

Principles of the Nurse-led Cardiovascular Prevention Programme in Hospital and Primary Care

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On behalf of the EUROACTION study group

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The Nurse-led Multidisciplinary EUROACTION Preventive Cardiology Programme

- A cardiovascular prevention and rehabilitation programme in hospital for coronary patients and their families
- A cardiovascular prevention programme in primary care for individuals at high risk of developing cardiovascular disease and their partners

Objectives of programme

To help patients and families achieve lifestyle, risk factor and therapeutic targets for cardiovascular disease prevention

- ❖ Lifestyle management: smoking (breath CO), diet, physical activity
- ❖ Other risk factor management:
 - ◆ Overweight/ obesity (BMI, waist circumference)
 - ◆ Blood pressure
 - ◆ Total cholesterol and LDL cholesterol
 - ◆ Diabetes
- ❖ Cardio-protective drug therapies: anti-platelets, beta-blockers, ACE- inhibitors/ARB's, lipid lowering drugs

Nurse-led multidisciplinary approach

The EUROACTION team in
Boldrini Hospital, Thiene,
Italy



The EUROACTION nurse and
the lead GP in Hoensbroek,
The Netherlands



Structure of the Preventive Cardiology Programmes

Identification and recruitment

Initial assessment by MDT

Preventive Cardiology Programme

- Empowering families to change their lifestyle: smoking, diet and physical activity
- Blood pressure, blood cholesterol and blood glucose management
- Compliance with cardio-protective medication
- Individual and group approach
- Supervised hospital and home exercise programme
- Health promotion workshop programme

16 week assessment (hospital only)

One year follow-up

Identification eligibility, and recruitment of coronary patients

	Intervention	Usual Care	All
Identified	1694	1718	3412
Eligible	1589 (94%)	1499 (87%)	3088 (91%)
Initial assessment	1061 (67%)	307*	1368
Participated in programme	860 (96%)	Not applicable	
16 week assessment	895 (84%)	263*	1158
One year assessment	946 (89%) (60%)+	994 (66%)+	1940 (63%)+

* Random sub-sample

+ Proportion of eligible patients

Identification, eligibility and recruitment of high risk patients

	Intervention	Usual Care	All
Eligible	1189	1114	2303
Initial assessment	1118 (94%)	331+	1449
Participated in programme	947 (93%)	Not applicable	
One year assessment	1019 (91%) (81%)*	1005 (90%)*	2024 (88%)*

* proportion of eligible patients + random sub-sample

Characteristics of coronary patients at the initial assessment

	INTERVENTION 1061 N (%)	USUAL CARE 307* N (%)
Women %	307 (29)	74 (24)
Age		
• <55	312 (29)	95 (31)
• 55-64	370 (35%)	104 (34)
• ≥ 65	379 (36%)	108 (35)
Mean (SD)	60 (10.33)	59 (10.52)

Characteristics of high risk patients at initial assessment

	INTERVENTION 1118 N (%)	USUAL CARE 331* N (%)
Women %	547 (49)	147 (44)
Age		
• <55	315 (28)	90 (27)
• 55-64	473 (42)	152 (46)
• ≥ 65	330 (30)	89 (27)
Mean (SD)	61 (7.75)	60 (7.28)

The Family approach

Hospital nurse in Halmstad, Sweden
with the first recruited couple



Hospital team in Krakow, Poland
with their first couple



Identification and recruitment of partners of coronary patients

	Intervention	Usual Care	All
Identified	827	804	1631
Initial assessment	649 (78%)	Not applicable	650
Participated in programme	410 (93%)	Not applicable	
16 week assessment	443 (68%)	Not applicable	443
One year assessment	401 (62%) (48%)*	335 (42%)	736 (45%)

* proportion of eligible patients

Identification and recruitment of partners of high risk patients

	Intervention	Usual Care	All
Identified	805	830	1635
Initial assessment	261 (32%)	Not applicable	237
Participated in programme	204 (91%)	Not applicable	
One year assessment	225 (86%) (28%)	363 (44%)	588 (34%)

The lifestyle programme

Smoking cessation

Healthy eating,
Weight
management



Increasing
Physical activity

- *No smoking*
- *Saturated Fat: <10% total Energy*
- *Fruits and vegetables: >400g/day*
- *Fish: >20g/day*
- *Oily Fish: >3 times/week*
- *30-45 minutes of physical activity at 60-75% of the average maximum heart rate on four-five days of the week*
- *BMI <25 kg/m²*
- *Waist <94 cm in men and <80 cm in women*

Information and education: *Family Support Pack*



Health Promotion workshop programme

Gemona, Italy

Valencia, Spain



The Health Promotion Workshop Programme

Primary Care

- Healthy eating and weight loss
- Increasing physical activity
- Understanding blood pressure, cholesterol and glucose and complying with cardio-protective medications

Hospital

- Coronary heart disease and cardiac procedures
- How to reduce risk:
 - Lifestyle change
 - Controlling other risk factors
- Understanding and complying with cardio-protective medications
- Resuming work and leisure

The Supervised Exercise Programme in hospital

Halmstad, Sweden



Valencia, Spain



Thiene, Italy



Participation of coronary patients in the programme

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* Random sub-sample

+ Proportion of eligible patients

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