Colorectal cancer screening in the EU: The present state.

EUROPEAN COLORECTAL CANCER DAYS

BRNO 2012: Prevention and screening

Prof. Reinhold W. Stockbrügger
Emeritus Professor Internal Medicine, Gastroenterology and Hepatology, University of Maastricht/NL
Contract Professor Internal Medicine, University Ferrara/I
Editor European Journal of Gastroenterology & Hepatology
Chairman Public Affairs Committee UEG
rstockbrugger635@gmail.com
CRC screening in Europe and elsewhere: Methods

ALTERNATIVES
CT colonography
Capsule endoscopy
Faecal tests
Blood tests
Risk factor profiles
NOTHING OF THIS HAS PASSED THE MASS TEST!

Atkin et al. Lancet 2010; 375: 1624-33
sigmoidoscopy
Zauber et al. NEJM 2012; 366:687-696
Colonoscopy +++
Quintero et al. NEJM 2012: 697-706
Colonoscopy = FIT

Acceptance of and participation in various CRC screening methods depend less on the invasiveness of the test than on the efficacy in terms of neoplasia detection!
The EUROPEAN UNION: 27 countries, more or less united!
Colorectal Cancer Screening in Italy

Scope for improvement!
Still quite a way to go!
Who is to be blamed?

Motivi addotti per la non esecuzione della ricerca
del sangue occulto a scopo preventivo
Intervistati 50-69enni
Pool Asl – Passi 2010

- penso di non averne bisogno: 42%
- nessuno me l’ha consigliato: 32%
- per pigrizia: 6%
- non ho avuto tempo: 4%
- non ho ricevuto convocazione: 4%
- ho paura dei risultati dell’esame: 3%
- altro: 3%
- gia fatta/consigliata colonoscopia: 3%
- mi sento imbarazzato: 2%
- è fastidioso/doloroso: 1%
- già operato/altri motivi sanitari: 1%
- sede/data/orario non andavano bene: 0%
- è difficile prenotare l’esame: 0%
CRC screening in Germany

Outcomes and costs
CRC screening in Germany
The opportunistic way!

Right in time:

Pox CP et al.
Efficacy of a nationwide screening colonoscopy program for colorectal cancer
Gastroenterology 2012, March 20 [Epub ahead of print]

2.821.392 screening colonoscopies in 2100 practices
Cumulative participation rate: females 17.2%; males 15.5%
adrenoma detection: f 16.7%; m 25.8%
advanced adenomas: in 6.4%
carcinomas: in 0.9% (stage I: 47.3%; II: 22.3%; III: 20.7%; IV: 9.6%
serious complications: 0.58/1000 colonoscopies

Right in time:

2.821.392 x € 216 = € 60.942.067.000 earned (Sieg et al, Z Gastroenterol 2007)

Gastroenterologists fight the crisis!
What else is there?

A decision of the European Council in 2003 (2003/878/EC)

Many conferences, stakeholders, pro’ and con’s

Finally, 2010, excellent “European guidelines for quality assurance in colorectal cancer screening and diagnosis” by Nereo Segnan, Julietta Patnick and Lawrence von Karsa + 99 co-authors from Europe and the rest of the world.

The recommendation:

Population-based CRC screening!
- public
- democratic
- administration-controlled
“Opportunistic” CRC screening: what is this?

Target individuals are not personally invited

The screening method is not legally decided

The costs are not necessarily be covered by the public (but they can!)

Screening initiative is up to the individual and to motivated providers

Ambition and fantasy govern more than uniform administration

Most CRC screening actions started “opportunistic”, some still are: US, Germany, Poland, et al.

Top examples: BASF, Boehringer Ingelheim, EADS
Thanks to: www.felix-burda-stiftung.de

Own Experience: Marbachtalklinik (acc: 58% sigmo);
Personnel Academisch Ziekenhuis Maastricht (acc: 40% colo)
CRC screening in Europe?

The reality!
CRC Screening in the European Union on 04-05-2012

“population-based” N= 9
B, DK, ES, F, GB, I, NL, SF, SV

Coverage between 10 and 100 per cent

“opportunistic” N= 7
A, CZ, D, GR, L, P, PL

Coverage (per definition) 100 per cent, per reality 10 and 100 per cent

“pilot” N= 2
IRL, S

NW

“not yet; unknown” N= 9
BG, CY, EST, H, LT, LV, M, R, SK

SE
United European Gastroenterology (UEG)

The “Written Declaration” in the European Parliament
The UEG and the Written Declaration 68/2010

68/2010
Written declaration on the fight against colorectal cancer in the European Union
The European Parliament,
having regard to Rule 123 of its Rules of Procedure,

A. whereas in the EU yearly there are over 400,000 new cases and 200,000 deaths of colorectal cancer (CRC), CRC being the 2nd most frequent cancer killer,
B. whereas CRC is associated with lifestyle factors (obesity, lack of exercise, alcohol and smoking) tackling these factors will decrease CRC development,
C. whereas screening in some EU countries has already lowered CRC mortality, in others screening activities have not been initiated,
D. whereas early detection of CRC will not only lead to a reduction of 40% mortality rate, but will also significantly reduce treatment costs,
E. whereas, following the European Commission, the fight against CRC should be a priority in public health as death by CRC is preventable with the medical tools available in the EU,

1. Calls on the Commission and the Member states
to support in the EU awareness campaigns on lifestyle factors causing CRC, aiming particularly at teenagers and young adults,
to stimulate implementation of CRC screening best practice in all EU countries and to publish progress reports every 2 years;
to make dissemination of CRC screening related research and knowledge a priority in upcoming work programmes of Research Framework Programme 7 and the EU Health Programme;
to introduce nationwide CRC screening, in accordance with EU guidelines;

2. Instructs its President to forward this declaration, together with the names of the signatories, to the Council, the Commission and the parliaments of the Member States.
UEG initiatives and events

www.e-learning.ueg.eu: e-learning programme “Colorectal cancer” (5 credits CME)

European Society of Digestive Oncology (ESDO) activities

Brno Conference, … today!

European Cancer Week with Patient Advocacy Groups, May/June, Rome

Introducing cancer prevention in the running EU research programme “Framework 7” and the future “Horizon 2020” (2014-2020)

You could read our weekly EU News on www.ueg.eu and learn that the European Union is highly interested in:

“Primary Prevention”
The UEGF and the Written Declaration
68/2010

68/2010
Written declaration on the fight against colorectal cancer in the European Union

The European Parliament,

having regard to Rule 123 of its Rules of Procedure,

A. whereas in the EU yearly there are over 400,000 new cases and 200,000 deaths of colorectal cancer (CRC), CRC being the 2nd most frequent cancer killer,
B. whereas CRC is associated with lifestyle factors (obesity, lack of exercise, alcohol and smoking) tackling these factors will decrease CRC development,
C. whereas screening in some EU countries has already lowered CRC mortality, in others screening activities have not been initiated,
D. whereas early detection of CRC will not only lead to a reduction of 40% mortality rate but will also significantly reduce treatment costs,
E. whereas, following the European Commission, the fight against CRC should be a priority in public health as death by CRC is preventable with the medical tools available in the EU,

1. Calls on the Commission and the Member states
   - to support in the EU awareness campaigns on lifestyle factors causing CRC, aiming particularly at teenagers and young adults,
   - to stimulate implementation of CRC screening best practice in all EU countries and to publish progress reports every 2 years;
   - to make dissemination of CRC screening related research and knowledge a priority in upcoming work programmes of Research Framework Programme 7 and the EU Health Programme;
   - to introduce nationwide CRC screening, in accordance with EU guidelines;

2. Instructs its President to forward this declaration, together with the names of the signatories, to the Council, the Commission and the parliaments of the Member States.
And now:

“Prevention”
Prevention?

Colorectal cancer screening:

**Early diagnosis** of cancer and “secondary prevention” by polypectomy in individuals at increased or normal risk

“Tertiary prevention” as control and prevention of metachronous lesions

“Primary prevention”: early action against all known risk factors for a disease in order to diminish or avoid the occurrence of the disease precursors or its definite manifestation.

Established risk factors for colorectal cancer:

- age
- heredity/familiarity
- smoking
- overweight
- heavy alcohol use
- low physical activity

Only for colorectal cancer?
CRC risk factors shared with:

- cancer of oesophagus, stomach, liver, and pancreas
- cancer of lungs, breast, uterus, et al
- cardio-vascular disorders
- metabolic syndrome
- diabetes
- osteoarthrosis

Are we endoscopists, gastroenterologists, internists, endocrinologists, cardiologists …

…or just good doctors?
In colorectal cancer: Primary prevention works!

• 55487 subjects (50-64 yrs) in a prospective study

• Five lifestyle recommendations:
  – Smoking
  – Physical activity
  – Alcohol intake
  – Waist circumference
  – Diet (fruit, vegetables, fibres, red and processed meat)

• Results
  – Median follow up 9.9 yrs
  – 1.9% CRC diagnosed
  – 13% (4-22%) attributable to lack of adherence 1 recommendation
  – 23% (9-37%) attributable to lack of adherence 5 recommendations
A provocation:

Prevention as an integrated part of a “Healthcare Production Chain”
Isolated Colorectal Cancer Screening or Integrated Cancer prevention?

- Every single organ screening – especially population-wide – is a considerable investment in effort, time and money.

- This might be the reason, why so many regional and national communities have not yet started colorectal cancer screening.

- As all legal, administrative and organisational measures necessary for any organ screening are similar, should we not combine screening and other preventive actions in dedicated units, on the PUBLIC as well as on the MEDICAL level?

- We could save expenses, increase the general understanding of prevention and booster the scientific and practical collaboration between interested medical specialities.
A Provocative Suggestion!

A newly designed HEALTHCARE PYRAMID:

Prevention – Acute Care – Chronic Care – Rehabilitation

What could it look like?

Academic Centre: Collection data; research; development

General District Hospital: Regional guidelines, organisation, regional education

Local hospital: local screening actions (specialists; laboratories)

General Practitioner: Holistic view; knows risk factor profile; trusted by patient/family

Stockbrugger R, Digestive Diseases, in print DOI: 10.1159/000337005
And in Europe?

The National Cancer Institute USA

The International Agency for Cancer Research in Lyon

European Centre for Disease Prevention and Control

Do we need a European Centre for Cancer Prevention?

And if YES, where should it be?
My very personal conclusion

Paradise seems to be definitely lost,
but apples can still be used for a healthier lifestyle!