  
<sup>1</sup> Department of General practice, University of Antwerp  
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*Background:* Diabetes is an important chronic condition with significant associated morbidity and mortality, which can be reduced by effective care. A interdisciplinary approach, sharing responsibility and involvement and education of patients are of major importance in diabetes care.

In Belgium a research project aimed at creating regional diabetes shared care was set up.

*Research questions:*

- Is regional implementation of shared care feasible?
- Does it increase quality of care (evidence based care) and patient satisfaction with care?
- Does it have a positive effect on health status (emotional distress, overall quality of life, Hba1c)?

*Methods:* Controlled trial (July 2004 – June 2006) with a regional complex intervention comprising introduction of a care-manager and 2 community based diabetes educators, development and implementation of a shared care protocol (with a central role for the GP), regional feedback on the quality of diabetes care and patient education. Practitioners and patients participate on a voluntary basis. In the control region usual care continues. Biophysical, psychosocial and process outcomes were collected thru GP registration of patients records, self-administered patient questionnaires (PAID, QUOTE) and by use of existing databases (e.g. laboratory data, health insurance data).

*Results:* A regional interdisciplinary shared care protocol comprising agreement on clinical protocols and structured communication was developed.

At baseline in the intervention region 45 GP's (N= 91) registered 442 patients (in the region N= ± 2300): 51% men, mean age 68, duration 8 years, hba1c 7,4%. In the control region data of 343 patients (N= ± 2050 ) were collected by 30 GP's (N=62):

46% men, mean age 68, duration 7 years, hba1c 7,3%.

Number of patients per GP ranges from 2 to 47.

*Conclusion:* Developing an interdisciplinary shared care protocol seems feasible. Implementation is ongoing. Baseline data are collected and will be presented.

*Points for discussion:*

1. Complex intervention = complex evaluation.

Voluntary participation causes selection bias + Low participation: Can we generalize the results? Can we expect to measure regional improvements based on this selected and 'low number' data?

PRESENTATION 6: Friday 21<sup>st</sup> October, 2005  
14.00 – 14.30 h.

THEME PAPER  
Work in Progress/Ongoing Study

TITLE: Screening and focussed intervention for comorbid anxiety and depression in patients with diabetes by trained nurses - a pilot study.

AUTHOR(S): Jolanda Meeuwissen, C. Van der Feltz-Cornelis  
G. Holleman, J. De Kruif

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*Background:* A high prevalence of 36% of comorbid anxiety and/or depression is found in type 2 diabetes. Less well-being, quality of life, coping behaviour, compliance and diabetes control, and high HbA(1c)-levels and diabetes complications are associated. Recognition and follow-up is often not forthcoming.

*Research questions:* 1) Is screening for anxiety and depressive disorder in diabetes patients administrated by registered diabetes nurses valid?  
2) Is administration of a selfhelp intervention and referral to the General Practitioner (GP) for anxiety and depressive disorder by the nurse for patients with positive screening outcome feasible?

*Method(s):* Study design: Pilotstudy on standardised screening and follow-up intervention by trained nurses and follow-up appointment with GP.

Setting: Dutch region with 5 nurses working with 10 GPs in 5 healthcare centres.

Participant selection: At random 200 patients with diabetes seen by nurses participate in the brief screening by the nurse, and 25 consecutive patients are followed.

Main variables measured: Resulting first 25 positive screens on Koeter & Brink screening interview are validated by a MINI interview assessing the psychiatric diagnosis according to DSM-criteria. The focussed follow-up intervention is evaluated in terms of health status (PHQ) and quality of life (SF36, Euroqol) at 6 months follow-up with 20 completers. Also a process evaluation with nurses and GPs is conducted.

Analysis methods and statistics: Validity compared with the MINI established by t-test. Reliability of the screening interview assessed with Pearson correlations. T-tests conducted on PHQ, MOS-SF36 and EuroQol. Covariables are compliance, implementation level for patients and GPs, and other process indicators.

*Results and conclusions:* Preliminary results will be presented concerning the question whether standardised tools for screening and follow-up by trained nurses establish an improvement in integrated diabetes care.

*Points for discussion at EGPRN:*

1. Recognition of comorbid anxiety and depression and focussed follow-up intervention are not sufficiently integrated in diabetes care. Do attendees recognise this as a problem?

2. In this study the effect of standardised screening and follow-up intervention by trained nurses on health status and quality of life is explored. Do attendees think that these tasks can be successfully carried out by trained nurses and thus integrated in diabetes care?

PRESENTATION 7: Friday 21<sup>st</sup> October, 2005  
14.30 – 15.00 h.

THEME PAPER  
Work in Progress/Ongoing Study

TITLE: Primary Care Management of Type 2 Diabetic Patients in Europe: Differences in Diagnostic and Therapeutic Tools and in GPs' Patients Records in Neighbouring Mediterranean Countries.

AUTHOR(S): Filippo D' Addio, Christos Lionis, Jean-Karl Soler  
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*Background:* Type 2 Diabetes Mellitus (T2DM) is a chronic illness widespread in Mediterranean countries with a high prevalence reported for Malta and Crete. Although very limited, information about prevalence of diabetes and its complications, its diagnostic and therapeutic management, quality indicators registered in GPs' patients records (PR) of primary care populations in different countries is useful to build a common European Health Management System in General Practice.

*Research questions:* 1) Do south European neighbouring countries differ with respect to a) prevalence of T2DM and its complications b) diabetes management c) presence of registered quality indicators for diabetes care in patient records in primary health care?  
2) What clinical outcomes should be used in order to determine whether research results on diabetes morbidity are valid within this Southern European setting?

*Methods:* GP databases in different countries (Turkey, Italy, Greece, Malta, France, Croatia etc.) will be screened for diabetic patient records to calculate the prevalence of T2DM in primary care. Except for sociodemographics (age, gender, education, profession, social security), clinical and disease related data (BMI, waist circumference, A1c, urinary albumin excretion rate (UAER), SBP, DBP, cholesterol and triglycerides, diet and drug management) diabetic patient records will be evaluated for registration of complications and comorbidity with cardiovascular events and mortality. An inter-country comparison of data and evaluation of diabetes management process indicators according to present guidelines (American Diabetes Association: Standards of Medical Care in diabetes – 2004; NCEP-ATP III 2001; ESH/ESC Hypertension Guidelines 2003) is planned. Also, data on physicians' performance and patients' behaviour will be gathered which will serve to identify areas for improvement of management outcomes.

*Conclusion:* The primary outcome of this study will be a quality assessment of T2DM care in general practice of different neighbouring European countries. The second outcome will be a review of quality in patient records in primary health care in the studied settings.

*Relevance to EGPRN:*

1. It is of interest to build a common European Health System in primary care starting from collaboration of GPs living and working in different but neighbouring countries delivering health care to populations with similar health indicators.
2. This paper is expected to start a discussion on the type of information needed in primary care morbidity registration and explore the actions required in building an information capacity in European regions where general practice is a new and growing discipline.

PRESENTATION 8: Friday 21<sup>st</sup> October, 2005  
15.00 – 15.30 h.

THEME PAPER  
Finished Study

TITLE: “Type 2 diabetic patients diagnosed in primary care; are they different from follow-up patients?”

AUTHOR(S): Ozlem Cigerli, Pinar Topsever, Ebru Celik Güzel  
Petek Apaydin, Senem Tangurek, Nihal Aladag  
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*Introduction and Aim:* Early diagnosis of Diabetes Mellitus type 2 (T2DM) by screening risk groups in primary care, enables better metabolic control and delay of complications. This study aims to assess frequency of T2DM diagnoses in primary care and to describe clinical and management characteristics of those patients.

*Research Question:* What is the proportion of type 2 diabetic patients diagnosed in primary care; do patient characteristics of cases with established T2DM diagnosis differ from the ones diagnosed in primary care?

*Materials and Methods:* Records of a cohort of T2DM patients (n=110) registered to a PHC over 3.5 years were screened for this case-control study. Data about sociodemographics (age, gender), metabolic and clinical features (A1c, fasting and postprandial blood glucose (FBG, PBG), total cholesterol, LDL, body mass index (BMI), waist circumference (WC), systolic and diastolic blood pressure) and medical history (reason for encounter, comorbidities) were extracted from the records. Patients were dichotomized according to established (controls) and new diagnosis (cases) of T2DM. Means of groups were compared with independent t test, for proportions, Chi-square test was used.

*Results:* Out of 110 registered T2DM patients, 25 (22.7%, m/f in % 28/72, age 62.8±10.7 years, BMI 30.6 ±4.9 kg/m<sup>2</sup>, WC 96.9±20.1 cm, SBP 143.9±19.9 mmHg, DBP 88.2±9.6 mmHg, 84.0% hypertensive) had been diagnosed in the PHC. According to reason for encounter, all new diagnoses were incidental. Glycaemia was better in cases (FPG 118.7±12.8mg/dl vs. 135.5±37.4mg/dl, p=0,03; PBG 126.0±27.0 mg/dl vs. 175.1±70.7mg/dl, p<0,01) whereas, follow-up lipidemia was better in controls (t.chol 238.0±42.8mg/dl vs. 199.0±37.6mg/dl, p=0.005; LDL 155.5±39.8mg/dl vs.118.8±35.2mg/dl, p=0.004). The groups did not differ with respect to blood pressure values. Therapy of choice for cases was non-pharmacologic (diet and lifestyle changes) whereas, controls were mostly on pharmacotherapy (24.0% vs. 86.0%,  $\chi^2=36,5$ , p<0.001).

*Conclusion:* Nearly one fourth of registered diabetic patients were diagnosed in primary care by screening. Risk factors constituting the rationale for screening, leading to early diagnosis might partly explain the differences in metabolic and management characteristics between new diagnoses and established T2DM cases.

*Points for discussion at EGPRN:*

1. What can be done to promote preventive care and early detection of Diabetes Mellitus for risk groups?
2. What management approach should be adopted in primary care for early detected cases of T2DM with mild clinical manifestation?

PRESENTATION 9: Friday 21<sup>st</sup> October, 2005  
14.00 – 14.30 h.

THEME PAPER  
Work in Progress/Ongoing Study

TITLE: Which is more indicative of different stages of peripheral diabetic neuropathy: glycaemic or haemodynamic control?

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*Background:* Diabetic neuropathy is one of the most feared complications of diabetes, due to its disabling outcome of lower extremity amputation. Tight glycaemic control is the only evidence-based treatment to prevent, delay and ameliorate diabetic neuropathy. Identifying potentially modifiable indicators of diabetic neuropathy is a crucial step for developing new preventive/therapeutic rationales in primary care for this condition.

*Research questions:* Which (modifiable) clinical features characterize different stages of peripheral diabetic neuropathy (DPN)?

*Methods:* All consecutive patients (n=132, male/female 48/84, age 59.0±12.1 years, diabetes duration 9.9±7.3 years, A<sub>1c</sub> 8.3±1.7%) referred to the department of neurology for evaluation of diabetic neuropathy during 3 months were included in this cross-sectional study. DPN was diagnosed and staged according to the criteria of Dyck et al. (stage 0: symptom(-), physical findings (-), electrophysiology (-); stage 1: symptom (+), physical findings (+), electrophysiology (-), stage 2: symptom (+), physical finding (+), electrophysiology (+); stage 3: symptom (+), physical findings (+), electrophysiology(+), at least 1 microvascular diabetic complication except neuropathy (+)). Patients were dichotomized by dividing neuropathy stages according to presence/absence of:

A) peripheral diabetic polyneuropathy (Dyck stage 0 vs. stages 1,2,3)

B) pathology in electrophysiology (Dyck stages 0, 1 vs. stages 2,3)

C) other diabetic microvascular complication(s) (retinopathy and/or nephropathy)

Differences in means of groups (disease duration, metabolic/clinical parameters) were analyzed via Student's *t*-test with a significance level of 0.05 and a 95% confidence interval (CI).

*Results:* Patients were distributed as follows: stage 0:13.6%, stage 1:48.5%, stage 2:19.7%, stage 3: 18.2%. When dichotomized according to A), groups were significantly differing in terms of duration of diabetes (5.0±5.1 vs. 10.7±7.3 years, 95% CI: -9.2 to -2.1 years, *p*=0.002), postprandial blood glucose (175.1±43.9 vs. 210.6±61.7 mg/dL, 95% CI: -65.5 to -5.6 mg/dL, *p*=0.021) and A<sub>1c</sub> levels (7.5±1.8 vs. 8.4±1.7%, 95% CI: -1.8 to -0.4%, *p*=0.041). According to B), groups differed in diabetes duration (8.7±7.1 vs. 11.9±7.2 years, 95% CI: -5.7 to -0.6 years, *p*=0.016). According to C) diabetes duration (9.0±7.0 vs. 14.2±7.6 years, 95% CI: -8.3 to 2.0 years, *p*=0.002) and pulse pressure (54.1±17.0 vs. 62.6±22.8 mmHg, 95% CI: -16.7 to -0.4 mmHg, *p*=0.041) were lower in patients without diabetic microvascular complications, other than neuropathy.



*Conclusion:* Early stages of DPN were associated with glycaemic control, transition to electrophysiological pathology is characterized by an un-modifiable factor like disease duration, in advanced DPN stages, haemodynamic factors (pulse pressure) seem to gain importance.

*Relevance to EGPRN:*

1. Implications for therapeutic approaches in primary care, targeting modifiable variables according to different stages of DPN in terms of prevention, delay and management of this condition can be discussed
2. As this is an ongoing study, what other options than increasing sample size (and thus, power) do we have to further validate the data/results of this study? Suggestions for further statistical analysis/ methods?
3. How valid and applicable are data obtained from high prevalence populations, like in the present study, for low prevalence populations, like generally observed in primary care settings?

PRESENTATION 10: Friday 21<sup>st</sup> October, 2005  
14.30 – 15.00 h.

THEME PAPER  
Finished Study

TITLE: Difficulties of Adherence Among Type 2 Diabetic Patients in primary care.

AUTHOR(S): Alain Moreau, V. Aroles, Y. Zerbib

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*Background:* Adherence to a recommended self care regimen is necessary to avoid diabetes complications. On one hand, type 2 diabetic patients may experience problems to follow the treatment plan recommended mainly because of psychosocial factors. On the other hand, to detect non adherence is a complex task for General Practitioners (GPs).

*Research question:* What are the psychosocial factors and medical outcomes associated with non adherence ?

*Methods:* A cross sectional study was carried out by the Department of General Practice (Lyon University). Each patient fulfilled a questionnaire including self reported Difficulties of Adherence (DIAD medication, diet, exercise), the Hospital Anxiety and Depression (HAD) scale, Health beliefs and perceptions about diabetes. Each GP fulfilled a specific questionnaire including objective medical outcomes and GPs' opinion about the patient adherence level (DEtection of DIAD : DEDIAD).

*Results:* 39 GPs included 587 patients. 521 patients had sent back their questionnaire. 17 % had DIAD medication, 42 % DIAD exercise and 62 % DIAD diet. With cumulated DIAD, 29 % had no DIAD, 31 % moderate DIAD and 41 % important DIAD. For DEDIAD, GPs relied on weight (77%), HbA1C (51 %) and lipid control (30 %) and less on listening to DIAD patients declarations (15%). Concordance between DIAD/DEDIAD was 70%. In multivariate analysis, 6 outcomes were associated with DIAD : age (OR : 0.96 ; CI 0.94-0.98 ; p=0.0014), to live alone (OR 1.86; 1.08-3.21, p=0.02), obesity (OR : 3.48; CI 1.84-6.58 ; p=0.0002), HbA1C>8 (OR : 3.39 ; CI 1.73-6.63 p = 0.0004), depression (OR : 2.54 ; 1.02-6.33; p=0.03), and perception of constraint in taking medication (OR : 1.57 ; CI 1.02-2.42 ; p : 0.04).

*Conclusions:* GP has to listen to type 2 diabetic patients DIAD (especially younger single), their perception of constraint in taking medication and depression. HbA1C and weight are good markers of DIAD.

PRESENTATION 11: Friday 21<sup>st</sup> October, 2005  
15.00 – 15.30 h.

FREESTANDING PAPER

TITLE: What do physicians do for IGT or IFG?: knowledge, attitude and behaviours.

AUTHOR(S): Mehmet Akman  
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*Background:* There is growing evidence that at glucose levels of impaired glucose tolerance (IGT) or impaired fasting glucose (IFG), there is a substantially increased risk of cardiovascular disease (CVD) and death. Type two diabetes can be prevented or delayed by life styles changes of high-risk subjects having IFG or IGT with/without additional cardiovascular disease risk factors.

*Research Question:* The aim of this study is to determine the knowledge, attitude and behavior of physicians about management of IFG and IGT.

*Method:* Target population of this cross-sectional study consists of primary and secondary care physicians providing health care to diabetic patients in one district of İstanbul. Randomly selected sample will be representative for the physicians who are visited by the patients with uncomplicated complaints (untrained GP's, Family Physicians and internists). Study includes two parts: a face-to-face survey and a simulated patient (SP) visit. The survey including questions concerning knowledge and attitudes about IGT and IGF will be answered by physicians. With the given informed consent, physicians will be visited by SPs one day in the next three months. These simulated patients will be educated to simulate a standard patient by the researchers on a standard scenario of a patient with IGT and/or IGF. Immediately after the visit the care given by physician will be evaluated by the SP with CARE (*The Consultation and Relational Empathy*) Measure and standard checklists prepared beforehand.

*Results and conclusion:* The data obtained from initial survey and checklists filled by SPs will be analyzed to make conclusions about the physicians' knowledge, attitude, and behavior that eventually affect the care given to IGT and IFG cases and the patients' perception about the patient-physician relationship. These results may contribute to the possible necessary steps that could be taken in the future.

*Topics for discussion:*

1. What are the musts of such a checklist (and also associated patient scenario) aiming to assess the care given to IGT and IGF patients in primary care by simulated patients (for both content and methodology)?
2. What could be possible ways of sampling when primary care is given by internists, untrained general practitioners and family physicians who are working in both private and government; primary and secondary care facilities if you have no clue about their distribution?
3. How could the results of this study be used to improve the care given to IGT and IFG patients in primary care?
4. What are the musts of simulated patient selection criteria and the education given to them in the content of this study?

PRESENTATION 12: Friday 21<sup>st</sup> October, 2005  
16.00 – 16.30 h.

FREESTANDING PAPER  
Study proposal / idea

TITLE: “Sensation of Alarm during Clinical Encounter”

AUTHOR(S): Johannes Hauswaldt, Eva Hummers-Pradier

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*Background:* During clinical encounter medical professionals may experience a sudden alarming sensation that “something in this situation is quite wrong”. Though often being unable to explain what exactly causes this feeling, internally they are sure in an overwhelming way that this feeling is real, important for understanding the situation, and that further top priority attention, immediate clarification and even massive or emergency action are needed.

Already known: Rules of thumb, simple heuristics, prima vista (first glimpse) as a group of intuitive responses on physician’s side of the shared decision making process, parallel to his analytic-deliberative approach using EbM.

*Research questions:*

To define this sensation and its elements

To describe triggering cues and favourable conditions

To describe frequent outcome (no action; further interrogation; further examination; aborting investigation in favour of emergency intervention; other)

To understand better its value, limits and reliability for the decision making process

*Methods:* Semi-structured single person interviews of physicians, using interview guide lines (Do you recognize the sensation of alarm? Are you able to give examples? What are benefits and danger of this sensation? Where does it come from?)

Focus group interviews for verbal externalisation and rational description of individual concepts

Audio-tape recording, verbatim transcription, coding and classification for comparable concepts

*Expected results:* We intend to define constitutional elements and favourable conditions, also for introduction into medical education.

We aim at further clarification on validity, failure and reliability of this sensation of alarm.

*Questions:*

Is this research relevant to you?

Which parts of it are of special interest to you?

Could you advise on research strategies or useful instruments?

PRESENTATION 13: Friday 21<sup>st</sup> October, 2005  
16.30 – 17.00 h.

FREESTANDING PAPER

TITLE: Which way to go in the 'gents'? Differences between voiding positions in the elderly male with moderate lower urinary tract symptoms.

AUTHOR(S): Roelf J.C. Norg, Piet J.M. Portegijs  
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*Background:* Lower Urinary Tract Symptoms (LUTS) are a common health problem. An increasing number of elderly male consult their general practitioner in early stages of the disease. In such stages surgery or medication are not (yet) appropriate. General practitioners therefore give lifestyle advices as a part of a 'watchful waiting' strategy. However, the efficacy of such non-pharmaceutical interventions, like the advice to void in a sitting position, is hardly investigated.

*Research question:* Which voiding position is best for elderly male with LUTS?

*Methods:* Replicated randomized single case experiment in 21 men with moderate LUTS (International Prostate Symptom Score 8 - 19). The subjects voided 40 times in a uroflowmeter, at random either standing or sitting. For each subject we calculated the difference in maximum urinary flow (Qmax) between both positions. Subsequently, a meta-analysis was performed to calculate the overall difference.

*Results:* The overall difference between voiding positions (QmaxStand - QmaxSit) was 0.53 ml/sec ( $p = 0.014$ ), and ranged from -1.68 to 2.34 ml/sec. The overall effect size therefore is small (3.9%), but ranges from -20% to +30% on an individual level. The correlation between the baseline Qmax and the difference in Qmax between both positions was almost significant ( $r = 0.43$ ,  $p = 0.052$ ). Subjects with impaired urinary flow (<10ml/sec) showed a mean difference of - 0.23 ml/sec versus + 0.92 ml/sec for those with normal urinary flow ( $\geq 10$ ml/sec).

*Conclusion:* The differences in voiding position may be important on an individual level. General practitioners may advise their symptomatic patients with impaired urinary flow to use the 'classic' toilet to void sitting; for those without urinary flow impairment, a standing position often is best (e.g. in a urinal).

*Points for discussion at EGPRN:*

1. Experiences of other GPs with respect to lifestyle advices for patients with LUTS.
2. We have analysed the correlation with baseline maximum urinary flow rate. Which other possible influences (confounders) should we investigate/analyse?

PRESENTATION 14: Friday 21<sup>st</sup> October, 2005  
17.00 – 17.30 h.

FREESTANDING PAPER

TITLE: 'Can you help me? My baby is sick'. How to assess telephone-communication skills of personnel who handles incoming phonecalls in medical centres?

AUTHOR(S): Hay Derkx, Bas Maiburg  
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*Background:* When patients need medical help from a general practitioner during out-of-hours services, they usually firstly need to call a special phonenumber. Here physician-assistants take care of these telephone calls. They assess the degree of urgency and determine the level of care required.

It is essential that these physician-assistants have good telephone communication skills. Surprisingly enough there is no instrument in the literature for assessing the quality telephone communication skills. We decided to develop one.

*Research question:* To what extent is it possible to develop a valid, reliable and practice rating scale to assess the communication skills of 'clinical call handlers'?

*Methods:* The setting is the Netherlands. We held focusgroups with all relevant partners involved (patients, general practitioners, telephone personnel etc) asking for the components of a rating scale for assessing telephone communication skills. This scale was then discussed with experts in this domain. to ensure content validity. The reliability of the list was tested in a pilot in which 10 special trained observers scored 6 telephone calls.

*Results:* The list for the assessment of communication skills in a telephone call contains 17 items, divided over 5 different phases of a telephone consultation. The reliability (internal consistency) of the list tested in the pilot was 0.77 (Cronbach's alpha).

*Conclusion:* A rating list was developed to assess the communication skills of clinical call handlers which meets common scientific demands of validity and reliability. This instrument can be used to give feedback to clinical call handlers. We will now start using this instrument to record the performance of medical telephone services by introducing incognito simulated patients on the phone.

*Points for discussion:* Since this instrument was developed in the Netherlands, we are interested to ask the audience if this instrument can also be used in other European primary care settings and under what conditions?

PRESENTATION 15: Friday 21<sup>st</sup> October, 2005  
16.00 – 16.30 h.

FREESTANDING PAPER  
Finished Study

TITLE: An anonymous error-reporting system for general practitioners in Germany. [www.jeder-fehler-zaehlt.de](http://www.jeder-fehler-zaehlt.de)

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*Background:* Voluntary error-reporting systems play an important role in security-oriented industries and in hospitals to detect safety problems, errors and near misses. The implementation of such a system in primary care seems to be more difficult; to date only three systems exist in Europe (in UK, Switzerland, and – as reported here – in Germany).

*Method:* An anonymous, voluntary, web-based error-reporting system was developed, pilot-tested, and finally implemented in Germany (and Austria) in Sept. 2004. As the success of such a system seems to depend largely on user involvement, particular attention was given to participation. Being an anonymous system for legal reasons, feed-back is given by regular selection of exemplary error reports (report of the week / the month), which can be discussed online, and by publication in German and Austrian GP journals.

*Results:* On average two to four error reports per week are collected; the site is accessed on average by 80 GPs daily. To date of submission 48 exemplary reports have been commented and published on the site; about 300 – often very useful – user-comments are displayed. A preliminary data analysis in February 2005 (85 reports) showed that 55% of the reports concerned near-misses, but another 14% of the reports mentioned moderate to severe patient harm. 55% of the reports related to medication errors. Some problem foci in general practice, e.g. the management of oral anticoagulation, or patients in nursing homes, could be identified.

*Conclusion:* It seems to be feasible to implement a voluntary error-reporting system for GPs and the success seems to depend on efforts for user-involvement and providing feed-back. Participation increases slowly but steadily. Further steps in the dissemination will consist in a closer attachment to peer-review work and in constituting closed user groups to provide confidential feed-back. The system provides heuristic clues for research. (298 words excl. heading)

*Points for discussion at EGPRN:*

- 1) Possibilities and limitations of voluntary error-reporting to increase patient safety in general practice
- 2) Exchange of experiences about several activities in the field of error prevention and patient safety in general practice in the participating countries.

PRESENTATION 16: Friday 21<sup>st</sup> October, 2005  
16.30 – 17.00 h.

FREESTANDING PAPER  
Work in Progress/Ongoing Study

TITLE: Obesity management: Empowerment of practitioners in a physician-network.

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*Background and rationale:* Obesity is a main public health concern and associated with considerable morbidity (like Diabetes Type II) and mortality. In general, treatment for obesity occurs in primary care and means long term weight management. Behaviour modification programmes seem to be a suitable therapeutic choice for this setting but are difficult to implement.

We choose a stepwise approach in an urban physician network to support GPs in their obesity management:

In a first step we implemented a cognitive behaviour modification program for weight loss. A core group of trained GPs acted as therapists (intermediate results after 99 patients: baseline BMI 33.5 kg/m<sup>2</sup>; median weight loss after 1 year: -3.4 kg; IQR 0.7-6.6 kg). In a second step we are examining predictors for successful participation (improvement of efficiency).

Our experiences serve as base for the third step: We plan an intervention to improve obesity management in the physician network as a whole (system intervention).

*Research Question:* What is the influence of a specific intervention program performed in an urban physician network on GP's obesity management patterns?

*Methods:*

*Design:* Prospective, controlled study. *Subjects:* Intervention-Group: GPs of an urban physician network (n = 130). Control-Group: GPs of a comparable physician network (n = 130). *Intervention:* Implementation of information services, training modules, optimised material for consultation and patient information, feedback instruments, and structural improvement of obesity treatment options. *Outcome:* Obesity management patterns of GPs (attitudes, knowledge, skills, practice behaviour). *Procedures:* Baseline assessment (Nov.2005): Anonymous questionnaire for all GPs assessing attitudes, skills and knowledge concerning their obesity management. In 2006: Intervention. Post interventional assessment (Jan.2007): Anonymous questionnaire.

*Discussion:* The study evaluates an intervention in the network system. Challenging tasks are the study design and the construction of a suitable questionnaire assessing change not in patients but in physician habits.

*Points for discussion at EGPRN:*

1. Study design: Ways to enhance comparability of groups?
2. Intervention: Which tools may be rated successful?
3. Questionnaire: How to measure implicit attitudes avoiding effect of social desirability?



PRESENTATION 17: Friday 21<sup>st</sup> October, 2005  
17.00 – 17.30 h.

FREESTANDING PAPER  
Work in Progress/Ongoing Study

TITLE: The RAMBLER Study: The Role of Ambulatory Blood Pressure Measurement in Routine Clinical Practice.

AUTHOR(S): Grainne Ni Uallachain, Andrew Murphy, Gillian Murphy

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*Background:* Ambulatory blood pressure measurement (ABPM) is a useful and important way of guiding clinical decisions in the diagnosis and treatment of hypertension. It has been shown that ABPM devices have a better correlation with end-organ complications than blood pressure levels measured in a clinic setting. Most of the studies on hypertension and the guidelines drawn up have been based on clinic measurements. There has been little research on how ABPM is used, and the associated implications of such use, in the community where hypertension is mainly diagnosed and managed.

*Research Question:* We aim to review the use of ABPM in daily community practice in terms of:

- (a) patient demographics and the confirmation, or not, of the diagnosis of hypertension
- (b) changes in pharmaceutical treatment
- (c) proportion of patients achieving recommended levels and improvement in individual patient blood pressure levels.

*Method:* DABL software is British Hypertension Society accredited ABPM software for the diagnosis and monitoring of hypertension. 7 practices in the west of Ireland using the DABL device for ABPM are recruited in this cross-sectional study. All patients who have had the 24 hour test done over the preceding 12 months are included (n=500). By reviewing the patient records, we record age, gender, pre-ABPM blood pressure level, ABPM result, treatment before and after the test, and subsequent clinic blood pressure readings. The data is then analysed and descriptive statistics are compiled using SPSS.

*Results:* Results will be presented at the conference.

*Conclusions:* Study findings provide important information about the use of ABPM in routine general practice in Ireland. This includes clarification of the role of ABPM as a clinical test and its contribution to daily decision making in the diagnosis and management of hypertension.

PRESENTATION 18: Saturday 22<sup>nd</sup> October, 2005  
09.00 – 09.30 h.

THEME PAPER

TITLE: Patients' perspective of the obstacles in adherence to type 2 diabetes treatment.

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*Background:* Treatment of patients with type 2 diabetes (DM2) is challenge for doctors as well for patients because of the complexity of treatment regime. Different studies present that adherence to treatment of chronic diseases are about 30-75% and therefore outcomes are not reached. It is evident that better disease control reduces the complications of diabetes. Adherence to treatment can be influenced by health care system/medical personnel, essence of the disease, medications and the patient. New biotechnological achievements and treatment methods avail nothing if patient does not adhere to the treatment.

*Research question:* To explore the opinions of patients about their disease, their health beliefs, related to their illness and the obstacles that they encounter in adhering to advised therapeutic regimen.

*Methods:* The study was a part of multi-centred international qualitative study Eurobstacle, which includes additional research questions. In Estonia 5 focus groups were undertaken. Out of one hundred DM2 patients recruited from family doctors' lists and specialist clinics 21 agreed to participate. The same facilitator and observer attended all the meetings which lasted 40-60 minutes. Interviews were audio taped, transcribed and content text analysis performed by two researchers.

*Results:* Knowledge about the DM2 its essence, course and treatment purposes among the participants are insufficient. Patients find the shared information not sufficient and sometimes conflicting. In attitude towards the disease patients express fatalism, indifference and in comparison to other diseases diabetes is considered to be not that serious. In adherence or no adherence to treatment regimen no difference is perceived by patients. Patients do not feel big responsibility of the disease control and as it is chronic and lifelong condition, it is difficult to find motivation to keep the regimen. In doctor-patient relationship doctors tend be critical affecting with it the patients' courage to ask.

*Conclusion:* The emerged themes of focus group discussion analysis were: knowledge of the disease, attitude towards the disease and treatment, relationship with health care provider and complexity of the treatment regimen.

PRESENTATION 19: Saturday 22<sup>nd</sup> October, 2005  
09.30 – 10.00 h.

THEME PAPER  
Work in Progress/Ongoing Study  
Finished Study

**TITLE:** Patient-empowerment in terms of patient activation is more effective in improving diabetes care than changing provider behaviour.

**AUTHOR(S):** Henk A. van Dam, Frans van der Horst

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*Background:* In spite of the achievements of the past decades medical outcomes in diabetes care need further improvement. Up till now emphasis was on care-providers and their professional guidelines. Recently a new trend has emerged, that of patient-empowerment in terms of patient-activation to take their own responsibility in the consult and in daily life with diabetes.

*Research question:* Does patient-empowerment lead to better medical outcomes, as compared to provider-orientated interventions?

*Methods:*

- Criteria based systematic review of diabetes-literature from 1980 till 2001 on interventions of patient-provider interaction in relation to objective medical and/or subjective outcomes in diabetes care, using Medline Embase, Psychlit/Psycinfo and the Cochrane Library, supplemented by cross-referencing literature-search.
- Qualitative research (using NUD\* IST software) on obstacles in living with diabetes and in provider-patient interaction, based on reports of (four) focus group-interviews with patients who have diabetes

*Results:* We identified only a few well-designed studies in which interventions focused on a direct approach of supporting patient-participation (e.g. motivational interviewing methods, systematic patient preparations to diabetes visits, patient-group empowerment courses) were more effective than interventions focused on change of provider behaviour, in medical terms and in terms of quality of life.

Cross-referencing literature give indications that purposefully guiding the diabetical processes in diabetes consultations yield better objective and subjective outcomes; very probably this is a consequence of the invitation to patients to bring in all diabetes-issues they consider to be relevant. The obstacle-study revealed problems patients encounter in daily life and in diabetes care.

*Conclusions:* Patient empowerment in different forms of patient-activation lead to better objective medical and to better subjective outcomes. They seem to meet the obstacles patients with diabetes encounter. More well-designed intervention studies focusing on enhancing patient-participation in diabetes care are needed, also to find out whether empowerment leads to better coping with diabetes in daily life.

*Points for discussion at EGPRN:*

1. How would a patient empowerment group education programme look like?
2. Would you allow lay counselors (trained peers with diabetes) to play a role in systematic patient preparation for diabetes consultations?

PRESENTATION 20: Saturday 22<sup>nd</sup> October, 2005  
10.00 – 10.30 h.

THEME PAPER  
Work in Progress/Ongoing Study

TITLE: Validation of a Questionnaire on Obstacles to Living with Type 2 Diabetes.

AUTHOR(S): Kay Wright<sup>1</sup>  
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*Background:* Past research has demonstrated a positive effect of successful diabetes self-management on health outcome, but adherence to lifestyle changes is difficult for many. The Obstacles and Outcomes (OBO) Study aims to characterise the relationship between perceived obstacles to adherence and health outcome, in people living with type 2 diabetes. From this, clinicians can identify the obstacles causing greatest problems for each patient. We report here the creation and validation of the Diabetes Obstacles Questionnaire, the feasibility testing of gathering health outcome data, and analysis of all the data, for the OBO study.

*Method:* Our previous research (the Euroobstacle Study) identified five themes relating to underlying barriers to patient self-management: diagnosis, knowledge, treatment, communication and motivation. Individual questionnaire items relating to these five themes were generated following a systematic review of the literature. Face validity was established by the Warwick Diabetes Care lay User Group. Questionnaires were distributed in May and June 2005, to 14 general practices across central England. At each practice, 21 consecutive patients with type 2 diabetes were given a questionnaire pack to take home. The pack comprises the Diabetes Obstacles Questionnaire, the validated Problem Areas in Diabetes (PAID) questionnaire the validated ADDQoL, for diabetes related quality of life. Health outcome measurements (HbA1c, BP, weight and lipids) are obtained from the medical records of all respondents. Returns from 210 patients are expected (30% drop-out rate).

*Results:* Criterion validity of the Diabetes Obstacles Questionnaire will be established by comparison with the PAID, and construct validity by comparing the distribution of questionnaire scores with the distribution of HbA1c scores. Internal consistency will be tested using Cronbach's alpha. The analysis will test for relationships between obstacles and health outcomes, including quality of life. Full results will be available at the meeting.

*Future research:* Following refinement and validation of the questionnaire, and testing the feasibility of the method, the OBO study will be conducted in the UK, Belgium and Estonia to characterise the relationship between perceived obstacles to adherence and health outcome, for people living with type 2 diabetes.

*Relevance to EGPRN:* Other self-funded partner countries are invited to join this international study, set in the context of EGPRN. The Diabetes Obstacles Questionnaire will be available for other research studies in diabetes.

PRESENTATION 21: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Work in Progress/Ongoing Study

**TITLE:** Diagnosis of diabetes mellitus in Malta. The contribution of patients' reasons for encounter and doctors' interventions to the final diagnosis of diabetes.

**AUTHOR(S):** Jean-Karl Soler, Inge M. Okkes

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*Background:* Diabetes Mellitus is an important disease in Malta, and the contribution of primary care to the diagnosis of diabetes is often criticised. This study uses the Maltese Transition Project data to study the contribution of patients' reasons for encounter and doctors' interventions, including blood investigations, to the final diagnosis of diabetes in incident cases in family practice.

*Research question:* What is the relative contribution of patients' symptoms and complaints, and family doctors' interventions to the diagnosis of diabetes mellitus in Maltese family practice?

*Method:* The Maltese Transition Project database, collected from the electronic patient records of 8 family doctor practices over four years since 1st January 2001, was used to study the epidemiology of diabetes mellitus in Maltese family medicine. The data on patients' reasons for encounter and doctors' interventions and diagnostic labels was captured, studied and analysed using the International Classification of Primary Care (version 2 electronic; ICPC-2-E) within an episode of care data structure model.

Episodes of care of diabetes mellitus were defined and coded by the family doctors using the ICPC-2-E rubrics T89 and T90. Such episodes of care were also coded with regards to certainty of diagnostic status and as regards to status as a new or pre-existing episode of care (coded as "N" for new and "X" for pre-existing episodes of care). The actual timing of the attachment of a coded diagnosis of diabetes within incident (new) episodes of care of diabetes within the database was identified, and the relationship with patients' reasons for encounter and doctors' interventions determined. The statistical significance of these relationships was determined through probabilistic statistical methods using Bayesian techniques.

*Results:* The relationships between patients' reasons for encounter and doctors' interventions and the diagnosis of new cases of diabetes mellitus within episodes of care, as coded in the doctors' EPR using ICPC-2-E, is described.

The database contains data on 55,359 encounters and 73,907 sub-encounters with 12,227 patients followed up by 8 family doctors over the four-year period from 1st January 2001. 450 episodes of care of type I or type II diabetes mellitus were recorded (398 [88%] type II, 52 [12%] type I), of which 100 (22.2%) were new and presented for the first time to the family doctor during the four year registration period. The reasons for encounter and history of presenting complaint for all new episodes of care of diabetes are listed in table 1 below.

It is evident that a minority of episodes involve the specific complaint that the patient believes that he/she has diabetes (rubric T90 expressed only 5 times) and/or the reason for encounter that a specialist has provided relevant diagnostic information (rubric \*61 expressed 10 times) possibly contributing to the diagnosis of diabetes. In the majority of episodes of care, the associated reasons for encounter involve the results of blood tests, typical symptoms, or the initiative of the GP/FD. Probability analysis will be used to indicate the probability that the various elements make a contribution to the final diagnosis. From preliminary analysis it seems that the GP/FD takes the lead in making the diagnosis of diabetes in most incident cases in primary care, based on symptoms, signs or test results.

*Conclusions:* The contribution of these factors to the final diagnosis is outlined, and specific conclusions are postulated.

*Points for discussion at EGPRN:*

1. Discussion of the use of the ICPC within EPR to study diagnostics within GP and FM
2. Discussion of the statistical analysis
3. Discussion on the generalisability of these results, or the potential to expand this project

Table 1. RfEs/history for new episode title T89, T90 (n=100)

	Code	Label	Total
1	*60	Result test/procedure	21
2	*34	Blood test	18
3	*62	Administrative procedure	12
4	*61	Result exam/test/lett oth provider	10
5	*64	Encounter/prob initiated by provider	9
6	*35	Urine test	8
7	U02	Urinary frequency/urgency	7
8	T90	Diabetes non-insulin dependent	5
9	T01	Excessive thirst	4
10	T08	Weight loss	4
11	*45	Observ/health educat/advice/diet	2
12	A91	Abnormal result investigation NOS	2
13	N17	Vertigo/dizziness	2
14	A98	Health maint/preventive medicine	2
15	D10	Vomiting	2
16	*31	Medical examin/health eval partial	1
17	P12	Bedwetting/enuresis	1
18	L17	Foot/toe symptom/complaint	1
19	A04	Weakness/tiredness general	1
20	*65	Enc/prob init by other than pt/prov	1
		Total	121

PRESENTATION 22: Saturday 22<sup>nd</sup> October, 2005  
11.00 - 12.45 h.

POSTER  
Finished Study

TITLE: Inequalities in diabetes control in a rural practice.

AUTHOR(S): Ferdinando Petrazzuoli, Francesco Carelli, Nicola Buono  
Filippo D'Addio, Fausto Scalzitti, Maria Carmela Castellano  
Stefano Di Sorbo, Giuseppe Di Sorbo, Luigi Ponsillo

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*Background:* In diabetics optimal glucose control reduces the risk of complications. People in higher social classes with higher educational level have better chances for maintaining good health but this has never been demonstrated in a rural setting in Italy.

*Research question:* Is educational level a factor which seriously affects the care of diabetics in a rural practise in Italy?

*Methods:* The setting of our study is a rural practice in the Province of Caserta. Data were collated from the electronic lists of diabetic patients (Type II) of 6 family doctors for a total of approximately 450 diabetics. The patients were divided in two groups according to their educational level. The level of glycated haemoglobin A1c (HbA1c) as an indicator of good control of diabetes mellitus was measured. The optimal target for our patients was: HbA1c < 7.0% . A sample of 150 of these diabetics was considered, in order to reduce costs, and to make the study easy to carry out. Epi Info ® (Epi3.3) and SPSS 11® was used to perform statistical tests. Statistical methods included bivariate distribution tables, odds ratio with its confidence interval and chi square test (X<sup>2</sup>).

*Results:* Out of 150 diabetics, 84 were female (56%) and 66 were male (44%). 84 (56%) belonged to the low-educational level. In 72 diabetics (48%) the level of HbA1c was out of range. There was a clear relationship between low educational level and poor control of diabetes (Odds ratio =4.80 (95% CI: 2.37-9.68) chi square=20.28 p<0.01).

*Conclusion:* Our study confirmed the association between low educational level and poor control of diabetes. An educational campaign towards low educated diabetics should be introduced by our local health authority.

*Points for discussion at EGPRN:*

1. Research methods
2. Relevance of the study.

PRESENTATION 23: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Finished Study

TITLE: Capillary blood glucose meters are useful in step-wise screening for type 2 diabetes in general practice.

AUTHOR(S): Erwin P. Klein Woolthuis  
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*Background:* Capillary blood glucose meters are practical and userfriendly, and could therefore be suitable for screening for type 2 diabetes in general practice. However, although these devices are accurate enough for self-monitoring, their single use in screening is not advised.

*Research question:* Is it possible to increase the validation of capillary blood glucose meters in screening for type 2 diabetes when a step-wise protocol is applied?

*Methods:* As part of a type 2 diabetes screening programme in 11 Dutch general practices (n=49,229), patients at risk for undiagnosed type 2 diabetes were screened during usual care measuring a capillary fasting plasma glucose (FPG1). This was repeated on another day if >6.0 mmol/L. In case of a second capillary FPG (FPG2)  $\geq 7.0$  mmol/L, or FPG2 6.1-7.0 mmol/L and FPG1  $\geq 7.0$  mmol/L, this was followed by a laboratory FPG measurement in a venous sample (venous FPG) immediately taken after the second capillary measurement.

*Results:* In 126 patients, all three measurements were performed (mean FPG1 8.5 mmol/L, mean FPG2 8.1 mmol/L, mean venous FPG 8,4 mmol/L). For FPG2 and venous FPG, the correlation coefficient r was 0.90 (p<0.0001). The mean difference (venous FPG minus FPG2) was 0.32 mmol/L (95% CI 0,14-0,50; limits of agreement -1,70 to 2,33 mmol/L; p<0,001). Compared to a venous FPG  $\geq 7.0$  mmol/L (the cut-off value for diabetes mellitus), the positive predictive value of the first capillary FPG test was 75%. This was increased to 82% after combining the result of the first and second FPG test.

*Conclusions:* Using a step-wise screening protocol including two capillary blood glucose measurements followed by a venous measurement if appropriate, the capillary blood glucose meter is well applicable in screening for type 2 diabetes in general practice.



PRESENTATION 24: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Work in Progress/Ongoing Study

**TITLE:** Predictive value of Gestational Metabolic Syndrome for the development of diabetes and vascular risk short and long term in mother and child.

**AUTHOR(S):** Beatriz Pascual de la Pisa, Pilar Gayoso Diz  
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*Background:* The Gestational metabolic syndrome (MSG) is diagnosed with the presence of gestational diabetes or impaired glucose tolerance during pregnancy plus two of these criteria: pregestational obesity, hypertension, hipertriglyceridemia and HDLc lower 40mg/dl. MSG has been related with obesity and vascular risk factors in mothers and hers children

*Research question:* Can women with MSG develop Diabetes or Impaired Glucose Metabolism after childbirth, such as Obesity, Vascular Risk factors (Dislipemia, Hypertension)? 2. Do hers children have increased the incidence of Obesity, dislipemia and alterations in glycaemia and blood pressure levels?

*Method:* DESIGN: Cohort study. SUJECTS: 20 Primary Care Health Centres will be involved, in relation to Spanish Primary Care Research Network on Preventive Activities. Study cohort (sample=980): women with MSG and and their children. Control cohort (sample=980): Women without MSG and heir children. Consecutive sampling. MEASUREMENTS: MOTHER: after childbirth and annually, we carry out a 75 gr-OGTT, and lipids, insulin levels, blood pressure, weight, waist/hip ratio, tobacco levels among smokers, nutritional survey. CHILD: after birth and annually weight, height, blood pressure, nutritional survey. Other confounding and predictor factors will be considered : socio-economic status, genetic factors, nutritional survey, lactation period...We carry out a genetic analysis of insulin resistance, at basal time in mother , father and child. FATHER: At the beginning of the study genetic analysis, anthropometrical measures and risk vascular factors determination. The endpoint outcome will be Diabetes and Metabolic Syndrome incidence in mothers, and Obesity and glycemic, lipidic and tensional alterations in children. Financial resources: ISCIII (redIAPP G03/170).

*Results:* This project is ongoing and finish approximately about three years.

*Conclusions:* It is possible to start of multicenter and multidisciplinary research project about diabetes in primary care. We hope this research project clarify the consequences of MSG and help to design prevention programmes before, during and after pregnancy.

*Points for discussion at EGPRN:*

1. Significant questions to consider before the beginning a multicenter research project in primary care.
2. The management of gestational metabolic syndrome in primary care.

PRESENTATION 25: Saturday 22<sup>nd</sup> October, 2005  
11.00 - 12.45 h.

POSTER  
Finished Study

**TITLE:** Diabetes mellitus and Erectil disfuntion: What are the most prevalent risk factors in these patients?

**AUTHOR(S):** Nicola Buono, Alfonso Sauro, Filippo D'Addio  
Ferdinando Petrazzuoli, Pietro Lo Greco  
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and ED study group

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*Background:* Erectile Dysfunction (ED) is a very common disease: 13% of males aged 45-50 are affected and 322 millions are expected to be affected by the year 2025. So far very little is known regarding the differences between male diabetics with and without ED.

*Aim* of this study was to evaluate the ED prevalence in a population aged 25-75 and to identify the risk factors of ED present in subjects with diabetes mellitus.

*Methods:* 22 GPs, caring about 28.512 pts (13.446 males), were involved in this study. All the males aged 25-75 years attending the GPs office were investigated for ED. Symptomatic patients for ED were enrolled in the study and they were asked to answer the IIEF questionnaire.

*Results:* 688 pts out of 2519, 25-75 years old, suffered from ED according to the IIEF questionnaire. Patients with Diabetes mellitus were 385(15.3%)and 258(67.0%) suffered of ED.

These Risk factors were found: Coronary heart disease (CHD) 215(55.8%);(OR=11.4;95% IC 6.8-19.1); Depression 147 (38,2%;OR=9.4;95% IC 5.1-17.6);Smoke 177(46.0%;OR= 4.0; 95% IC 2.5-6.5); Hypertension 223 (57.9%;OR=1.0; 95% IC 0.6-1.6); Peripheral Vascular disease (PVD) 115 (15.7%);(OR=243.4; 95% IC 33.4-1770.9);Hyperthyroidism 48(12.5%; OR=3.9; 95% IC 1.6-9.5), Obesity 171(42.8%;OR.0.3 IC95% 0.2-0.5).

Patients without Diabetes were 2134 and their risk factors were: CHD 367(17.2%;OR=8.6; 95% IC 6.7-11.1); Depression 274 (12.8%;OR=32.0; 95% IC 23.0-44.5); Smoke 992(46.5%;OR=1.1 95% IC 1.1-1.7); Hypertension 688 (32.2%;OR=6.4; 95% IC 5.1-8.1); Peripheral Vascular disease 211 (9.9%; OR=14.8; 95% IC 10.7-20.5);Hyperthyroidism 59(2.8%;Chi square 240.4,P<0.00001), Obesity 734( 34.4%;OR 1.8 IC 95% 1.4-2.2)  
The presence of 2 or more of the risk factors greatly increased the risk of ED.

*Conclusions:* ED prevalence is still underestimated. In diabetics a lot of other serious risk factors are very frequently present, in particular Depression, Smoke, PVD and Obesity. The reason behind that is still unknown.

*Points for discussion at EGPRN:* Research methods. Relevance of the study.

PRESENTATION 26: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Finished Study

TITLE: “Follow-up Characteristics of a Type 2 Diabetic Patient Population in Primary Care”

AUTHOR(S): Ebru Celik Guzel, Ozlem Cigerli, Muge Filiz  
Senem Tangurek, Petek Apaydin, Nihal Aladag  
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*Background:* As most of diabetes cases are diagnosed and followed-up in primary care, quality of diabetes care in this setting is of major importance. This study aims to evaluate the course of 3,5 years of diabetes care in a primary health care center (PHC) in Değirmendere, Turkey. Research question: What are the follow-up characteristics for type 2 diabetic patients in primary care in the studied setting?

*Methods:* For this descriptive, retrospective cohort study, all medical records of a PHC between January 2002 and July 2005 were screened for diabetic patient files, which were evaluated for 1) sociodemographic parameters, 2) metabolic/clinical (HbA1c, urinary albumine excretion rate (UAER), lipidemia (LDL), blood pressure, diabetic complications, comorbidities) and 3) health care utilisation characteristics (number and interval of follow-up visits). HbA1c<7% and SBP<130mmHg and/or DBP<80mmHg, UAER<30mg/day, and LDL<100mg/dl were considered normal. Descriptives were presented as mean±SD, % or median (range).

*Results:* Out of 1178 registered patients, 118 (10.0%) were type 2 diabetic. Patients (male/female in %=30.5/69.5, age 63.7±10.5 years (range 37-88), diabetes duration 2.99 years (range 3 months-30 years), HbA1c 7.2±1.6% (range 4.7-11.7), diabetic complication(s)≥1:18.2%, hypertensive:10%) had a mean follow-up duration of 9.6 months (range 0.13-39.0). Mean control frequency throughout the studied period was 8.5 times (range 2-52) and mean control interval was 0.7 months (0.1-5.8) per patient. Over one third (35.5%) of the patients were evaluated for eye complications, 31.0% for neuropathy, 100% for blood pressure, 73.6% for UAER, 57.8% for HbA1c and 96.4% were checked for lipidemia. HbA1c was normal in 57.8%, UAER in 51.8%, LDL in 15.5%, and blood pressure in 13.6% of patients screened, respectively.

*Conclusion:* Diabetes prevalence in the studied primary care setting was similar to the reported figure for the Marmara region (TURDEP: 9.1%). Although, all diabetic patients in the studied setting were scheduled for screening of diabetic complications and furthermore, follow-up intervals were satisfactory, the proportion of patients screened, as well as metabolic and clinical outcomes of follow-up and therapy still need to be improved.

*Points for discussion at EGPRN:*

1. How can we define the prevalence of T2DM in primary care settings without gate-keeping function?
2. How can we enhance patient compliance with respect to screening for diabetic complications?
3. What can be done to improve therapy and follow-up outcomes for T2DM patients in primary care?

PRESENTATION 27: Saturday 22<sup>nd</sup> October, 2005  
11.00 - 12.45 h.

POSTER  
Finished Study

**TITLE:** Diabetologic Education for individuals with type 2 diabetes: a systematic review about effectiveness.

**AUTHOR(S):** Diego Núñez García, Beatriz Pascual de la Pisa  
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*Background:* Diabetes Mellitus (DM) is one of the most prevalent chronic diseases in the world. Currently, diabetologic education (DE) is considered to be a necessary tool in approaching this disease, both in terms of preventing DM and avoiding its complications. We do not yet fully know the effectiveness and efficiency of such educational interventions in diabetes.

*Research question:* we propose to value the quality evidence about DE on health outcomes (mortality, morbidity and quality of life) in DM2 patients.

*Method:* MESH: Non-insulin-dependent, Diabetes Mellitus, Health education. Database: MEDLINE (Pubmed 1966-march2003), Cochrane Library (on-line), CINHALL(1982-march 2003), only papers published in the medical literature in English and Spanish language. Furthermore, we have reviewed journals of relevance for diabetes and primary health care: Diabetes Care, Diabetic Medicine, and Atención Primaria. Inclusion criteria: controlled clinical trials (CCT), meta analysis, systematic review on individuals with DM2 or adults with diabetes and sample size greater than 50 patients.

*Results:* Of the 285 studies that were found following the search parameters, 41 achieved the inclusion criteria. Five systematic reviews were found. Analysis of existing studies indicates the improvement is statistically significant in terms of metabolic control, dietary habits, physical activity, cardio vascular risk factors, quality of life, knowledge and reduces foot problems (amputations and ulcers). Also, ED increase in frequency, accuracy, and reliability of self-monitoring of capillary blood glucose. (all variables  $p < 0.05$ )

*Conclusions:* ED can be consider as a useful tool for improving health outcomes: decreasing ulcers and amputations, improving quality of life and psychological state, and decreasing number of hospital admission. We do not have conclusive findings on the effectiveness of DE in terms of others morbidity causes, mortality, type of ED or who imparts it. These findings should motivate health care professionals to make use of educational methods in their daily practice to improve the health of their patients.

*Points for discussion at EGPRN:*

1. analysis of the ED effectiveness about different methods of intervention (individual versus group), types of professionals, methods of reinforcement, and analysis of costs.
2. Primary care: a place to diabetologic education researching.

PRESENTATION 28: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Finished Study

TITLE: Do our elderly diabetic patients keep the diet?

AUTHOR(S): Imre Rurik

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*Background:* Diabetes mellitus is one of the most common and serious illness in the general practices. The general practitioners have many possibilities giving better services for patients.

*Research question:* The general practitioners have often only limited information's how is the recommended life style modifications and medical nutritional therapy, commonly called diet followed, by their patients.

*Method:* Evaluation was performed in a Hungarian primary care setting (general practice) on nutritional habits of diabetic and non diabetic elderly people. The population of 247 persons (71 diabetics and 176 non diabetics) were selected consecutively from primary care patients in Budapest, focusing to nutritional habits, some anthropological parameters and life style elements.

*Results:* Except body height, all of registered anthropometrical parameters were higher by diabetics, mainly overweighted and obese. Diabetic women had higher; men had lower body weights in their youth. The greatest weight gains were registered between 50 - 60y. People educated only in primary school represented a greater proportion among diabetics. People with higher BMI have eaten less frequently than people in the normal BMI range. The numbers of daily meals were higher by diabetics, but that proved to be significant only on weekends and holidays. There were only minimal differences in the answers of questionnaire concerning food choices and food frequency. More frequent use of fats was observed among diabetics. Only the consumption of fish, vegetables and some cold cut products were slightly more frequent among diabetics. The time spent with physical activity was low in general, especially by diabetics. In the study population the differences in the diet proved smaller than it was expected and recommended. The self judgement showed that only 49% of diabetics kept their eating habit as healthy, versus 63% of non-diabetics. The food choices were modified also by the economic situations of patients.

*Conclusion:* The result suggests that the majority of elderly diabetics did not pay enough attention to correct diabetic diet; therefore they should be controlled more closely by primary care staff.

*Points for discussion at EGPRN:*

1. Are they existing valid recommendations for diabetic diet?
2. Which way could it be controlled by the primary care staff?
3. Do these recommendations modified by use of medication?

PRESENTATION 29: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER

**TITLE:** Treating hypertension in diabetics with device-guided breathing: a randomized controlled study.

**AUTHOR(S):** Moshe H Schein<sup>1</sup>, Ariela Alter<sup>2</sup>, Benjamin Gavish<sup>2</sup>  
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**Objective:** To assess the efficacy of device-guided breathing to lower blood pressure in diabetic hypertensives.

**Design and Methods:** A randomized controlled study carried out in an urban family practice clinic in Israel. Non-insulin dependent diabetics with uncontrolled blood pressure, receiving antihypertensive therapy or unmedicated, were enrolled. The intervention group used a device (RESPeRATE, InterCure Ltd, Israel), which interactively guides the user towards slow and regular breathing by synchronizing breathing voluntarily to musical tones, for 15-minutes daily at home for an 8-week period. The control group continued with their regular treatment. Blood pressure (BP) was measured in the clinic at baseline, after 4 weeks and at termination at 8 weeks. Medication was unchanged for 3 weeks prior to and during the study period. The main outcome measure was the office BP change from baseline to the end of the 8-week period.

**Results:** Baseline characteristics of 31 patients (15 treatment and 16 controls), 19M/12F were: age 64±9 years (mean ± SD); BMI 28±8 kg/m<sup>2</sup>; 28/31 receiving antihypertensive medication, BP 146±10/81±8mmHg and heart rate 73±10 bpm. The difference in BP change between the treatment and control groups was significant for systolic BP (SBP) -8.4 vs +4.7 mmHg,  $p=0.007$  for comparison between groups. Greater systolic BP reductions were found to be significantly correlated with older age in the treatment group ( $p<0.01$ ), while there was no such dependence in the control group.

BP value at start and end of study (mean±SE in mmHg)						
	TREATMENT			CONTROL		
	START	END	p-value	START	END	p-value
SBP	146.9±2.8	138.5±3.8	0.003	145.0±2.5	149.7.1±4.5	N.S.
DBP	81.7±2.3	78.9±3.5	N.S.	80.4±1.6	78.5±1.7	N.S.

**Conclusion:** Self-treatment with device-guided breathing at home for 2 months by non-insulin dependent diabetic patients was associated with a significant reduction in office systolic BP.

PRESENTATION 30: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Finished Study

TITLE: Who knows more see more.

AUTHOR(S): Nevenka Vinter-Repalust, Goranka Petricek  
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*Background:* Diabetic patients' health care is complex, continuous, and demands general practitioner's specific skills and approach.

Research question: To explore and determine factors that affects quality of health care for diabetic patients' provided by GP, with emphasis on GP's characteristics.

*Methods:* Within the “Health monitoring project” led by Netherlands Institute of Primary Health Care (NIVEL) in collaboration with the Department of Family Medicine, “Andrija Stampar” School of Public Health, Zagreb Medical School, data on 3065 diabetic patients under the care of 58 GPs from different areas of Croatia were collected. In addition, data on participating GPs' professional characteristics, their organisational skills and work habits were collected. In statistical analysis we used the factor model analysis and logistic regression.

*Results:* Out of 3065 patients, in 1044 (34.1%) diabetes lasted 1-5 years, in 990 (32.3%) 6-10 years, and in 1031 (33.6%) 10 years or more. In 1532 patients (49.8%) diabetes complications were recorded. GPs had an average of 53 diabetics in their population, average prevalence being 33.21%.

The average age of participated GPs was 45 years, work experience was 23 years, they cared for the same population for 17 years and had around 1600 patients in their care. In 1999, GPs had an average of 52 office encounters and 4 house calls per week. During the last 10 years they've published, 4 to 5 papers each.

Longer GPs working experience, as well as longer work with the same population, vocational training, and programmed care for diabetic patients showed as predictors of earlier diabetes complications finding. Further more, making team decisions and number of publications proved to be a predictive factor, which reduced occurrence of diabetic complications.

Conclusion: Success in improving diabetes health care is associated with longer working experience, good relationship with patient, good team work, better GP education and GP research activities.

*Relevance to EGPRN:* This is one of the seldom studies in Croatia that assess the quality of care of diabetic patients relating to the various professional characteristics of GP, and their organisational skills and working conditions. These elements could be considered within “core value” for curriculum of vocational training in Family Medicine.

*Points for discussion:*

1. Multinational collaboration in the future?

PRESENTATION 31: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER

**TITLE:** Development and implementation of a self-management education programme for patients with type 2 diabetes in primary care in Belgium.

**AUTHOR(S):** Hilde Bastiaens<sup>1</sup>, Johan Wens<sup>1</sup>, Patricia Sunaert<sup>2</sup>  
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*Background:* Patients with chronic diseases like diabetes must self-manage their illness on a daily basis. How patients actually do this has a great impact on their overall health and well-being.

Self management education is considered an integral part of diabetes care.

As part of a research project on shared care, a regional structured education programme for patients with type 2 diabetes is being developed and implemented in primary care.

*Research questions:*

- Is structured education in primary care feasible?
- Does the programme increase the patient's perception of the importance of his own role?
- Does the programme have a positive effect on health status (emotional distress, Hba1c, BMI)?

*Methods:* Prospective longitudinal study (October 2004 – June 2006).

An individual empowerment based education programme focussing on increasing knowledge, motivation and decreasing diabetes related psychosocial distress was developed.

The GP refers patients for education, provided by two diabetic nurses in a primary care setting.

The standard education package contains 3 sessions (total of 2hours). This can be increased or decreased depending upon the individual patients needs.

Patient's perception of his own role (newly developed scale), emotional distress (PAID) and Hba1c/BMI are measured at the start of the education and after education has finished.

*Results:* One third of all GP's in the region (N=30) referred patients for education. At this moment, 81 patients were educated. Mean age of this group is 64 ( $\pm 10$ ), 51% are male and ¼ is single. On average people were diagnosed with diabetes for 6 years ( $\pm 5$ ) when they started the education programme. Mean Hba1c is 7,5 ( $\pm 1,4$ ), mean BMI is 29 ( $\pm 6$ ). The number of sessions per patients ranges from 1 to 5.



*Conclusion:* Implementation of a self-management education programme for patients with type 2 diabetes in primary care in Belgium seems feasible. First reactions are positive.

*Points for discussion:*

1. We would like to compare this results to the results of a control group. As control group we would match the patients who were educated with patients in the region who were not. Could we do this? If we match, on what parameters?
2. 2300 diabetics in the region – 81 educated = success? How increase participation?

PRESENTATION 32: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Ongoing Study

TITLE: Exploring patient enablement in primary care consultations: the patient's view.

AUTHOR(S): Teresa Pawlikowska\*, Frances Griffiths\*  
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*Background:* The patient enablement instrument (PEI) was developed as a patient-driven questionnaire reflecting a patient-centred approach. It relates the patient's assessment of needs, process and outcome as "patient enablement". The post-consultation PEI questions cover the change in patients' ability to cope and understanding of their problem. This study explores nature of "enablement" from the patient's view.

*Method:* Consecutive adult patients attending three volunteer UK general practitioners were given the PEI. Consenting patient's consultations were videoed. Eighty-one patients with high or low scoring consultations were followed up with a semi-structured interview, once they had viewed their index consultation to aid recall. Interviews were audio taped and transcribed verbatim.

The transcripts of audio-taped patient feedback for index consultations were analysed thematically, using a coding framework informed by known correlates of PEI and emergent themes derived from the interviews. The coding framework was constantly reviewed and modified in order to capture the full range of data deemed relevant to answering the research question.

*Results:* Patients valued continuity and a trusted doctor with whom they had an established relationship: "my doctor". They appreciated being treated as individuals and valued joint management decisions. They welcomed talking in a relaxed atmosphere, to a doctor who listened, even if the consequence was an increased wait. Patient's personality and previous experience also influenced outcome. Enablement occurred when their agenda was fulfilled, or when the patient felt they had moved forward as the result of the consultation. Enablement was low when the patient recognised their problem was "routine", or closure could not be achieved.

*Conclusions:* Having an established relationship with a trusted doctor who listens and has time facilitates patient enablement. Enablement occurred when patients felt they had moved forward in terms of understanding or coping. The type of problem and patient views and experience influenced enablement. Patients themselves recognised this.

PRESENTATION 33: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Work in Progress/Ongoing Study

**TITLE:** Assessing the quality of life of patients with diabetes in general practice: a systematic review on disease-specific instruments and published research.

**AUTHOR(S):** Athanasia Papathanasiou  
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*Background:* There is a growing interest in current literature on quality of life (QOL) issues and frequently policy makers and health planners are focusing their approach on it. QOL has also been seen as an important health outcome, representing the ultimate goal of all health interventions.

*Research questions:*

- (a) To what extent questionnaires relevant to QOL in diabetes mellitus (DM) are currently used in the literature?
- (b) To what extent questionnaires relevant to QOL in DM have been used to General Practice (GP)?
- (c) What criteria could be used in order to select the appropriate instruments for specific populations and local conditions?

*Method:* Systematic review to the following databases: PubMed, EMBASE, Cinahl, MednetHELLAS and QOLID was used to identify instruments that assess the quality of life and its multidimensional constructs. Instruments were included in the review if they were: disease-specific for DM, patient-assessed and if they have been evaluated for adult patients. We looked also for papers, which were implementing research with the use of QOL instruments in the field of general practice/ family medicine, and to that purpose PubMed was searched.

*Results:* Sixty instruments met the inclusion criteria. Forty of them focus principally on patient's well-being in physical, psychological and/ or social functioning, while ten of them assess treatment satisfaction and ten evaluate patient's knowledge, attitudes and beliefs. \* However only a few publications (nineteen references in Pubmed) are held by GPs. Ten of them come from the United Kingdom and the Netherlands. In Greece limited information concerning the assessment of the QOL in DM was found.

*Conclusions:* The number of instruments that have been developed in the literature to assess the QOL in patients with DM is overwhelming. However the concept of selecting the appropriate instrument for each study remains ambiguous and poorly defined. Consequently there is a room for discussion regarding the selection criteria that could be used from GPs in order to achieve a multidimensional measurement of QOL.  
(word count 322)

*Points for discussion at EGPRN:*

1. We anticipate a general discussion on the methodology, which should be followed by GPs in order to select the most appropriate instruments for primary care.

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2. This paper also conveys an invitation to GPs from other countries in order to explore a potential partnership across Europe with the aim of making available a network of GPs with specific interest in understanding and effectively evaluate the quality of life of patients with DM.

PRESENTATION 34: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER

**TITLE:** Illness perception in elderly diabetic patients. A qualitative study.

**AUTHOR(S):** Pemra Ünal, Arzu Uzuner  
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*Background:* Except for comorbidities, complicating diabetic control in the elderly, motivation and understanding of the disease also affects patient compliance. Knowledge about perception and needs of patients will attenuate primary health care professionals' performance and thus, the quality of diabetes care.

*Research question:* What are the beliefs that affect the management of diabetes? Is there any thing that can be changed to make the patient "better"?

*Methods:* Twenty four patients over 60 years of age, upon informed consent, were included in four focus groups. A questionnaire assessed information about the patients and their illness. Focus group discussions were structured with five questions; patients' feelings at time of diagnosis, their thoughts related to be diabetic, their strengths and weaknesses to control the disease and their needs through management. One facilitator and one observer attended all meetings which lasted 40-60 minutes, each. All records were transcribed verbatim and coded by two different researchers separately. Data of this qualitative study was analysed thematically and the agreement about emerging themes was reached by discussion.

*Results:* Patients' expressions clearly demonstrated anxiety and fear during the diagnosis phase and, together with their families, a strong feeling of responsibility for the management of their illness. Whatever the gender or education level, they feel distressed about diabetic complications. They have a strong agreement on the need of changes in life style by cognitive approach. Main themes were categorized as: 1-Reaction to diagnosis of diabetes and its acceptance 2- Beliefs about the causes, symptoms, complications and management 3-Emotions related to their diseases and its complications 4-Experiences and needs to control diabetes from the point of self care management, life style modifications, social relations, professional support, and health education.

*Conclusions:* Health care providers should pay greater attention to patients' subjective experiences and their family relations to raise the standard of diabetic patients' care.

*Points for discussion at EGPRN:*

1. Is the number of participants satisfactory for such kind of design? What is the criteria to answer questions about appropriate "sample size"?
2. What can be done to improve the validity of the study?
3. What may be planned for the next step of this study when we rely on these results?

PRESENTATION 35: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER

TITLE: Diabetic patients' perceptions of their illness: Validation of the Turkish brief illness perception questionnaire.

AUTHOR(S): Arzu Uzuner, Pemra Ünalán, Ahmet Sengül  
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*Background:* Diabetic patients' perceptions of their illness may affect their attitudes to therapy, thus determining their treatment outcomes and quality of life. The illness perception questionnaire (IPQ) is a quantitative measure to assess the five components of illness representation which are identity, consequences, timeline, control/cure and cause.

*Research question:* Is the Turkish version of the "brief" IPQ (BIPQ) valid and reliable to measure perceptions of diabetic patients of their illness?

*Method:* This multi-center, ongoing validation study is performed at the family medicine and endocrinology outpatient clinics in four hospitals. A total of 112 diabetic adult patients, after informed consent, were recruited. Except for the BIPQ, consisting of 9 items scored by a Likert scale ranging from 0 (best) to 10 (worst) to assess the dimensions of diabetic perception, a patient form inquiring sociodemographic and illness-related characteristics was applied by face to face interview. Glycosylated haemoglobin (HbA1c) levels were gathered from patient records. Descriptive data are presented as mean±SD, range or %, Cronbach's alpha and Spearman correlation test were computed for validation purposes.

*Results:* Participants characteristics were m/f=38.4/61.6%, age 61.2±11.3 years (range 24-83), diabetes duration 9.7±8.2 years, HbA1c 7.7% (±1.7). Internal reliability of the scale measured by Cronbach's alpha was 0.67. Item-scale correlations ranged between 0.11 and 0.72 for all items, except the one about understanding the disease (-0.57). Correlations of items related to personal and treatment control and understanding were 0.07, 0.24 and -0.12, respectively. Test-retest correlation was 0.77. Exclusion of the "understanding" item increased the alpha to 0.75 (0.78 for re-test). HbA1c was directly, education level was inversely related to being emotionally affected by diabetes, having concerns about it and to experiencing symptoms ( $p < 0.05$ ).

*Conclusions:* Although the Turkish version of BIPQ is of acceptable validity and reliability, adaptation of the "control" item to daily language and exclusion of the "understanding" item could increase reliability.

*Points for discussion at EGPRN:*

1. How else can the validation process be modified/improved?
2. Can the BIPQ be of use in primary care?
3. How can primary diabetes care profit from the knowledge about illness perception of diabetic patients? What dimension does it add to our understanding? What could it change in our daily practice?

PRESENTATION 36: Saturday 22<sup>nd</sup> October, 2005  
11.00 - 12.45 h.

POSTER  
Finished Study

TITLE: Standard breakfast validity in the Gestational Diabetes diagnosis.

AUTHOR(S): Beatriz Pascual de la Pisa  
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*Background:* The diagnosed of Gestational diabetes(GD) is based on an oral glucose tolerance test (OGTT). This test commonly induces vomiting, nausea or unspecific unpleasant state and is recognized as a not very physiological test.

*Research question:* To analyse the criterion validity of a standard breakfast for the Gestational Diabetes diagnosis in pregnant women, using as gold standard the 100g oral glucose tolerance test and National Diabetes Data Group criteria.

*Method:*

Design: Multicenter observational study about diagnostic test in Primary Care.  
Measurements: A SB (711 Kcal, 98 g carbohydrates, 29 g of fat, 15 g of proteins and 3 g of fiber) in pregnant women was carried out in 24-28 gestation weeks, determining venous plasma glycaemia (VPG) in 0, 1st, 2nd and 3rd hours. We analyse sensibility (Se), specificity (Sp), positive and negative predictive values (PPV and NPV). We use the ROC curve to study the diagnostic performance and to seek the best cutoff values.

*Results:* 637 pregnant women accepted the study: 506 were included (vomiting during OGTT test was the more frequency exclusion criteria). The prevalence of GD was 11.4%. The ROC curves analysis shows: the best area under curve (AUC) is for 1st VPG measurement (152mg/dl, AUC 0.885, Se 38.33%, Sp 97.76%, PPV 67.68%, NPV 92.77%), 2nd VPG measurement (144mg/dl, AUC 0.830, Se 16.67%, Sp 98.88%, PPV 64.76%, NPV 90.57%) and 0 VPG measurement (105mg/dl, AUC 0.713, Se 10%, Sp 99.33%, PPV 56.38%, NPV 92.70%)  
The combination of 0 and 1st threshold shows the best diagnostic performance: Se 80%, Sp 100%, PPV 100%, PPN 98.29%.

*Conclusions:* Diagnosing GD through SB would be a usefulness alternative for women with OGTT intolerance: 0 and 1st VPG combinations present an adequate Se and Sp. We will have a most physiological and better tolerated test to apply in the pregnancy to diagnose the gestational diabetes.

*Points for discussion at EGPRN:*

1. Alternatives methods to diagnose Gestational Diabetes Mellitus in Primary Care.

PRESENTATION 37: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Finished Study

TITLE: Gp's intervention in changing lifestyle behaviour of adipose patients.

AUTHOR(S): Tatjana Cikac<sup>1)</sup>, Djurdjica Lazic<sup>2)</sup>  
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**Background:** Obesity and physical inactivity («silent epidemic») are the dominant causes of insulin resistance. Changing behaviour is the main aim of primary and secondary prevention of chronic diseases, including obesity. Although changing an individual's behavior is perceived to be difficult, evidence suggests that intensive and repeated counseling by GPs can cause patients to become more physically active and to perform healthy diet.

**Objectives:** To investigate efficiency of GP's intervention in changing lifestyle behaviour of adipose patients from his list.

**Method:** In the period 2001-2004, 135 obese patients (BMI>30) in one GP practice attended educational program for changing lifestyle behaviour. The program lasted for 6 months, was based on a small group work and used *behaviorism* as a key element in the therapy of obesity. Once a week parameters such as: BMI, blood glucose, blood pressure, waist circumference, nutrition and physical activity personal records, were checked.

**Results:** The average age was 48 years, 30% were men. BMI in men decreased for 9%: from 34,6 kg/m<sup>2</sup> to 31,7 kg/m<sup>2</sup> (p<0,001). BMI in women decreased for 8,1%: from 34,9 kg/m<sup>2</sup> to 32,1 kg/m<sup>2</sup>(p<0,001). 42,2% of the participants from the extreme obesity group and obesity group switched to lower BMI group. Waist circumference decreased for 7,5 cm in men, and for 8,4 cm in women (p<0,001). Cholesterol decreased for 0,8 mmol/l in both men and women. Blood glucose decreased for 1,4 mmol/L in men, and for 0,5 mmol/L (p<0,001) in women.

**Conclusion:** GPs are familiar with their patients and have a critical role in the assessment and advising of an appropriate lifestyle. GP recommendations can be a great source of motivation for the patient. Small group work coordinated by GP is effective in changing lifestyle behaviour.

**Relevance to EGPRW:** Research on primary prevention of wide spectrum of chronic diseases greatly takes place in GPs' offices. I would ask EGPRN audience about possibilities to perform international research on this topic.



PRESENTATION 38: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER

TITLE: What determines patients' satisfaction with out of hours primary medical care?

AUTHOR(S): Robert Scully  
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*Background:* The health service in Ireland is one of a number of European health services currently undergoing significant reform. Out of hours primary medical care has been to this change and although patient satisfaction levels appear high, certain groups of patients are less satisfied with this new form of care.

*Research question:* To explore patient's satisfaction with out of hours primary medical care and specifically investigate the relative effects of 'patient expectation' and 'patient health status' on patient satisfaction.

*Methods:* A postal questionnaire with cover letter and freepost envelope has been forwarded to a block sample of 1200 patients contacting the service during a designated 11 day period (01/07/05-11/07/05). The questionnaire is based on the new short form questionnaire developed and validated by Salisbury to measure patient satisfaction with out of hours care, with the addition of the SF-12 to measure health status. The mail out strategy consisted of a pre-notice letter, followed by the questionnaire with a cover letter, and finally a reminder postcard. All non-respondents will be forwarded a second questionnaire within two to four weeks.

*Results:* Data is currently being collected and will be analysed using SPSS, version 11.0. Based on previous work conducted by the authors <sup>1,2</sup>, a response rate of 50-60% is expected. Previous studies have shown that 'patient expectation' and 'patient health status' are major determinants of patient satisfaction. Further investigation of the relative effects of these and other variables on patient satisfaction has important implications for the future planning of out-of-hour primary care services.

PRESENTATION 39: Saturday 22<sup>nd</sup> October, 2005  
11.00 – 12.45 h.

POSTER  
Work in Progress/Ongoing Study

TITLE: Self-assessment of family practice organization in Slovenia.

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*Background:* The organizational culture in Slovenian healthcare system is still underdeveloped. We are aware of importance of organizational development which could be the key for further healthcare improvement. We need an assessment instrument to get some data on the current level of organization in Slovenian primary care practices.

*Research question(s):* Current level of organizational development in family practice in Slovenia?

Key differences between practices?

Priority areas for the organizational improvement?

*Methods:* The use of a self-assessment tool Maturity Matrix developed by Swansea research team in a primary care group with an assistance of trained facilitator.

The sample of 30 family practices was stratified by the practice size (solo, dual, group) and location (rural, urban) and include teaching and no-teaching practices as public and private contractors. At first each member of the team individually self-assess 8 domains of 11 different dimensions of organizational culture. Then facilitator through discussion on each dimension reaches an agreement with consensus about the achieved level of organizational development in the practice.

*Results:* The average score is  $4,2 \pm 1,0$  point. The best scores are reached in continual professional development (6,7), self-monitoring of prescribing patterns (5,9) and sharing information with patients (5,1). Audit of clinical performance (2,4), use of guidelines (3,1) and human resource management (3,4) were assessed at lowest level. The main differences between practices are found in HRM, specially dependent on the location of the practices (rural/ urban  $p=0,012$ ) and status in healthcare system (public/private  $P=0,044$ ). Use of guidelines, sharing information with patients and access to clinical information do not show statistically significant differences. According to all the data the priorities for organizational learning and future educational changes in family medicine in Slovenia are human resource management, audit of clinical performance and use of guidelines.

*Conclusion(s):* The data about the current level of organization help us to recognize the priorities for quality improvement in family practices in Slovenia.

PRESENTATION 40: Saturday 22<sup>nd</sup> October, 2005  
14.40 – 14.50 h.

ONE-SLIDE/FIVE MINUTES  
Work in progress / Ongoing study

TITLE: Enhancement of decision making and responsibilities in primary care in Germany: new ideas for service delivery for patients with depression – an international perspective.

AUTHOR(S): Daniela Kempkens, Monika A. Rieger

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*Background:* Depression is a common condition in primary care in industrialised countries. It has been shown to be an under-treated and under-recognised illness with many implications for patients' health, quality of life, health care and societal cost. In many European countries primary care physicians take a key role in diagnosis and treatment of depression and coordination of care.

*Research Questions:* What structures of primary care exist for patients with depression in different countries? How satisfied are GPs with their job in respect to care of people with depression? What recommendations for primary care in Germany can be drawn from experiences in the other countries?

*Methods:* An international study between Germany as central study subject and Finland, the Netherlands, England, Estonia, and Canada. Primary care physicians in all six countries will be asked about existing care structures for depression, competencies and skills in diagnosis and therapy of depression as well as job satisfaction in the respective health care system. This will be complemented by qualitative, semi-structured interviews with experts of primary care, academic medicine, public health, medical societies and other relevant fields. The survey will consist of validated instruments concerned with job satisfaction and services for depression as well as specific questions for each country. Targets are at least 100 filled out questionnaires per country. International cooperation is a key component in this study.

*Funding:* This project is fully funded by the Germany Federal Ministry of Education and Research for a period of 2 years to promote young researchers in primary care.

*Points for discussion at EGPRN:*

1. Feasibility of study design
2. Appropriate methods for sample selection for quantitative analysis

PRESENTATION 41: Saturday 22<sup>nd</sup> October, 2005  
14.50 – 15.00 h.

ONE-SLIDE/FIVE MINUTES

**TITLE:** Absolute and Relative Risk - Information as a Basis to prevent Atherosclerosis (ARRIBA): a Decision Aid in Cardiovascular Prevention.

**AUTHOR(S):** Andreas C. Sönnichsen, Erika Baum, Heidi Keller  
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*Background:* While guidelines from cardiologic societies persist in recommending the treatment of single risk factors in cardiovascular prevention, epidemiological data suggest that global risk is more important. This is especially true in the low-prevalence setting of primary care, where treatment of single risk factors leads to expensive overtreatment of patients with low global risk. We therefore developed a Framingham-based risk calculation tool and decision aid (ARRIBA) to achieve treatment decisions based on global risk and patient participation. This tool is currently being evaluated regarding patient satisfaction and drug prescription. Promising preliminary results motivate us to plan an evaluation of ARRIBA regarding endpoints of cardiovascular morbidity and mortality.

*Research Question:* Does the implementation of the decision aid ARRIBA reduce cardiovascular morbidity and mortality compared to the traditional single risk factor treatment regimen (usual care)? Is the goal of lower morbidity and mortality achieved at lower cost?

*Methods:* The study shall be carried out as a multicentre randomized controlled trial in several European countries (5-10). Each study centre will recruit 100 general practitioners which will be randomized to an intervention and a usual care (control) group. In the intervention group the general practitioners will be trained in the application of the ARRIBA tool. Each general practitioner will recruit 50 patients between age 45 and 75. In the intervention group the patients will be treated applying the ARRIBA tool. Cardiovascular risk and treatment will be reevaluated once a year. Patients in the control group will receive usual care. Total follow-up will be 5 years, in which all prescriptions of drugs, suggested and achieved life style changes, cardiovascular events and mortality are recorded.

*Relevance:* We would like to invite research groups of general practice from other European countries to participate in this study. We believe this study to be extremely relevant, because the European data basis is scarce regarding cardiovascular risk prediction as well as the evaluation of treatment strategies oriented at global risk.

PRESENTATION 42: Saturday 22<sup>nd</sup> October, 2005  
15.00 – 15.10 h.

ONE-SLIDE/FIVE MINUTES

**TITLE:** Evaluation of glycemic control in patients with type 2 diabetes (T2DM) receiving insulin glargine (glargine) initiated by general practitioners (GPs) – study design from the IMPACT study.

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*Background:* French guidelines recommend initiation of insulin therapy in T2DM patients not achieving adequate glycemic control with oral therapy. However, previous studies in France have shown an under-prescription of insulin in this patient population. Further data suggest that French GPs tend to delay insulin initiation owing to concerns about patients' acceptance of, and compliance with, insulin therapy. Simplifying the insulin regimen with a single injection of the long-acting insulin analog glargine may facilitate the initiation of insulin therapy by GPs.

*Research question:* Would a specific and focused training program for the initiation of insulin therapy with glargine change the primary care management of T2DM patients?

*Methods:* A French, multicenter, retrospective survey including 1500 GPs treating a total of at least 3000 patients in whom glargine was initiated after the training program 'Alliance diabète 7%'. The GP training consisted of three components: an education meeting providing consensus on the appropriate use of glargine combined with communication skills training; monitoring and feedback of prescribing behavior; development of education material for patients. The study was initiated 2 years after GP training. Change in glycemic control following initiation of glargine and incidence of hypoglycemia will be assessed. Patient characteristics, methods and reasons for insulin initiation will also be evaluated.

*Results:* The effect on glycemic control (HbA<sub>1c</sub> and fasting blood glucose levels) before and after (at least 3 months) the initiation of glargine will be evaluated. Incidence of severe hypoglycemia (defined by ≥1 of the following: hospitalization; glucagon intake; emergency unit intervention; coma; injury occurring after initiation of glargine) and symptomatic hypoglycemia (patient-reported) occurring within the last month of the study will be analyzed.

*Conclusions:* Results are expected in early 2006.

*Points for discussion at EGPRN:*

1. Are similar studies being conducted in other countries?
2. Feedback on the study endpoints?

PRESENTATION 43: Saturday 22<sup>nd</sup> October, 2005  
15.10 – 15.20 h.

ONE-SLIDE/FIVE MINUTES

TITLE: Care supply and pathways : a function of local area.  
A case study in rural western France.

AUTHOR(S): S. Séchet, Gwenola Levasseur  
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*Context:* In view of the local disparities in care supply (density and diversity), there is currently no guarantee that two patients consulting for the same pathology will be offered the same care. These disparities affect both the medical practice and the patients' perception of the care they receive. Each user and professional has their own representation of the health and welfare system, a partial knowledge of the resources that may be available. Each works out their own network of contacts, referrals, partnerships through acquaintances and more or less formal collaborations enabling them to build up pathways in the care system. The study concerns both care providers as actors involved in the pathways within the system and also individuals, actors of their own care pathways. The specified parameter is diabetes type 2; the area chosen is Central Western Brittany, a rural location with a low-density, ageing population.

*Question:* How are the access routes to the care system and the pathways within the system constituted in rural areas?

*Objectives:* To describe the construction mechanisms of both the access routes to the care system and the pathways within this system.  
To show the extent to which care pathways are dependent on the configuration of the care system, on each person's understanding of the system presented to them and on their care needs.

*Methods:* Analysis of local health systems : a quantitative approach (monitoring supply in any form, inventory of local demography and local characteristics).  
Pathways : a quantitative and qualitative study. Identifying consultations for type 2 diabetes (secondary analysis of health insurance data) and semi-directive biographical interviews with patients.

*Expected results:* From the qualitative and quantitative survey, it should be possible to infer the effects of the local context on the use of care services. Points to be considered include : the part played by distance, the availability of information on care facilities, the reasons for failing to consult (access problems, financial reasons etc.) ; the personal and healthcare benefits provided or not and considered as essential; restricted access to certain treatments or complementary skills and the reasons given; the perceived rationing : limited length of stay, less expensive technology in testing, individual screening, poorer access to screening campaigns.

PRESENTATION 44: Saturday 22<sup>nd</sup> October, 2005  
15.20 – 15.30 h.

ONE-SLIDE/FIVE MINUTES  
Work in progress / Ongoing study

TITLE: Does the role of gate-keeper of Health Expenditure, entrusted to the General Practitioners, change heavily their distinguishing marks?

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*Background:* The role of gate-keeper of Health Expenditure entrusted to the General Practitioners (GPs) by some European National Health Systems (NHS) disturbs the relationship with the patients and compels the GPs to perform activities unrelated to their competencies. In Italy there are these main topics about this issue: the editing of prescription form for the diagnostic or therapeutic services payable by National Health System, the prescriptions of some drugs payable by NHS only for a few directions not for other, the checks made by local branch of NHS over GPs about their prescriptions payable by NHS.

*Research question:* *In Europe, which is the burden of GP linked with activities related to check the Health Expenditure? This activity worsens the quality in Primary care?*

*Methods:* *A questionnaire, built to identify the main topics in checking Health Expenditure in each European country, will administer to European GPs. Another questionnaire will administer to GPs.*  
about relationship with the patients and quality. A group of GPs, each coming from different European Countries, will coordinate the project.

*Relevance to EGPRN:* Pharmacoeconomics needs of NHS could change deeply the identity, the nature of General Practitioner.

PRESENTATION 45: Saturday 22<sup>nd</sup> October, 2005  
16.00 – 16.30 h.

FREESTANDING PAPER

TITLE: Drug use by older patients in general practice and the effect of medication record charts.

AUTHOR(S): U. Junius-Walker, G. Theile, A. Breull  
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*Background:* Despite the rising health care utilization of older people and their overproportional drug consumption with its dramatic increase in costs, little is known about the real use of prescribed and OTC medication. We want to initiate a European research project with the following aims.

*Research aims:*

- To describe the consumption of prescribed and OTC drugs of older patients in general practice across Europe.
- To determine health and motivational factors that are associated with drug prescription and use.
- To assess the benefit of a medication record chart

*Methods:* We intend to design a prospective multicentre cohort study with general practices and their patients aged 65 years and over, living at home. Over a one year period computerized practice data will be collected. For a subgroup of patients, we intend to carry out a randomised controlled trial. In both arms, detailed information about the patients` health status, their drug use, and the doctors` knowledge about it will be gathered at the start (t0) and end (t1) of this study period. The intervention arm will additionally receive a medication record chart at t0 that must be taken to all doctors` visits throughout the year.

*Expected results:* We expect a standardized and comparable description of drug use of older patients in general practice across Europe. By using three sources of information concerning drug use (patient and doctor interview, practice data) we intend to critically validate these sources. Health profiles and motivations of drug prescriptions will allow us to identify factors accounting for the variation of drug consumptions. The intervention study will determine whether a medication record chart will improve health care providers` knowledge and patients` health.

*Questions:* Is this research relevant to your home country? Would you like to become a partner in this study?



PRESENTATION 46: Saturday 22<sup>nd</sup> October, 2005  
16.30 – 17.00 h.

FREESTANDING PAPER

**TITLE:** Survival in patients with prevalent all-cause heart failure and borderline left ventricular systolic dysfunction: mortality sub-study of the Echocardiographic Heart of England Screening Study (ECHOES).

**AUTHOR(S):** FDR Hobbs, AK Roalfe, Hare R, Davis FRCP  
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*Background:* Heart failure is reported to have an essentially malignant prognosis, modifiable by several interventions. Outcome data are available from randomised controlled treatment trials and longitudinal epidemiological studies. However, neither type of study provide reliable data on heart failure mortality.

*Research Question:* What is the 5 year mortality of all-cause, all-stage, prevalent heart failure?

*Methods:* The prospective ECHOES study provides precise estimates on the community prevalence of heart failure and left ventricular systolic dysfunction (LVSD), based on the rigorous screening of 3960 patients randomly selected from the general population over the age of 45, stratified for socio-economic status and urban/rural domicile and generalisable to England. Subjects were defined as cases after strict objective criteria on clinical assessment, ECG, echocardiography, and adjudication if necessary. Outcome data were causes of death, based on adjudicated routine mortality statistics.

*Results:* 5-year survival rate of the general population was 93% compared to 58% of those with LVSD and 58% with definite heart failure. Median survival time of definite heart failure was 7 years 7 months. Those with a prior diagnostic label of heart failure had the lowest survival compared with the general population ( $p < 0.0001$ ). Survival improved significantly with increasing ejection fraction ( $p < 0.0001$ ). Patients with multiple causes of heart failure had the poorest survival.

*Conclusions:* The ECHOES mortality data confirm the poor prognosis of patients suffering heart failure across the community with a mortality risk estimate of 8-9% per year, lower than rates suggested in earlier more selective population studies. Important novel findings are that borderline normal systolic function carries a poor prognosis, that heart failure prognosis is worse in patients with a prior clinical label of heart failure, and that heart failure aetiology does not appear to exert an effect on mortality rates.

PRESENTATION 47: Saturday 22<sup>nd</sup> October, 2005  
17.00 – 17.30 h.

FREESTANDING PAPER

TITLE: Preliminary results from the electronic Health Indicator Data (eHID) project.

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*Background:* Family medicine is the most appropriate source of health indicators for chronic conditions. In comparing such health indicators from different countries across Europe, it is necessary to examine data collection in family practice and analysis methods to interpret such indicators.

*Research question:* To investigate recording and analysis of diagnostic data from electronic patient records. To determine the relative strengths and weaknesses of each network system.

*Methods:* Information from family practice data sources will be used to illustrate some of the issues in using such data to make comparisons across different networks. Each network was asked to provide example data for health indicators of interest: diabetes mellitus, ischaemic heart disease and mental illness. We conducted interviews with general practitioners providing data and network organisations.

*Results:* The results here are preliminary and we hope to have further results to present in October. Eight networks provided data. Four network organisations and their GPs were interviewed. Electronic patient records were structured in two ways – based on either diagnoses or consultation. A diagnosis-based system may overestimate prevalence where inactive conditions are not removed, and a consultation-based system may underestimate prevalence if affected patients do not consult during the measurement period. Health system differences affect the determination of the denominator. Where patients are registered with a GP, whether they attend or not, there is a readymade denominator. However where patients are only recorded if they consult, an adjustment is needed to allow for non-consulters. Data quality may be affected where GPs are asked to record more than is necessary for the clinical record. Diagnoses are recorded using several classification systems which do not transpose exactly.

*Conclusion:* Our preliminary results suggest that data from electronic patient records in family medicine has important differences in different countries and networks. This must be accounted for in any comparisons.

*Points for discussion:*

- We welcome any insights from delegates concerning their national experience
- How useful is this data compared with community-based studies?

What is the effect and importance of the time-lag between disease onset and doctor diagnosis?

PRESENTATION 48: Saturday 22<sup>nd</sup> October, 2005  
16.00 – 16.30 h.

FREESTANDING PAPER  
Work in Progress/Ongoing Study

**TITLE:** Implementation Of European Guidelines In Cardiovascular Disease Prevention – The Irish General Practice Experience.

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*Background:* Prior to the expansion of the European Union last year, Ireland had the highest death rate from Coronary Heart Disease in those under sixty five years of age in the EU (nearly double the average rate of death from coronary heart disease within the EU). In line with the secondary care recommendations of Ireland's National Cardiovascular Disease Strategy (1999), the "Heartwatch Programme" was implemented in 2003 under the leadership of the Irish College of General Practitioners.

*Research question(s):* Can a national programme reduce morbidity and mortality due to cardiovascular disease?

The interim questions are:

- What are the baseline levels of risk factors and therapeutic interventions relevant to secondary prevention and their trends over time?
- What are the processes involved in implementing the programme including the referral process and patient retention?
- What is the incidence of cardiovascular events in patients participating in the programme?

*Methods:* The programme was implemented as follows:

- Internationally recognised cardiovascular prevention guidelines were adopted ('Prevention of Coronary Disease in Clinical Practice 1998', Second Joint Task Force of European and other Societies on Coronary Prevention).
- Diabetes patients from a regional pilot Diabetes Structured Care Programme were also included under the Heartwatch Programme.
- 470 GPs (20% of all Irish GPs) were selected to participate in the programme and data was electronically transferred from GP practices to an Independent National Data Centre.
- Data on 12,000 eligible patients and 60,000 GP/patient consultations has been collected

*Results:* Preliminary results have shown improvements in patients for controlling many of the associated risk factors – Systolic and Diastolic Blood Pressure, Total and LDL Cholesterol and Smoking.

*Conclusion(s):* The programme has demonstrated deficiencies in the control of risk factors in these patients and suggests that that this programme may provide a template for the future management of chronic illness in primary care.

Points for Discussion:

1. Are Cardiovascular Disease guidelines adhered to in your country by the majority of GPs?  
If yes – How is this being achieved?

If no - Why not?

2. In your country what would the Barriers & Opportunities be in relation to implementation of such a programme?

PRESENTATION 49: Saturday 22<sup>nd</sup> October, 2005  
16.30 – 17.00 h.

FREESTANDING PAPER

**TITLE:** PRimary care Monitoring for depressive Patients Trial (PRoMPT)  
A RCT on Case Management for patients with Major Depression in  
primary care in Germany (ISRCTN66386086).

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*Background:* German general practices show a key-date-prevalence of 10.9% in 2000 for depression. Case Management (CM): is taking responsibility for following-up patients; is determining whether patients were continuing the prescribed treatment as intended; is assessing whether depressive symptoms were improving; and is taking action when patients were not adhering to guideline-based treatment or when they were not showing expected improvement' (von Korff/Goldberg) In 2005 we started a government funded trial on CM in general practices (GP).

*Method:* Research hypothesis is "GP-based case management for patients with major depression reaches an improvement of 35% in Primary Health Questionnaire (PHQ-D-Score) for major depression". Cluster randomised controlled trial with the clinic as randomisation unit measuring patients symptoms as primary outcome. Screening and inclusion takes place by PHQ-D and GP assessment of the Major Depression criteria. Patients receive CM by a special trained practice assistant for one year including telephone monitoring (15 min) for the status of depression, the adherence, and side effects – versus usual care. Outcomes: Depression-symptome in PHQ-D; Adherence of patient to drug taking (self-report); Quality-of-Life; Costs at 6 and 12 months. Sample size is calculated as a total n = 680 (2x340). 68 general physicians are to be recruited with 10 Patients at each cluster.

*Expected results:* Findings will show that CM in primary care improves depression symptoms by enhancing the continuity of care for patients in a decentral setting. We present preliminary baseline-data at the conference.

*Relevance to EGPRN:* Chronic illness care became an essential issue of European health care. GP-based CM is a option to implement Chronic Care Model as a new paradigm in caring for chronic illnesses.

PRESENTATION 50: Saturday 22<sup>nd</sup> October, 2005  
17.00 – 17.30 h.

FREESTANDING PAPER  
Finished Study

TITLE: Flemish Moslem girls and sexual health.

AUTHOR(S): Kristin Hendrickx, Maurissen Isabelle  
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*Introduction:* Moslem girls in Flanders are balancing between the Western environment where they are born and raised, go to the school and have their friends, and their cultural environment at home. Previous research indicated several areas of tension. One of these areas is sexual health. In the Moslem society sexuality is lively present, but tied to religious and cultural codes. This has to do with social control and “shame”, “haram”. Sexual education is often not or not enough given in the family, which has also to do with “haram” and with respect for the parents. The same adolescents come into touch with the more free Western sexuality codes. Care providers are often not well-informed about the way how Moslem girls cope with sexual health problems that can raise from the tensions between these two worlds.

*Research question:* Which coping strategies in connection with sexual health have Moslem girls in Flanders anno 2005? How can care providers ameliorate their sexual health programs towards this group of adolescents?

*Method:* 19 Moslem girls between 16 and 24 years old were recruited in youth work and in family practices. In semi-structured interviews the researchers asked about 8 themes: marriage, virginity, sexuality, unwanted pregnancy and abortion, homosexuality, sexual transmitted infections, contraception, medical assistance and suggestions for medical assistance. The interviews were audio taped, transcribed and analysed by two independent researchers, following the “grounded theory”.

*Results:* This research provides broader insights about sexual experiences and sexual health problems of Moslem girls.

To obtain a diploma is important, and marriage is delayed for this reason. Virginity until marriage is for most of the girls essential, not only for religious reasons, but also from deliberate choice. They experiment sexually, often without protection for pregnancy and STD. Contraception before marriage is little used. Knowledge about STD is vague en they ask explicitly for information. Homosexuality stays a taboo subject, although a certain tolerance is perceptible. The different information canals and the thresholds to medical assistance are lighted up.

*Discussion:* Moslem girls have obvious need for information about sexuality and sexual health. Care providing can ameliorate when doctors and caregivers are well-informed about cultural backgrounds and visions. Possible canals to sexual health care are very little known and/or attainable.