The Promotion of Secondary Prevention with the Help of Motivational Interviewing in Patients with Coronary Heart Disease

Martine Bonhôte Börner, charge nurse (Leitende Pflegefachfrau), co-projectmanager, and trainer for motivational interviewing (MINT)
Department of Cardiology and Angiology
Content

1. Project environment
2. Secondary prevention in coronary heart disease (CHD)
3. Project aims and organization
4. Intervention: Motivational interviewing
5. Findings
6. Practical implications and next steps
Project Environment: the Department of Cardiology and Angiology at the Inselspital, University Hospital of Bern

A total of 5000 patients per year; of which 2500 patients with CHD
Patients with CHD

Emergency Patients: 20%
Acute coronary syndrome ACS includes:
**STEMI**: Symptoms: ECG modification, ↑ of cardiac markers
**NSTEMI**: Symptoms: ECG modification, ↑ of cardiac markers

**Instable angina pectoris**: Symptoms: angina, decreased exercise tolerance, ECG modification, no elevation of cardiac markers

Elective Patients:
**Stable coronary syndrome**

**Stable CHD**: Symptoms: stenosis of the coronaries >75%, no elevation of cardiac markers
Secondary Prevention in CHD

- CHD remains the leading cause of death (Bundesamt Statistik 2011; Michal et al., 2014)
- Stable CHD entails the same long term risk of mortality as an acute coronary syndrome (Daly et al., 2006)
- Behavior related risk factors contribute to the development and progression of CHD (Yusuf et al., 2004)
- Preventive measures are seldom instituted in patients with CHD (Chow et al., 2010)
- Cardiac rehabilitation programs reduce cardiovascular mortality significantly in CHD patients (Dod et al., 2010; Goel et al., 2011)
Secondary Prevention in CHD (cont.)

• Participation in rehabilitation programs is insufficient:
  Only 15% of CHD patients take part in rehabilitation programs
  (Khattab et al., 2013)

• Very short hospitalisation (<24 hours)
  Shortened hospital stays increase the need for efficient and
  customized patient interventions (Abt-Zegelin, 2006; Mentrup et al., 2012)
CHD Guideline Treatment - Nice to Have

- Percutaneous coronary intervention (PCI)
- Medication
- Secondary prevention program
CHD Treatment - Reality

- Percutaneous coronary intervention (PCI)
- Medication
- Secondary prevention program
Project Aims

• Increase the participation of CHD patients in rehabilitation programs and promote lifestyle change
• Provide support regarding the illness perception and knowledge about cardiac risk factors

→ Systematic and individual consultation to promoted patients’ self-efficacy and to provide patient empowerment by means of motivational interviewing
→ Determine the effectiveness of motivational interviewing on participation in rehabilitation programs and lifestyle change
Our Approach: Prevention-Team and Organisation

• Team for secondary prevention:
  – 3 persons

• Identification of CHD patients:
  – Daily, based on the list of admissions and the medical file

• Method for the consultation:
  – Motivational interviewing

• Method for determining the effectiveness of the intervention: experimental study, single blinded, and weekly randomisation
Motivational Interviewing MI

Person-centred method of guiding (a person) to elicit and strengthen personal motivation for change (Miller & Rollnick, 2009, page 47)

• Core values of MI: collaboration, autonomy, evocation

• Prevention team‘s communication values: express empathy, develop discrepancy, avoid argumentation and support self-efficacy
Motivational Interviewing – EVB

- MI is an effective method to work with patients who are ambivalent about lifestyle change (Thompson et al., 2011)

- MI can be used as part of a short intervention to promote health behavior change (Britt et al., 2004)

- MI contributes to lower the barriers of participating in rehabilitation programs and thus making lifestyle change more sustainable (Michal et al., 2014)

- MI effectively promotes client engagement in the treatments (Lundahl et al., 2009)
Structure of the Secondary Prevention Consultation

Elective CHD patient: outpatient < 10 hours / inpatient < 24 hours

ACTIVITIES:
- Review of admissions list
- Review of medical file
- Identification of previous interventions
- Medical history
- Attendance at cardiac rehabilitation programs
Structure of the Secondary Prevention Consultation

Entry into service → PCI intervention → Consultation prevention (MI) → Discharge → Recall

ACTIVITIES:
Percutaneous coronary intervention (PCI) with or without dilatation
Structure of the Secondary Prevention Consultation

ACTIVITIES:

Consultation using MI:
- Search for consensus
- Determine illness perception
- Identify risk factors and with for life style change
- Conduct change talk, provide empowerment
- Talk about cardiac rehabilitation
- Execute referral if possible

Study: have questionnaires on demographical data, risk factors completed as well as SF-36 and IPQ-R
Structure of the Secondary Prevention Consultation

**ACTIVITIES:**

- **Documentation**
  - Complete medical discharge file and nurse records

- **Provide patient with**
  - Appointment for cardiac rehabilitation and/or flyers, brochures
Structure of the Secondary Prevention Consultation

ACTIVITIES:
Study: Telephone interview 6 months after PCI. Complete questionnaire on risk factors as well as SF-36 and IPQ-R

Prevention Team
Findings

Strengths

• The Prevention Team operates in the Department of Cardiology: responsibilities are clear and they have the lead in prevention activities

• Cardiology health professionals work closely together with the Prevention Team and there is a high acceptance of the Prevention Team’s work

• Improvement of communication and collaboration between the Departments of Cardiology and Angiology and the Division of Cardiovascular Prevention, Rehabilitation and Sports medicine due to more information and clarified referral structures
Findings

• Results from the study
  – Patients in the intervention and control group felt well 6 months after the PCI (SF-36)
  – Patients demonstrate low awareness of their disease (IPQ-R)
  – Cardiac rehabilitation attendance is similar in the intervention and control group and has not changed despite the intervention based on motivational interviewing

• Limitations
  – In order to provide interventions with high quality motivational interviewing, intensive training and close supervision are essential (MITI)
Findings

Challenges

– Very short periods of hospitalization: is one session of motivational interviewing sufficient?

– Motivational interviewing focuses on behavioural aspects: is it necessary to focus raising illness perception or promoting cardiac rehabilitation?

– Patients’ main focus is on the PCI: how much can you learn in one day? how long is the patients’ attention span?
Next steps or how to tackle our difficulties

• Enhance our Prevention Team by developing and implementing an Advanced Practice Nurse

• Promote research in this field

• Train and supervise new key users including nurses in MI at the Department of Cardiology and Angiology department and establish a network with persons interested in applying the MI method at the Inselspital, University Hospital

• Improve collaboration with other Departments in Cardiology:
  – Intern procedure of registration has been reviewed and redesigned
  – Close collaboration with cardiac rehabilitation centres in order to improve the registration process
CHD Guideline Treatment - Nice to have = Reality

Percutaneous coronary intervention (PCI)

Medication

Secondary prevention program
Thank you for attention.

Your Insel Prevention Team

• Sara Mülhauser  
  scientific collaborator
• Christine Rolli  
  nurse professional
• Martine Bonhôte Börner  
  co-project manager
  martine.bonhote@insel.ch
• Dr. Maya Shaha  
  scientific collaborator
  co-project manager
References

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