



BIARRITZ  
7/8/9  
JUN 2017

# Psychocardiologie

Ça me fends le cœur...!

Acte 2

Le Monologue du cardiologue

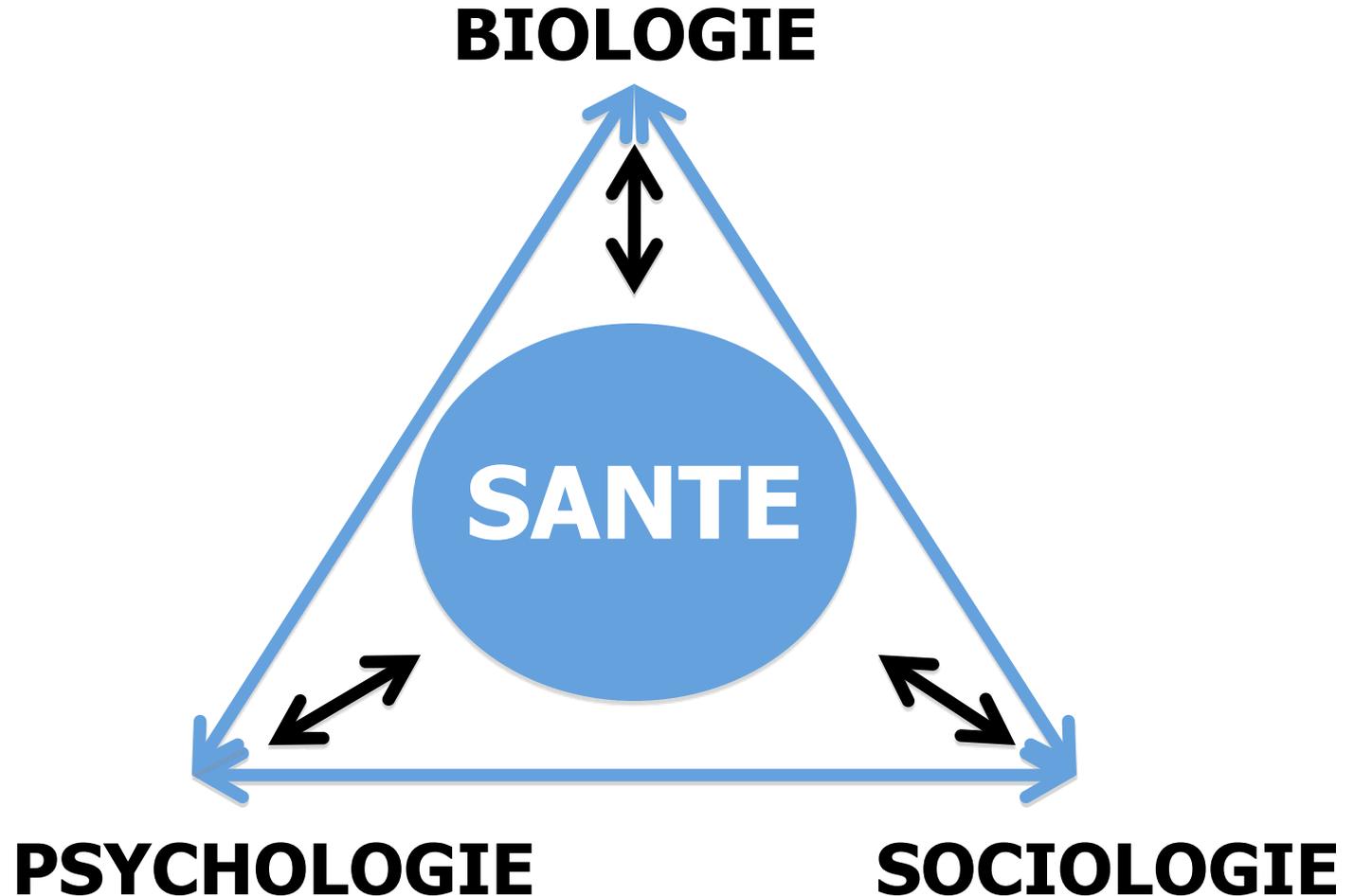
Jean-Pierre HOUPPE  
THONVILLE

**Aucun conflit d'intérêt pour cette présentation**

**Il y a deux maladies :  
celle soignée par le médecin  
et celle vécue par le patient.  
Ces deux maladies sont différentes  
à bien des égards.**

**Arthur Kleinman, The Illness Narratives**

# Le modèle biopsychosocial



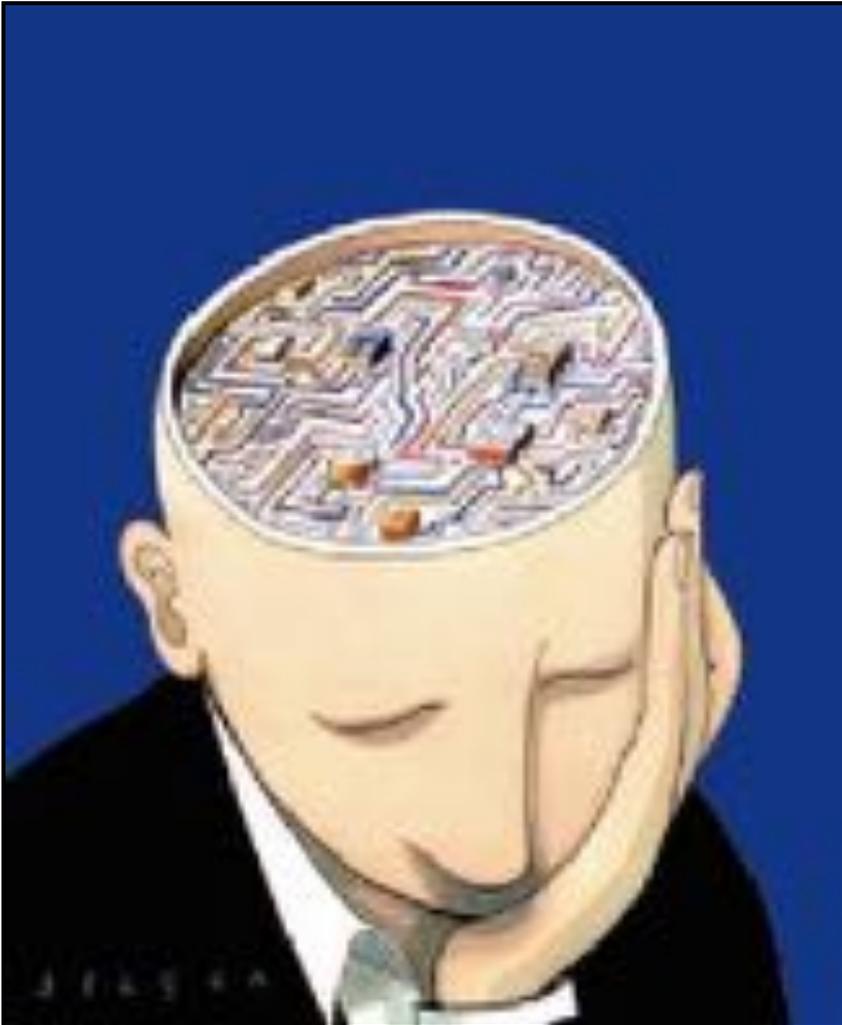
# INTERHEART

## Risk of AMI associated with Risk Factors in the Overall Population

Risk factor	% Cont	% Cases	OR (99% CI) adj for age, sex, smok	OR (99% CI) adj for all
<b>ApoB/ApoA-1 (5 v 1)</b>	20.0	33.5	3.87 (3.39, 4.42)	<b>3.25 (2.81, 3.76)</b>
<b>Current smoking</b>	26.8	45.2	2.95 (2.72, 3.20)	<b>2.87 (2.58, 3.19)</b>
<b>Diabetes</b>	7.5	18.4	3.08 (2.77, 3.42)	<b>2.37 (2.07, 2.71)</b>
<b>Hypertension</b>	21.9	39.0	2.48 (2.30, 2.68)	<b>1.91 (1.74, 2.10)</b>
<b>Abdo Obesity (3 v 1)</b>	33.3	46.3	2.22 (2.03, 2.42)	<b>1.62 (1.45, 1.80)</b>
<b>Psychosocial Stress</b>	-	-	2.51 (2.15, 2.93)	<b>2.67 (2.21, 3.22)</b>
<b>Veg &amp; fruits daily</b>	42.4	35.8	0.70 (0.64, 0.77)	<b>0.70 (0.62, 0.79)</b>
<b>Exercise</b>			0.79	<b>0.86 (0.76, 0.97)</b>
<b>Alcohol Intake</b>			0.36	<b>0.91 (0.82, 1.02)</b>
All combined			5.0)	129.2(90.2, 185.0)
All combined (extremes)			33.9)	333.7 (230.2, 483.9)

**32%**

# Facteurs psychosociaux et cardiologie



## 1. PSYCHOLOGIE

1. Stress, Anxiété, Dépression
2. Hostilité, cynisme
3. Pessimisme, désespoir
4. Colère
5. Personnalité Type D
6. SSPT
7. BURN-OUT

## 2. SOCIOLOGIE

1. Origine et Support sociaux
2. Relation de couple, solitude
3. Sentiment religieux

## 3. STATUT SOCIO-ECONOMIQUE

1. Revenu financier
2. Position sociale
3. Niveau d'études

# STRESS PSYCHOSOCIAL

PSYCHOLOGIE

SOCIOLOGIE

SOCIO-ECONOMIE

Facteurs de risque  
Comportement  
Observance

Activation Inflammatoire  
Activation Coagulation  
Dysfonction endothéliale  
Baisse Variabilité Sinusale

Génétique

# MALADIE CARDIO-VASCULAIRE

**MODES D'ACTION DU STRESS PSYCHOSOCIAL EN CARDIOLOGIE**



## **European Guidelines on cardiovascular disease prevention in clinical practice (version 2012)**

**The Fifth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of nine societies and by invited experts)**

Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR)<sup>†</sup>

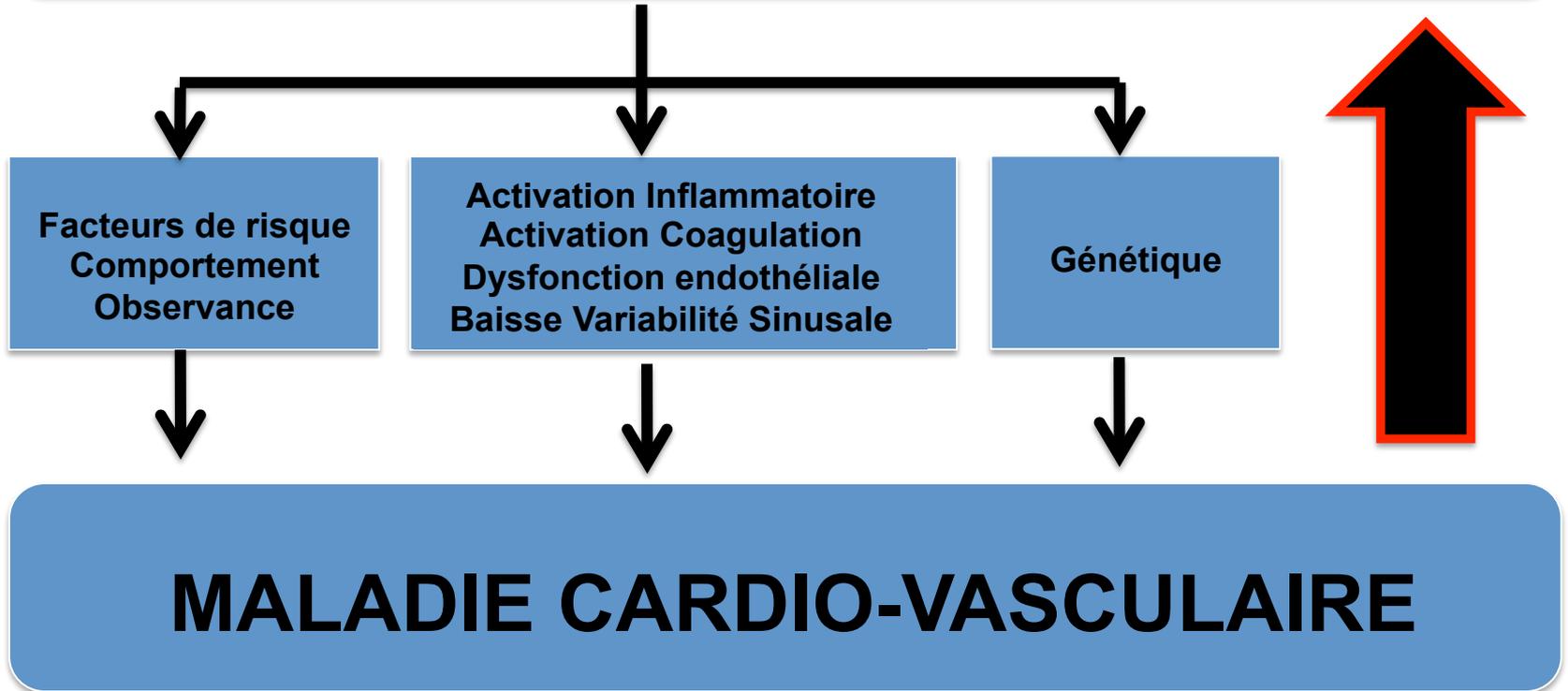
**Authors/Task Force Members:** Joep Perk (Chairperson) (Sweden)\*, Guy De Backer<sup>1</sup> (Belgium), Helmut Gohlke<sup>1</sup> (Germany), Ian Graham<sup>1</sup> (Ireland), Željko Reiner<sup>2</sup> (Croatia), W.M. Monique Verschuren<sup>1</sup> (The Netherlands), Christian Albus<sup>3</sup> (Germany), Pascale Benlian<sup>1</sup> (France), Gudrun Boysen<sup>4</sup> (Denmark), Renata Cifkova<sup>5</sup> (Czech Republic), Christi Deaton<sup>1</sup> (UK), Shah Ebrahim<sup>1</sup> (UK), Miles Fisher<sup>4</sup> (UK), Giuseppe Germano<sup>1</sup> (Italy), Richard Hobbs<sup>1,7</sup> (UK), Arno Hoes<sup>7</sup> (The Netherlands), Sehnaz Karadeniz<sup>8</sup> (Turkey), Alessandro Mezzani<sup>1</sup> (Italy), Eva Prescott<sup>1</sup> (Denmark), Lars Ryden<sup>1</sup> (Sweden), Martin Scherer<sup>7</sup> (Germany), Mikko Syväne<sup>9</sup> (Finland), Wilma J.M. Scholte Op Reimer<sup>1</sup> (The Netherlands), Christiaan Vrints<sup>1</sup> (Belgium), David Wood<sup>1</sup> (UK), Jose Luis Zamorano<sup>1</sup> (Spain), Faez Zannad<sup>1</sup> (France).

# STRESS PSYCHOSOCIAL

PSYCHOLOGIE

SOCIOLOGIE

SOCIO-ECONOMIE



**MODES D'ACTION DU STRESS PSYCHOSOCIAL EN CARDIOLOGIE**

# Pas de Guidelines...



European Heart Journal (2016) 37, 2315–2381  
doi:10.1093/eurheartj/ehw106

**JOINT ESC GUIDELINES**

## **2016 European Guidelines on cardiovascular disease prevention in clinical practice**

**The Sixth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of 10 societies and by invited experts)**

**Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR)**



## 2015 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

**Task Force for the Management of Acute Coronary Syndromes in Patients Presenting without Persistent ST-Segment Elevation of the European Society of Cardiology (ESC)**

clinical practice guidelines

Annals of Oncology 26 (Supplement 5): e8–e30, 2015  
doi:10.1093/annonc/mdv298

### Primary breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up<sup>1</sup>

E. Senkus<sup>1</sup>, S. Kyriakides<sup>2</sup>, S. Ohno<sup>3</sup>, F. Penault-Llorca<sup>1,5</sup>, P. Poortmans<sup>6</sup>, E. Rutgers<sup>7</sup>,  
S. Zackrisson<sup>8</sup> & F. Cardoso<sup>9</sup>, on behalf of the ESMO Guidelines Committee\*

<sup>1</sup>Department of Oncology and Radiotherapy, Medical University of Gdańsk, Gdańsk, Poland; <sup>2</sup>Eunice Donna Cancer, Nicosia, Cyprus; <sup>3</sup>Breast Oncology Center, Cancer Institute Hospital, Tokyo, Japan; <sup>4</sup>Department of Pathology, Centre Jean-Pierre, Clémont-Ferrand; <sup>5</sup>EA 4577 Université d'Auvergne, Clémont-Ferrand, France; <sup>6</sup>Radboud University Medical Center, Nijmegen, The Netherlands; <sup>7</sup>Department of Surgery, Netherlands Cancer Institute, Amsterdam, The Netherlands; <sup>8</sup>Department of Diagnostic Radiology, Lund University, Malmö, Sweden; <sup>9</sup>Breast Unit, Champalraud Clinical Center, Lisbon, Portugal

# Mais « position paper »

*Eur J Prev Cardiol.* 2015 Oct;22(10):1290-306. doi: 10.1177/2047487314543075. Epub 2014 Jul 24.

## **Psychosocial aspects in cardiac rehabilitation: From theory to practice. A position paper from the Cardiac Rehabilitation Section of the European Association of Cardiovascular Prevention and Rehabilitation of the European Society of Cardiology.**

Pogosova N<sup>1</sup>, Sauer H<sup>2</sup>, Pedersen SS<sup>3</sup>, Cupples ME<sup>4</sup>, McGee H<sup>5</sup>, Höfer S<sup>6</sup>, Doyle F<sup>5</sup>, Schmid JP<sup>7</sup>, von Känel R<sup>8</sup>; Cardiac Rehabilitation Section of the European Association of Cardiovascular Prevention and Rehabilitation of the European Society of Cardiology.

⊕ Collaborators (9)

⊕ Author information

### **Abstract**

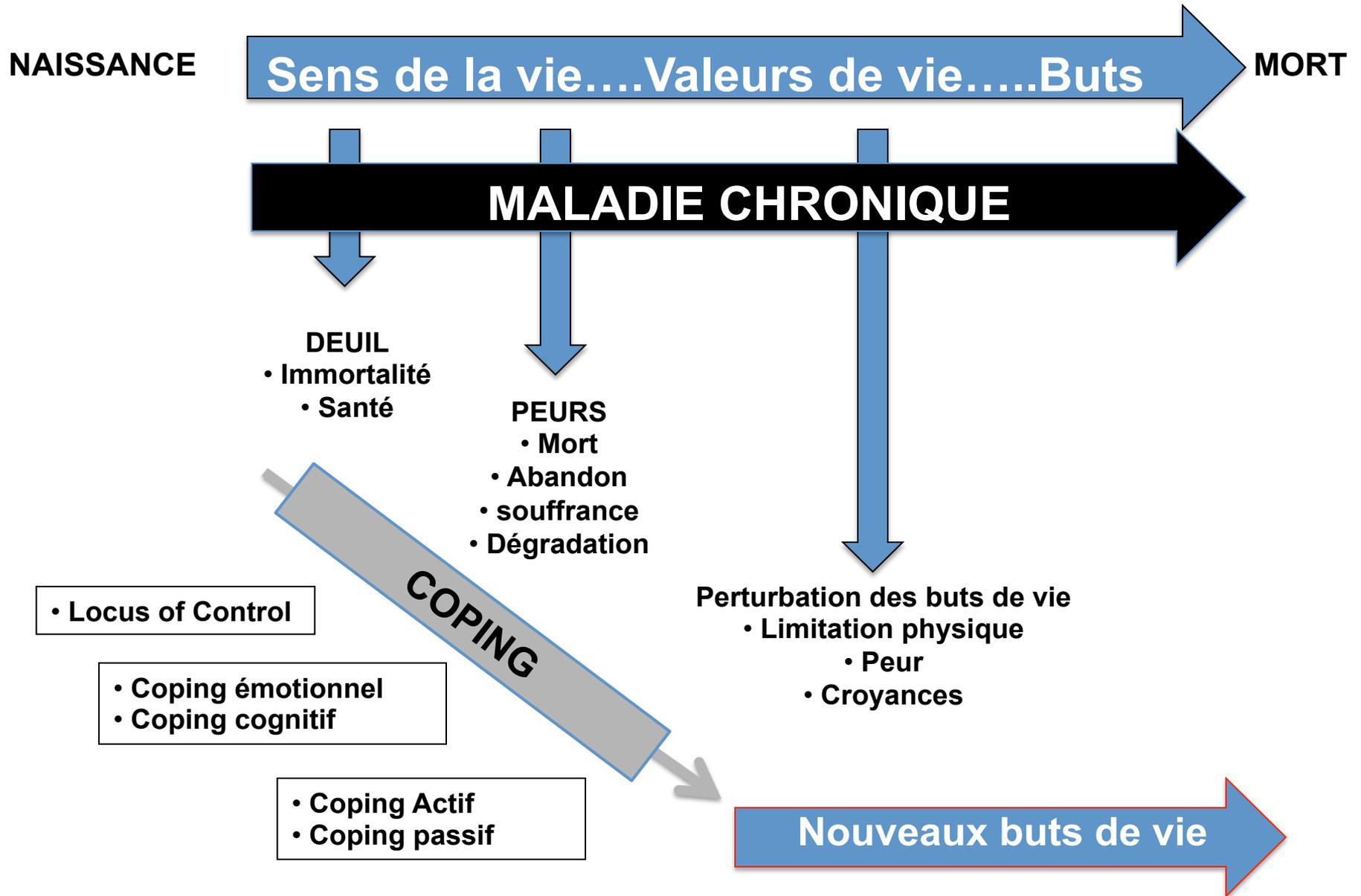
A large body of empirical research shows that psychosocial risk factors (PSRFs) such as low socio-economic status, social isolation, stress, type-D personality, depression and anxiety increase the risk of incident coronary heart disease (CHD) and also contribute to poorer health-related quality of life (HRQoL) and prognosis in patients with established CHD. PSRFs may also act as barriers to lifestyle changes and treatment adherence and may moderate the effects of cardiac rehabilitation (CR). Furthermore, there appears to be a bidirectional interaction between PSRFs and the cardiovascular system. Stress, anxiety and depression affect the cardiovascular system through immune, neuroendocrine and behavioural pathways. In turn, CHD and its associated treatments may lead to distress in patients, including anxiety and depression. In clinical practice, PSRFs can be assessed with single-item screening questions, standardised questionnaires, or structured clinical interviews. Psychotherapy and medication can be considered to alleviate any PSRF-related symptoms and to enhance HRQoL, but the evidence for a definite beneficial effect on cardiac endpoints is inconclusive. A multimodal behavioural intervention, integrating counselling for PSRFs and coping with illness should be included within comprehensive CR. Patients with clinically significant symptoms of distress should be referred for psychological counselling or psychologically focused interventions and/or psychopharmacological treatment. To conclude, the success of CR may critically depend on the interdependence of the body and mind and this interaction needs to be reflected through the assessment and management of PSRFs in line with robust scientific evidence, by trained staff, integrated within the core CR team.

# Le Chaos de la Maladie

**Le syndrome coronarien aigu est un temps**

- 1. De bouleversement**
- 2. D'épreuve**
- 3. D'adaptation**





**Schéma d'adaptation à la maladie chronique**

# Théorie des valeurs et perturbation des buts

Qual Life Res. 2005 Dec;14(10):2265-75.

## Goal disturbance in relation to anxiety, depression, and health-related quality of life after Myocardial Infarction.

Boersma SN, Maes S, Joekes K.

Health and Medical Psychology, Faculty of Social and Behavioural Sciences, Leiden University, The Netherlands. boersma@fsw.leidenuniv.nl

## Effect of Having a Sense of Purpose in Life on the Risk of Death from Cardiovascular Diseases

Megumi Koizumi,<sup>1,2</sup> Hiroshi Ito,<sup>2</sup> Yoshihiro Kaneko,<sup>1</sup> and Yutaka Motohashi.<sup>1</sup>

<sup>1</sup> Department of Public Health, Akita University School of Medicine.

<sup>2</sup> Department of Internal Medicine, Division of Cardiovascular Medicine, Akita University School of Medicine.

Received May 21, 2007; accepted January 16, 2008; released online August 28, 2008.

Death CV: HR=0.28  
Stroke:HR=0.56

### ABSTRACT

**Background:** Many studies have focused on disease causality, but few of them deal with health-promoting factors. Thus, we examined the effect of having a sense of purpose in life (*ikigai*) on mortality from cardiovascular disease (CVD).

**Methods:** In 1988, we conducted a prospective cohort study of 2,959 Japanese subjects, ranging in age from 40 to 74 years, and followed them till the end of 2003. The level of their sense of purpose in life was evaluated by a self-administered questionnaire. After excluding those with a history of heart disease, stroke, or malignant tumor, 1,618 subjects (832 men and 786 women) who had completed the questionnaire were used in the analyses with Cox's proportional hazards model.

**Results:** During the average 13.3 years of follow up, 249 deaths (172 men and 77 women) occurred as a result of all causes: 32 from heart disease, 31 from stroke, 63 from CVD, and 104 from malignant tumors. The adjusted hazard ratios for death in men with a strong sense of purpose in life, as compared with those with a low sense of purpose, were 0.28 (95% confidence interval: 0.10-0.84) for stroke, 0.56 (0.28-1.10) for CVD, and 0.62 (0.45-0.86) as a result of all causes. In women, no significant relationship was found between having a sense of purpose in life and mortality; this was possibly because the smaller number of deaths reduced the statistical significance.

**Conclusion:** We found that in men, having a sense of purpose in life affected the risk of death as a result of all causes, stroke, and CVD.

# Un temps du bouleversement

- **La brutalité de l'événement**
- **la douleur intense**
- **L'appel fréquent du SAMU**
- **la frayeur possible de l'entourage**
- **L'hospitalisation**
- **la perception de l'urgence**
- **la coronarographie, l'angioplastie**

# Un temps d'épreuve

- **Le diagnostic marque le début d'un temps d'épreuve.**
- **Fin d'une illusoire immortalité**
- **Nécessité de faire le deuil d'une santé parfaite.**
- **Les étapes de ce deuil symbolique**
  - **stupeur ou l'incrédulité,**
  - **déni, la colère,**
  - **la tristesse,**
  - **la culpabilité**
  - **la résignation.**
- **Temps de peurs très primitives**

# un temps d'adaptation

## LE COPING

**Ensemble des efforts cognitifs et comportementaux destinés à maîtriser, réduire ou tolérer les exigences internes ou externes qui menacent ou excèdent les ressources d'une personne .**

**Lazarus et Folkman 1984**

- **Possibilités variables selon**
  - Individus
  - Moment
  - Situations
  - Contexte global

# Aspects et styles et modes de Coping

- **Aspects**
  - Facteurs cognitifs
  - Facteurs émotionnels
  - Lieu de contrôle interne ou externe
- **Style de coping**
  - Centré sur le problème
  - Centré sur l'émotion
- **Modes**
  - Coping actif: implication, attention, résolution
  - Coping passif: déni, évitement, résignation

# Le Coping en Cardiologie

- **Coping passif : mauvais pronostic**
- **Déni: peut être efficace au départ**
- **Coping actif : intérêt de la réadaptation cardiaque**
- **Entraînement à la résilience**
  - **Support social**
  - **Optimisme**
  - **Souplesse mentale**
  - **Engagement**

# Conséquences psychologiques d'un syndrome coronarien aigu



## Mental health status and risk of new cardiovascular events or death in patients with myocardial infarction: a population-based cohort study

Tine Jepsen Nielsen,<sup>1</sup> Mogens Vestergaard,<sup>2</sup> Bo Christensen,<sup>1</sup>  
Kaj Sparle Christensen,<sup>3</sup> Karen Kjær Larsen<sup>2</sup>

### Key messages

- During the 3 years after MI, patients with the lowest mental health status had an almost 50% risk of new cardiovascular events or death.
- Low mental health status after MI was a strong predictor of new cardiovascular events or death, independent of depression, anxiety and clinical, sociodemographic and behavioural risk factors.

# Le déni



# Le déni

- Moyen de protection employé surtout les hommes.
- Emotions trop difficiles à gérer (angoisse de mort, colère, peur de l'abandon, de la déchéance, sentiment d'injustice).
- Le déni peut être efficace à court terme.
- A plus long terme : un impact négatif.
- Difficile à gérer ( Pour le médecin et l'entourage)
- L'entourage anxieux : discours infantilisant ou agressif
- Le médecin rationalise:
  - Utilisation d'explications scientifiques.
  - Utilisation d'arguments sensés provoquer la peur.

# Le déni

- **Cette attitude médicale est totalement inefficace , car d'une part le patient a très bien compris la situation d'un point de vue cognitif et d' autre part le déni est un refus de ressenti émotionnel. Le patient est donc insensible à la peur.**
- **La prise en charge**
  - **l'acceptation qu'une phase de déni partiel et adaptatif peut être nécessaire et souvent bénéfique à court terme pour le patient.**
  - **Dans un second temps, si le déni est massif et persistant, il est indispensable de mettre en place un soutien psychologique afin de permettre au patient de faire face à ses émotions « négatives » (angoisse, colère, tristesse)**
  - **et une aide éducative afin de mobiliser ses ressources intérieures de changement et d' adaptation.**
  - **Il ne s'agit pas à ce moment de la prise en charge de convaincre mais de mobiliser la motivation intérieure du patient.**
  - **C' est tout l'intérêt de l'éducation thérapeutique sous ces différents aspects biopsychosociaux en centre de réadaptation cardiaque.**

# La dépression



# La dépression

- **4 fois plus que la population standard.**
- **20 % des patients après infarctus du myocarde**
- **40% ont des traits dépressifs**
- **Physiopathologie: mécanismes apoptotiques communs au myocarde et à l'hippocampe**
- **Le diagnostic selon le DSM 5 repose sur un questionnaire en 9 questions.**
- **Le questionnaire en trois questions, tel qu'il a été utilisé par l'ESC, est très utile**
- **Le syndrome de dépression postinfarctus est sous évalué et insuffisamment pris en charge .**

## AHA Scientific Statement

### **Depression as a Risk Factor for Poor Prognosis Among Patients With Acute Coronary Syndrome: Systematic Review and Recommendations**

#### **A Scientific Statement From the American Heart Association**

Judith H. Lichtman, PhD, MPH, Co-Chair; Erika S. Froelicher, RN, MA, MPH, PhD, FAHA, Co-Chair;  
James A. Blumenthal, PhD, ABPP; Robert M. Carney, PhD; Lynn V. Doering, RN, DNSc, FAHA;  
Nancy Frasure-Smith, PhD; Kenneth E. Freedland, PhD; Allan S. Jaffe, MD;  
Erica C. Leifheit-Limson, PhD; David S. Sheps, MD, MSPH, FAHA; Viola Vaccarino, MD, PhD, FAHA;  
Lawson Wulsin, MD; on behalf of the American Heart Association Statistics Committee of the Council  
on Epidemiology and Prevention and the Council on Cardiovascular and Stroke Nursing

**Background**—Although prospective studies, systematic reviews, and meta-analyses have documented an association between depression and increased morbidity and mortality in a variety of cardiac populations, depression has not yet achieved formal recognition as a risk factor for poor prognosis in patients with acute coronary syndrome by the American Heart Association and other health organizations. The purpose of this scientific statement is to review available evidence and recommend whether depression should be elevated to the status of a risk factor for patients with acute coronary syndrome.

**Methods and Results**—Writing group members were approved by the American Heart Association's Scientific Statement and Manuscript Oversight Committees. A systematic literature review on depression and adverse medical outcomes after acute coronary syndrome was conducted that included all-cause mortality, cardiac mortality, and composite outcomes for mortality and nonfatal events. The review assessed the strength, consistency, independence, and generalizability of the published studies. A total of 53 individual studies (32 reported on associations with all-cause mortality, 12 on cardiac mortality, and 22 on composite outcomes) and 4 meta-analyses met inclusion criteria. There was heterogeneity across studies in terms of the demographic composition of study samples, definition and measurement of depression, length of follow-up, and covariates included in the multivariable models. Despite limitations in some individual studies, our review

## Métaanalyse de 53 études

1. Risque de mortalité globale multiplié par 2.3
2. Risque de mortalité cardio-vasculaire multiplié par 2.7
3. Risque d'événements cardio-vasculaires non mortels multiplié par 1.6.

## Epidemiology and Prevention

### Myocardial Infarction and Risk of Suicide A Population-Based Case-Control Study

Karen Kjær Larsen, MD; Esben Agerbo, MSc, PhD, DrMedSc; Bo Christensen, MD, PhD;  
Jens Søndergaard, MD, PhD; Mogens Vestergaard, MD, PhD

**Background**—Myocardial infarction (MI) is associated with an increased risk of anxiety, depression, low quality of life, and all-cause mortality. Whether MI is associated with an increased risk of suicide is unknown. We examined the association between MI and suicide.

**Methods and Results**—We conducted a population-based case-control study by retrieving data from 5 nationwide longitudinal registers in Denmark. As cases, we selected all persons aged 40 to 89 years who died by suicide from 1981 to 2006. As controls, we randomly selected up to 10 persons per case matched by sex, day of birth, and calendar time. We identified 19 857 persons who committed suicide and 190 058 controls. MI was associated with a marked increased risk of suicide. The risk of suicide was highest during the first month after discharge for MI for patients with no history of psychiatric illness (adjusted rate ratio, 3.25; 95% confidence interval, 1.61 to 6.56) and for patients with a history of psychiatric illness (adjusted rate ratio, 64.05; 95% confidence interval, 13.36 to 307.06) compared with those with no history of MI or psychiatric illness. However, the risk remained high for at least 5 years after MI.

**Conclusions**—MI is followed by an increased risk of suicide for persons with and without psychiatric illness. Our results suggest the importance of screening patients with MI for depression and suicidal ideation. (*Circulation*. 2010;122:2388-2393.)

**Key Words:** acute myocardial infarction ■ depression ■ epidemiology ■ mortality ■ suicide

**KK Larsen.Circulation.2010;122:2388-2393**

- Patients sans antécédent psychiatrique
- Premier mois +++
- Risque suicidaire. RR: 3.25

# L'anxiété



# L'anxiété

- **Moins étudiée que la dépression dans les suites d'infarctus du myocarde.**
- **En phase aigüe : plus de 30% des patients.**
- **Après la phase aigüe, l'anxiété persiste chez environ 15 à 20% des patients.**
- **Il est intéressant de mentionner certains travaux qui ont montré que la prescription d'anxiolytique lors de l'hospitalisation pour infarctus ne modifie ni les scores d'anxiété ni la mortalité cardiaque ou la survenue de complication aigües.**
- **Le maintien d'une anxiété généralisée après infarctus augmente le risque de récurrence d'évènements coronariens et de mortalité de 25 à 40% selon les séries.**

# L'anxiété

*Psychosom Med.* 2010 Jul;72(8):563-9. doi: 10.1097/PSY.0b013e3181dbff97. Epub 2010 Apr 21.

## **Prognostic association of anxiety post myocardial infarction with mortality and new cardiac events: a meta-analysis.**

Roest AM<sup>1</sup>, Martens EJ, Denollet J, de Jonge P.

### ⊕ Author information

### Abstract

**OBJECTIVE:** To assess the association of anxiety after myocardial infarction (MI) with cardiac prognosis.

**METHODS:** A meta-analysis of references derived from MEDLINE, EMBASE, and PSYCINFO (1975-March 2009) was performed without language restrictions. End point was cardiac outcome defined as all-cause mortality, cardiac mortality, and cardiac events. The authors selected prospective studies with at least 6 months follow-up, and anxiety had to be assessed within 3 months after MI with reliable and valid instruments.

**RESULTS:** Twelve papers met selection criteria. These studies described follow-up (on average, 2.6 years) of 5750 patients with MI. Anxious patients were at risk of adverse events (odds ratio (OR) fixed, 1.36; 95% confidence interval (CI), 1.18-1.56;  $p < .001$ ). Anxiety was also specifically associated with all-cause mortality (OR fixed, 1.47; 95% CI, 1.02-2.13;  $p = .04$ ), cardiac mortality (OR fixed, 1.23; 95% CI, 1.03-1.47;  $p = .02$ ), and new cardiac events (OR fixed, 1.71; 95% CI, 1.31-2.23;  $p < .001$ ).

**CONCLUSIONS:** Post-MI anxiety is associated with a 36% increased risk of adverse cardiac outcomes in bivariate analyses. Because the existing literature is small and contains several limitations, more research is needed to evaluate the association of anxiety and prognosis in patients with MI and to assess the extent to which this association is independent of clinical variables, such as disease severity especially depression.

36%

# Le syndrome de stress post traumatique



## Symptom experience during acute coronary syndrome and the development of posttraumatic stress symptoms.

Wikman A, Messeri-Bürzy N, Molloy GJ, Randall G, Perkins-Porras L, Steptoe A.

Department of Epidemiology and Public Health, University College London, London, UK. anna.wikman@ucl.ac.uk

### Abstract

There is growing evidence for the development of posttraumatic stress symptoms as a consequence of acute cardiac events. Acute coronary syndrome (ACS) patients experience a range of acute cardiac symptoms, and these may cluster together in specific patterns. The objectives of this study were to establish distinct symptom clusters in ACS patients, and to investigate whether the experience of different types of symptom clusters was associated with posttraumatic symptom intensity at six months. ACS patients were interviewed in hospital within 48 h of admission, 294 patients provided information on symptoms before hospitalisation, and cluster analysis was used to identify patterns. Posttraumatic stress symptoms were identified in 156 patients at six months. Three symptom clusters were identified; pain symptoms, diffuse symptoms and symptoms of dyspnea. In multiple regression analyses, adjusting for sociodemographic, clinical and psychological factors, the pain symptoms cluster ( $\beta = .153, P = .044$ ) emerged as a significant predictor of posttraumatic symptom severity at six months. A marginally significant association was observed between symptoms of dyspnea and reduced intrusive symptoms at six months ( $\beta = -.156, P = .061$ ). Findings suggest acute ACS symptoms occur in distinct clusters, which may have distinctive effects on intensity of subsequent posttraumatic symptoms. Since posttraumatic stress is associated with adverse outcomes, identifying patients at risk based on their symptom experience during ACS may be useful in targeting interventions.

15%

## Persistence of Posttraumatic Stress Symptoms 12 and 36 Months After Acute Coronary Syndrome

ANNA WIKMAN, MSc, MIMI BHATTACHARYYA, MRCP, LINDA PERKINS-PORRAS, PhD, AND ANDREW STEPTOE, DPHIL

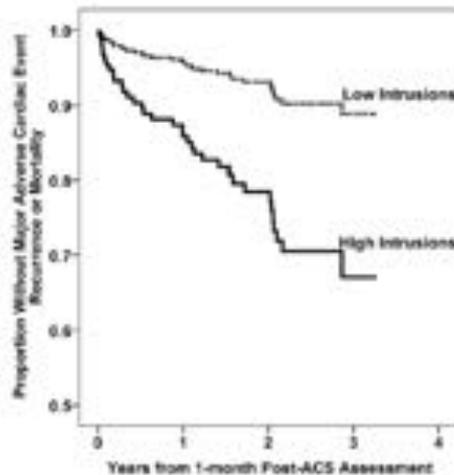
**Objectives:** To assess the prevalence and predictors of posttraumatic stress symptoms in patients at 12 and 36 months post hospital admission for an acute coronary syndrome (ACS). There is increasing recognition that posttraumatic stress may develop in the aftermath of an acute cardiac event. However, there has been little research on the longer-term prevalence of posttraumatic stress disorder (PTSD). **Methods:** Posttraumatic stress symptoms were assessed at 12 months in 213 patients with ACS and in 179 patients at 36 months. Predictor variables included clinical, demographic, and emotional factors measured during hospital admission. **Results:** At 12 months post ACS, 26 (12.2%) patients qualified for a diagnosis of PTSD; 23 (12.8%) patients were identified with PTSD at 36 months. Posttraumatic symptoms at 12 months were associated with younger age, ethnic minority status, cardiac symptom recurrence, history of depression, depressed mood during admission, hostility, and Type D personality. In multiple regression, depressed mood during admission and recurrent cardiac symptoms were independent predictors of posttraumatic symptoms ( $R^2 = 0.507, p < .001$ ). At 36 months, posttraumatic stress symptoms were independently predicted by posttraumatic symptom levels at 12 months and depressed mood during admission ( $R^2 = 0.635, p < .001$ ). **Conclusions:** Posttraumatic stress symptoms persist for at least 3 years after an acute cardiac event. Early emotional responses are important in predicting longer-term posttraumatic stress. It is important to identify patients at risk for posttraumatic stress as they are more likely to experience reduced quality of life. **Key words:** acute coronary syndromes, myocardial infarction, posttraumatic stress symptoms, prevalence, predictors.

Récidive X 2

## Posttraumatic stress due to an acute coronary syndrome increases risk of 42-month major adverse cardiac events and all-cause mortality

Donald Edmondson, Ph.D.<sup>1</sup>, Nina Rieckmann, Ph.D.<sup>2</sup>, Jonathan A. Shaffer, Ph.D.<sup>1</sup>, Joseph E. Schwartz, Ph.D.<sup>1</sup>, Matthew M. Burg, Ph.D.<sup>1,3</sup>, Karina W. Davidson, Ph.D.<sup>1</sup>, Lynn Clemow, Ph.D.<sup>1</sup>, Daichi Shimbo, M.D.<sup>1</sup>, and Ian M. Kronish, M.D., M.P.H.<sup>4</sup>

<sup>1</sup>Center for Behavioral Cardiovascular Health, Columbia University Medical Center, New York



Number at Risk

Low Intrusions	210	190	116	9
High Intrusions	36	28	13	4

**M.A.C.E**  
**A.C.M**

**HR : 3.38**

# Mourir de Peur...



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CLINICAL RESEARCH  
Acute coronary syndromes

## Fear of dying and inflammation following acute coronary syndrome

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<b>Aims</b>	Many patients are afraid of dying during acute coronary syndrome (ACS), but the origins and biological correlates of these emotional responses are poorly understood. This study evaluated the prevalence of fear of dying, associations with inflammatory responses during ACS, and later heart rate variability (HRV) and cortisol secretion.
<b>Methods and results</b>	Two hundred and eight patients admitted with clinically verified ACS rated their fear of dying on interview in hospital. Plasma tumour necrosis factor (TNF) $\alpha$ was recorded on admission, and HRV and salivary cortisol were assessed 3 weeks later. Intense distress and fear of dying was experienced by 21.7%, with moderate levels in 66.1% patients. Fear of dying was more common in younger, lower socioeconomic status, and unmarried patients. It was positively associated with plasma TNF $\alpha$ on admission after controlling for sociodemographic factors, clinical risk, and pain intensity (adjusted odds = 4.67, 95% C.I. 1.66–12.65). TNF $\alpha$ was associated with reduced HRV 3 weeks later, adjusting for clinical and sociodemographic factors and medication ( $P = 0.019$ ), while fear of dying was associated with reduced cortisol output ( $P = 0.004$ ).
<b>Conclusions</b>	Intense distress and fear of dying and heightened inflammation may be related manifestations of an acute biobehavioural response to severe cardiac injury, and have implications for prognostically significant biological risk processes.
<b>Keywords</b>	Acute coronary syndrome • Fear of dying • Inflammation • Heart rate variability • Cortisol

# Que peut faire le cardiologue?

- **Avoir conscience de la problématique**
- **Déterminer la part du stress psychosocial dans la survenue du SCA**
- **Evaluation psychique: « Et psychiquement vous allez comment? »**
- **Prendre le temps de laisser la parole: Temps gagné sur le futur**
- **Prise en charge globale**
- **Evaluation: questionnaire ESC + recherche SSPT**
- **Evaluation des buts de vie: : « En quoi ce SCA est-il susceptible de perturber vos buts de vie? »**
  - **Personnels**
  - **Familiaux**
  - **Professionnels**

<b>Statut socio-économique</b>	<ol style="list-style-type: none"> <li>1. Quel est votre niveau d' études ?</li> <li>2. Etes-vous travailleur manuel ?</li> </ol>
<b>Stress Familial et professionnel</b>	<ol style="list-style-type: none"> <li>1. Avez-vous une possibilité de contrôler votre demande de travail ?</li> <li>2. Estimez-vous être normalement récompensé pour votre investissement au travail ?</li> <li>3. Avez-vous des problèmes sérieux dans votre relation de couple ?</li> </ol>
<b>Isolement Social</b>	<ol style="list-style-type: none"> <li>1. Vivez vous seul ?</li> <li>2. Avez-vous une personne à qui vous confier?</li> </ol>
<b>Dépression</b>	<ol style="list-style-type: none"> <li>1. Vous sentez-vous triste, déprimé ou sans espoir ?</li> <li>2. Avez-vous perdu de l' intérêt et du plaisir à vivre ?</li> </ol>
<b>Anxiété</b>	<ol style="list-style-type: none"> <li>1. Vous sentez-vous souvent nerveux, anxieux ou « a cran »</li> <li>2. Etes-vous souvent incapable de mettre fin ou de contrôler une préoccupation?</li> </ol>
<b>Hostilité</b>	<ol style="list-style-type: none"> <li>1. Vous mettez-vous souvent en colère pour des choses banales ?</li> <li>2. Etes-vous souvent irrité par le comportement des autres ?</li> </ol>
<b>Personnalité de type D</b>	<ol style="list-style-type: none"> <li>1. Etes-vous généralement, anxieux, dépressif ou irritable ?</li> <li>2. Evitez-vous de partager vos idées et vos émotions avec les autres ?</li> </ol>

**Questionnaire d'évaluation du Stress psychosocial adapté du modèle de L'ESC**

# Evaluation des facteurs psychosociaux

### 3.4.3 Assessment of psychosocial risk factors

The assessment of psychosocial factors in patients and persons with CVD risk factors is crucial as a means to stratify future preventive efforts according to the individual risk profile of the patient. Standardized measurements for depression, anxiety, hostility, socio-economic status, social support, psychosocial stress, and type D personality are available in many languages and countries.<sup>115,123</sup> Alternatively, a preliminary assessment of psychosocial factors can be made within the physicians' clinical interview, as detailed in *Table 6*.



- Burn-Out
- PTSD
- Valeurs et buts de vie

**Table 6** Core questions for the assessment of psychosocial risk factors in clinical practice

Low socio-economic status	What is your highest educational degree?
	Are you a manual worker?
Work and family stress	Do you lack control over how to meet the demands at work?
	Is your reward inappropriate for your effort?
	Do you have serious problems with your spouse?
Social isolation	Are you living alone?
	Do you lack a close confidant?
Depression	Do you feel down, depressed, and hopeless?
	Have you lost interest and pleasure in life?
Anxiety	Do you frequently feel nervous, anxious, or on edge?
	Are you frequently unable to stop or control worrying?
Hostility	Do you frequently feel angry over little things?
	Do you often feel annoyed about other people's habits?
Type D personality	In general, do you often feel anxious, irritable, or depressed?
	Do you avoid sharing your thoughts and feelings with other people?

# La prise en charge



# Médicaments psychotropes

- **Anxiolytiques**

- **Phase aiguë, Traitement court**
- **Dépendance**
- **Aucune étude en cardiologie**

- **Antidépresseurs**

- **Etudes : SADHART, ENRICHED, CREATE , MIND-IT**
- **« Ce que nous savons »:**
  1. **IRSS sont indiqués dans les dépressions majeures**
  2. **IRSS sont inutiles dans les autres dépressions**
  3. **IRSS peuvent être utilisés en sécurité en cardiologie**
  4. **IRSS : aucune efficacité sur la mortalité cardiovasculaire**

# Activité physique: La drogue miracle

- **EFFETS BENEFIQUES**

- **Pronostique cardiovasculaire**
- **Santé Mentale**
- **50% de réduction de la mortalité ( Dépression post AMI)**

- **EFFETS BIOPHYSIOLOGIQUES**

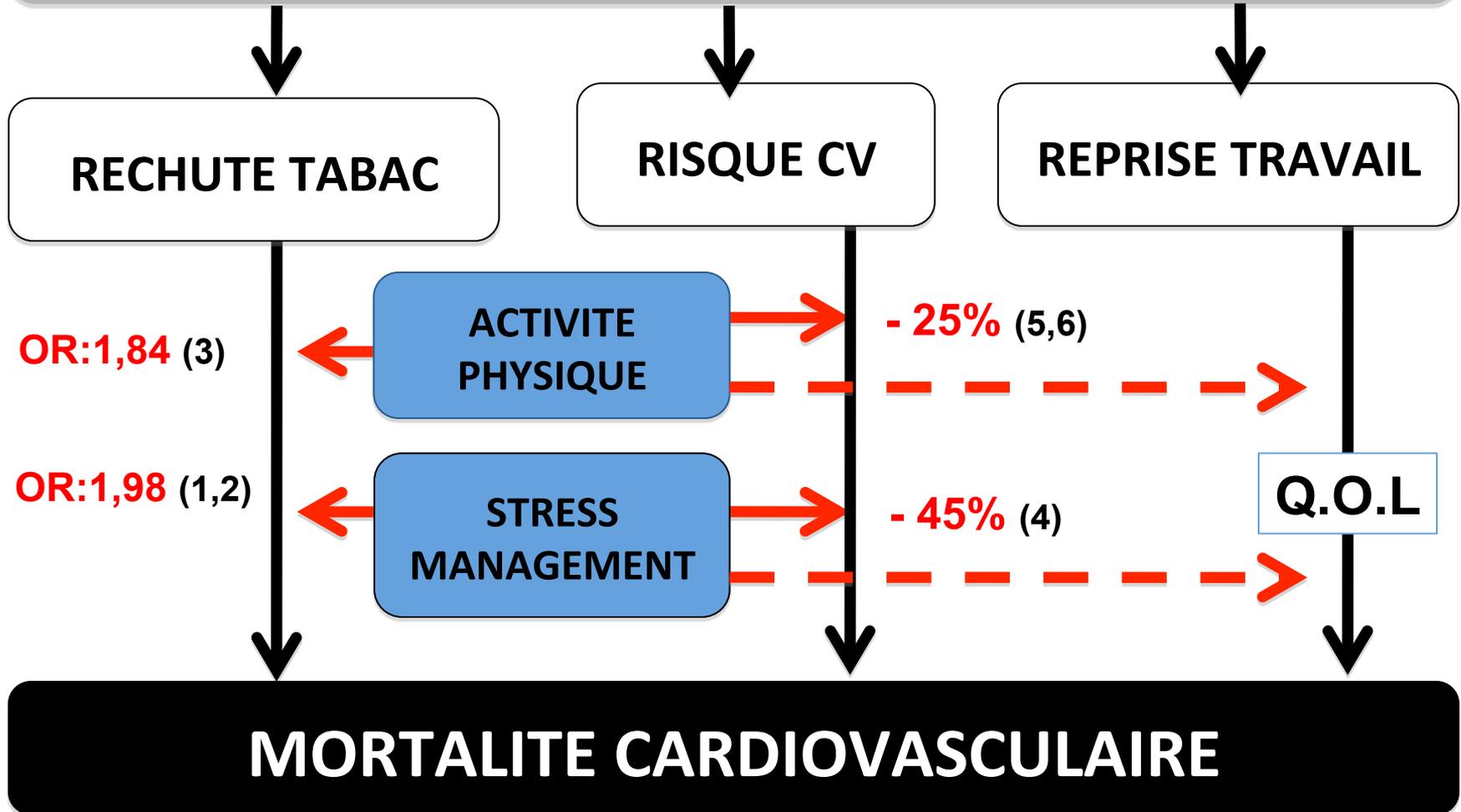
- Diminution de la réponse au stress mental ( Amaigrissement)
- Réduction de la sécrétion d'adrénaline
- Effets anti-inflammatoires :IL6, TNF $\alpha$ , CRP
- Effets anxiolytiques et antidépresseurs.
- Amélioration de la neurogénèse ( BDNF Sécrétion)

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# Gestion du stress et thérapies

- **Gestion du stress en prévention**
  - Activité physique
  - Relaxation psychocorporelle, sophrologie, Tai-Chi, Qi Gong
  - Cohérence cardiaque
  - Méditation en pleine conscience
- **Méthodes psychothérapeutiques**
  - Thérapies cognitivo-comportementales
  - Hypnothérapie
  - EMDR
  - Thérapie d'acceptation et d'engagement

# FACTEURS PSYCHOSOCIAUX



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# Randomized Controlled Trial of Cognitive Behavioral Therapy vs Standard Treatment to Prevent Recurrent Cardiovascular Events in Patients With Coronary Heart Disease

Secondary Prevention in Uppsala Primary Health Care Project (SUPRIM)

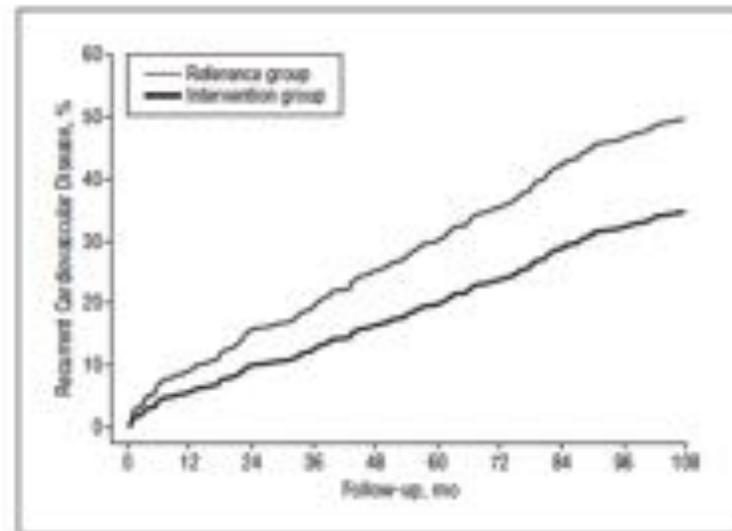
Mats Gulliksson, MD, PhD; Gunilla Burell, PhD; Bengt Vessby, MD, PhD; Lennart Lundin, MD, PhD; Henrik Toss, MD, PhD; Kurt Svardsudd, MD, PhD

- 45 %

**Background:** Psychosocial factors are independently associated with increased risk of cardiovascular disease (CVD) morbidity and mortality, but the effects of psychosocial factor intervention on CVD are uncertain. We performed a randomized controlled clinical trial of cognitive behavioral therapy (CBT) to measure its effects on CVD recurrence.

**Methods:** The study included 362 women and men 75 years or younger who were discharged from the hospital after a coronary heart disease event within the past 12 months. Patients were randomized to receive traditional care (reference group, 170 patients) or traditional care plus a CBT program (intervention group, 192 patients), focused on stress management, with 20 two-hour sessions during 1 year. Median attendance at each CBT session was 85%. Outcome variables were all-cause mortality, hospital admission for recurrent CVD, and recurrent acute myocardial infarction.

**Results:** During a mean 94 months of follow-up, the intervention group had a 41% lower rate of fatal and non-

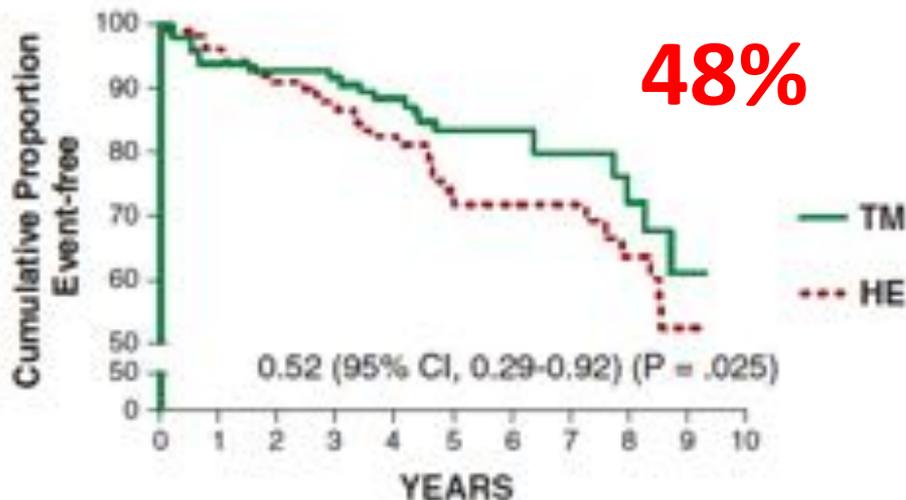


**Figure 2.** Cumulative first recurrent fatal and nonfatal cardiovascular events during 9 years (108 months) from baseline, adjusted for the influence of age, sex, marital status, education, smoking habits, comorbidity (number of previous acute myocardial infarctions, angina pectoris, hyperlipidemia, hypertension, heart failure, diabetes mellitus, asthma/chronic obstructive pulmonary disease, and stroke), peripheral artery disease, and 2-year mean systolic blood pressure, serum cholesterol, and serum triglyceride level, and scores for vital exhaustion, coping ability resources, and credence in the future, by treatment group.

# Stress Reduction in the Secondary Prevention of Cardiovascular Disease

## Randomized, Controlled Trial of Transcendental Meditation and Health Education in Blacks

Robert H. Schneider, MD, FACC; Clarence E. Grim, MD;  
Maxwell V. Rainforth, PhD; Theodore Kotchen, MD; Sanford I. Nidich, EdD;  
Carolyn Gaylord-King, PhD; John W. Salerno, PhD; Jane Morley Kotchen, MD, MPH;  
Charles N. Alexander, PhD†



- Mortalité
- Infarctus et AVC

### Conclusions

This randomized, controlled trial found that a selected mind-body, stress reduction intervention, the TM program, significantly reduced risk for mortality, MI, and stroke in black men and women with coronary heart disease. These changes in clinical events were associated with lower BP and psychosocial distress. Thus, the TM program may be a clinically useful behavioral intervention in the secondary prevention of CVD in this and perhaps other high-risk populations.

- HTA, Colére
- Effet dose et observance

# MESSAGES à RETENIR

- 1. Plus de 50% des patients souffrent de détresse psychologique : 20% de dépression, 30% d'anxiété et 15% de stress post-traumatique.**
- 2. Le déni est un mécanisme de protection fréquent, efficace à court terme et néfaste s'il est massif et durable.**
- 3. La détresse psychologique post-infarctus multiplie la mortalité et les complications coronariennes par 2.**
- 4. La souffrance psychologique doit être systématiquement évaluée en post-infarctus.**
- 5. La prise en charge doit être assurée par une équipe multidisciplinaire : cardiologues, psychologues, psychiatres et médecins de réadaptation.**
- 6. Les traitements médicamenteux peuvent être utiles mais ils ne modifient pas le pronostic coronarien.**
- 7. En revanche l'activité physique et les méthodes psychothérapeutiques améliorent la qualité de vie et diminuent la mortalité coronarienne.**

MON CAHIER D'ACCOMPAGNEMENT

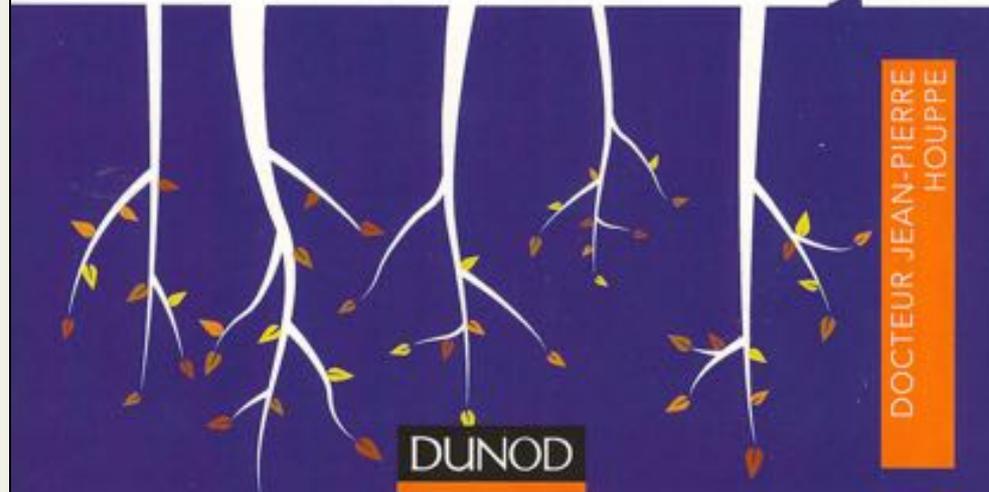
# Prendre soin de son cœur

Introduction à la psychocardiologie

Je fais de mon cerveau  
l'allié de mon cœur

J'adapte mes  
comportements

J'apprends à gérer  
mes émotions



DOCTEUR JEAN-PIERRE  
HOUPPE

DUNOD