



ORDINE DEI MEDICI CHIRURGHI
E DEGLI ODONTOIATRI
DELLA PROVINCIA DI BERGAMO



Il Cuore, l'Età, il Genere

LA MEDICINA DI GENERE IN RETE

23 OTTOBRE ORE 9:30-13:30
ORDINE DEI MEDICI DI BERGAMO



Dott.ssa Alice Calabrese

Sistema Socio Sanitario



Regione
Lombardia

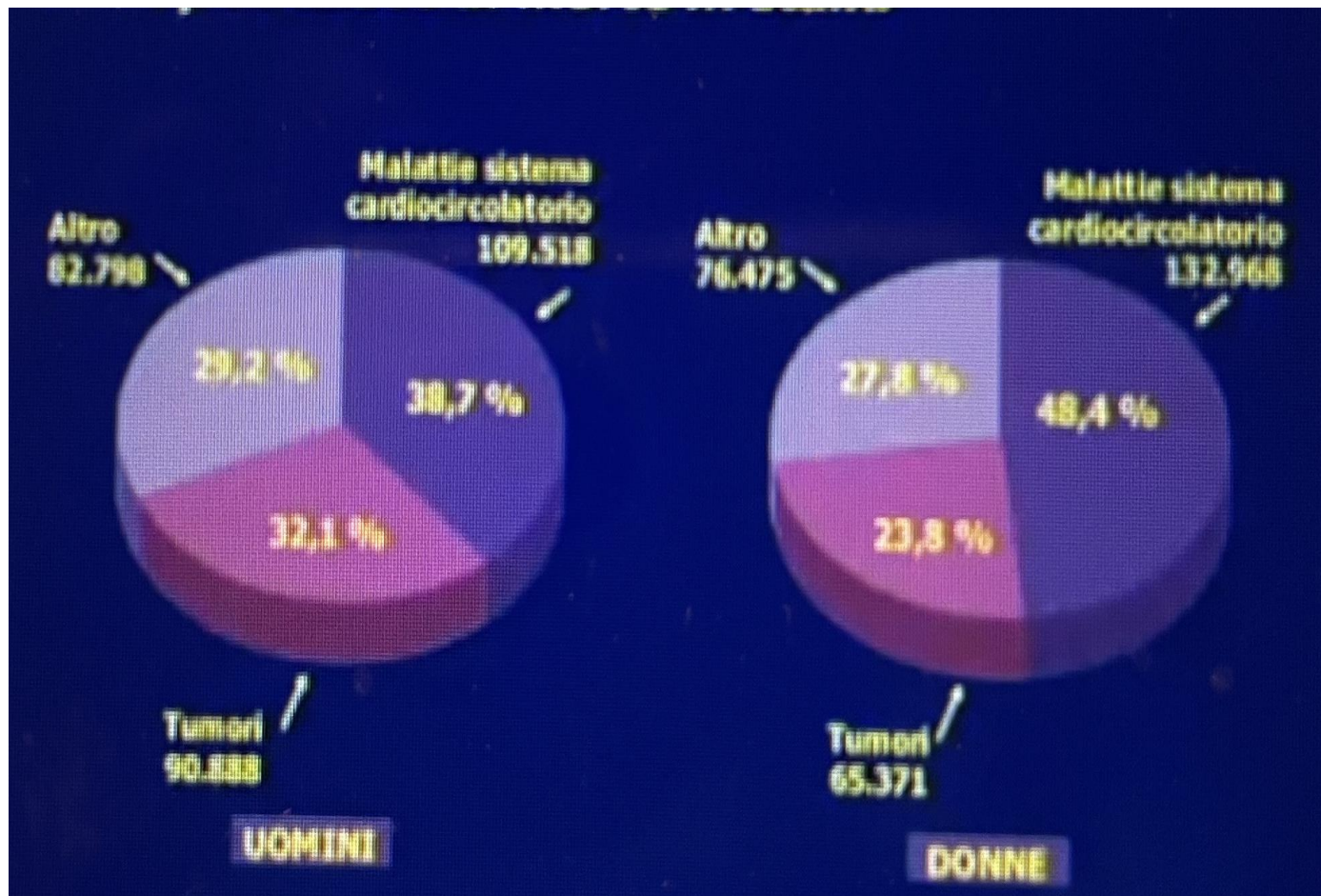
ASST Papa Giovanni XXIII

Cardiologia 1-Scompenso e Trapianti di Cuore
Dipartimento Cardiovascolare

ASST-Papa Giovanni XXIII Bergamo- Italy

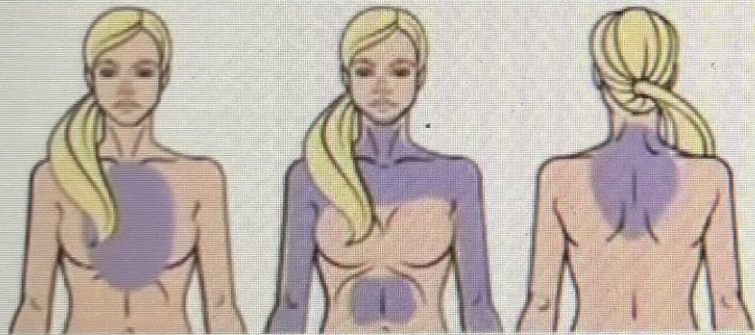
23 Ottobre 2021

Il Cuore, l'Età, il Genere



Il Cuore, l'Età, il Genere

Cardiopatía ischemica :
Dolore toracico spesso assente



- è spesso precordiale ma non retrosternale, più facilmente dorsale, al collo, alla mandibola
- la causa scatenante è più spesso una emozione che uno sforzo fisico

spesso diverso dal dolore «tipico»
secondo il modello maschile



**FR classici:
peso
relativo**

Outcomes

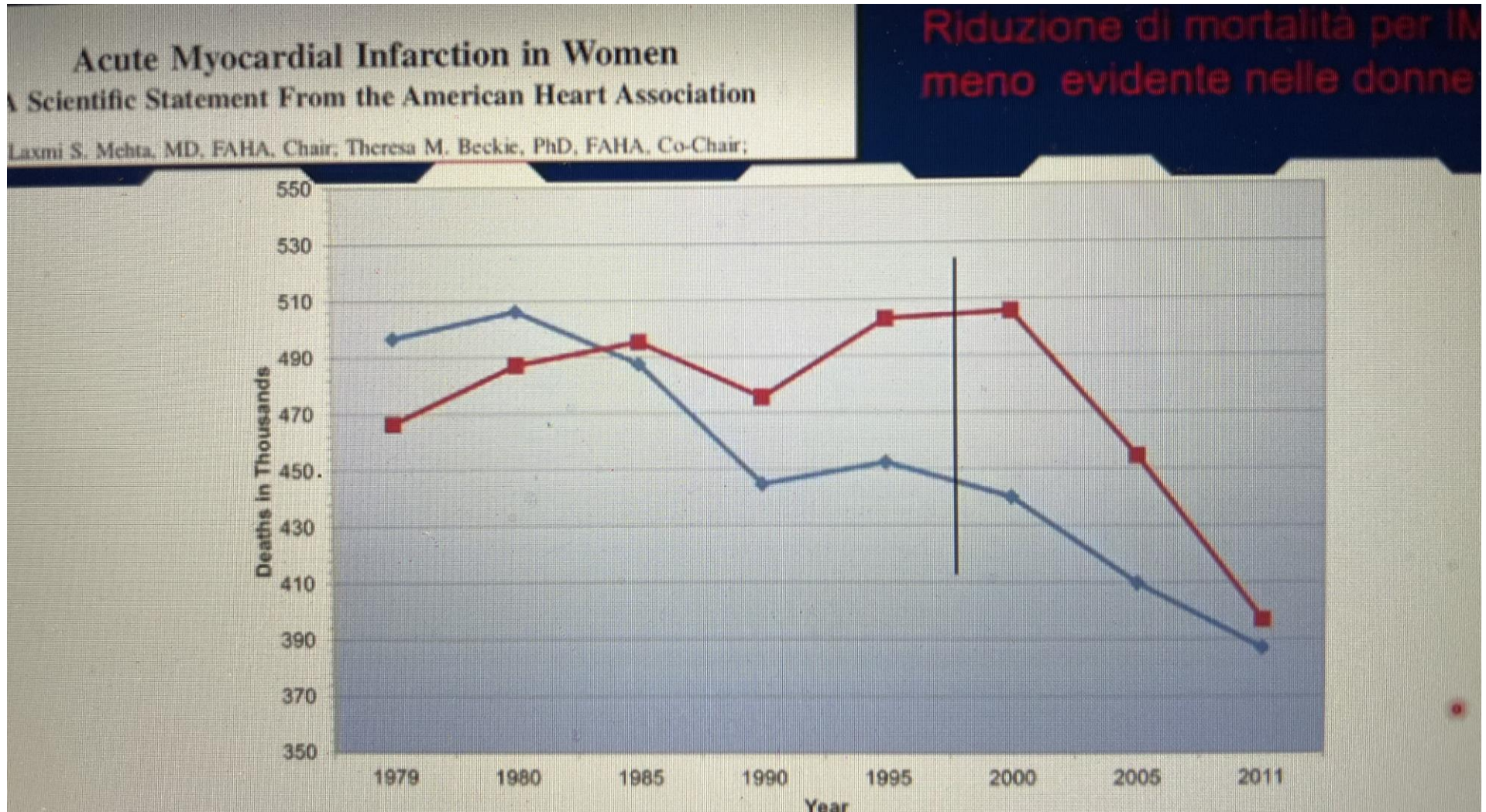


**FR specifici/
predominanti**

**Sotto/mis-
diagnosi**

awareness

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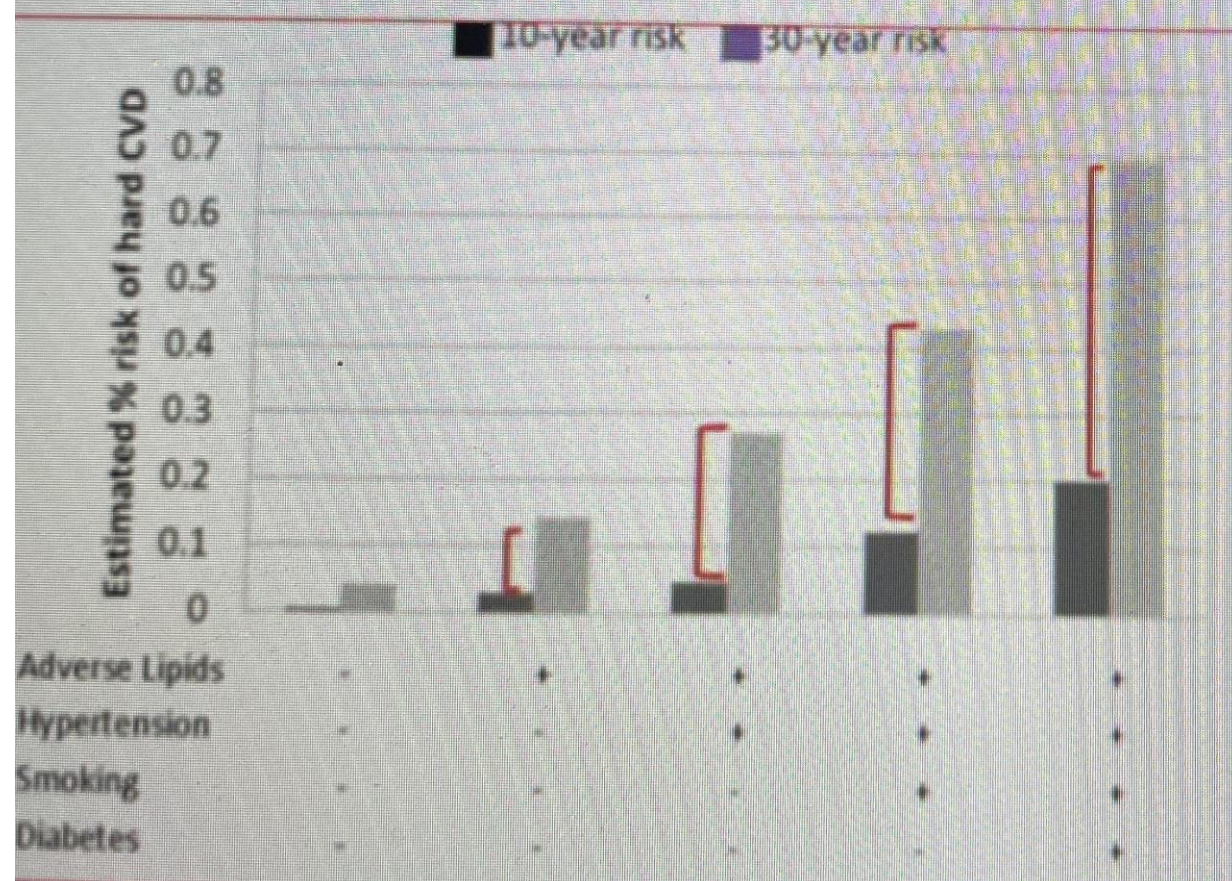
Studio INTERHEART

“Nove fattori di rischio, facilmente misurabili,
“spiegano” oltre il 90% degli infarti miocardici”

- 1) **Fumo**, 2) **Ipertensione**, 3) **Diabete**,
- 4) **Dislipidemia**, 5) **Obesità addominale**,
- 6) **Stress**, (**Depressione**)
- 7) **Inattività fisica**,
- 8) **Scarsa assunzione di frutta e verdura**,
- 9) **Nulla assunzione di alcol**



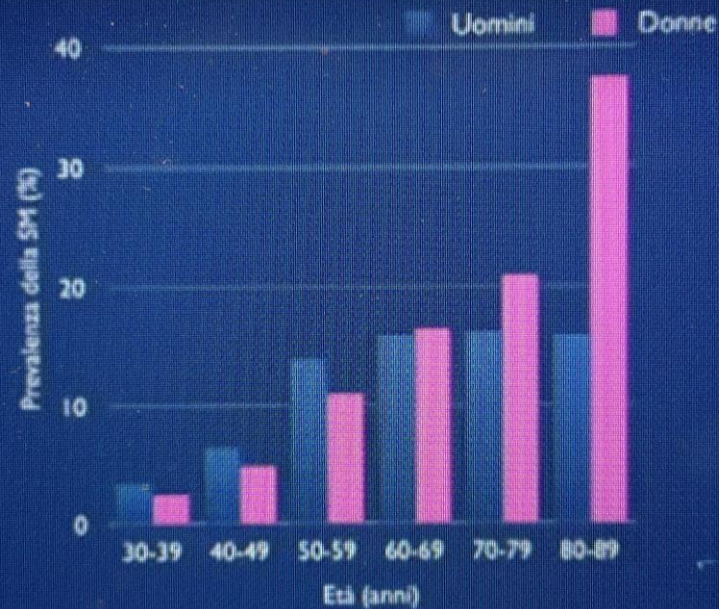
Controllo dei 5 FR (fumo, ipertensione, ipercolesterolemia, iperglicemia, BMI) = **basso rischio CV**,
Ma... >50 % delle donne in USA ha un insieme di almeno 3 FR



Più FR si potenziano
in modo esponenziale

Sindrome Metabolica

Prevalenza in Europa nei due sessi e per classi di età



Hu G, et al. Arch Intern Med. 2004;164:1066

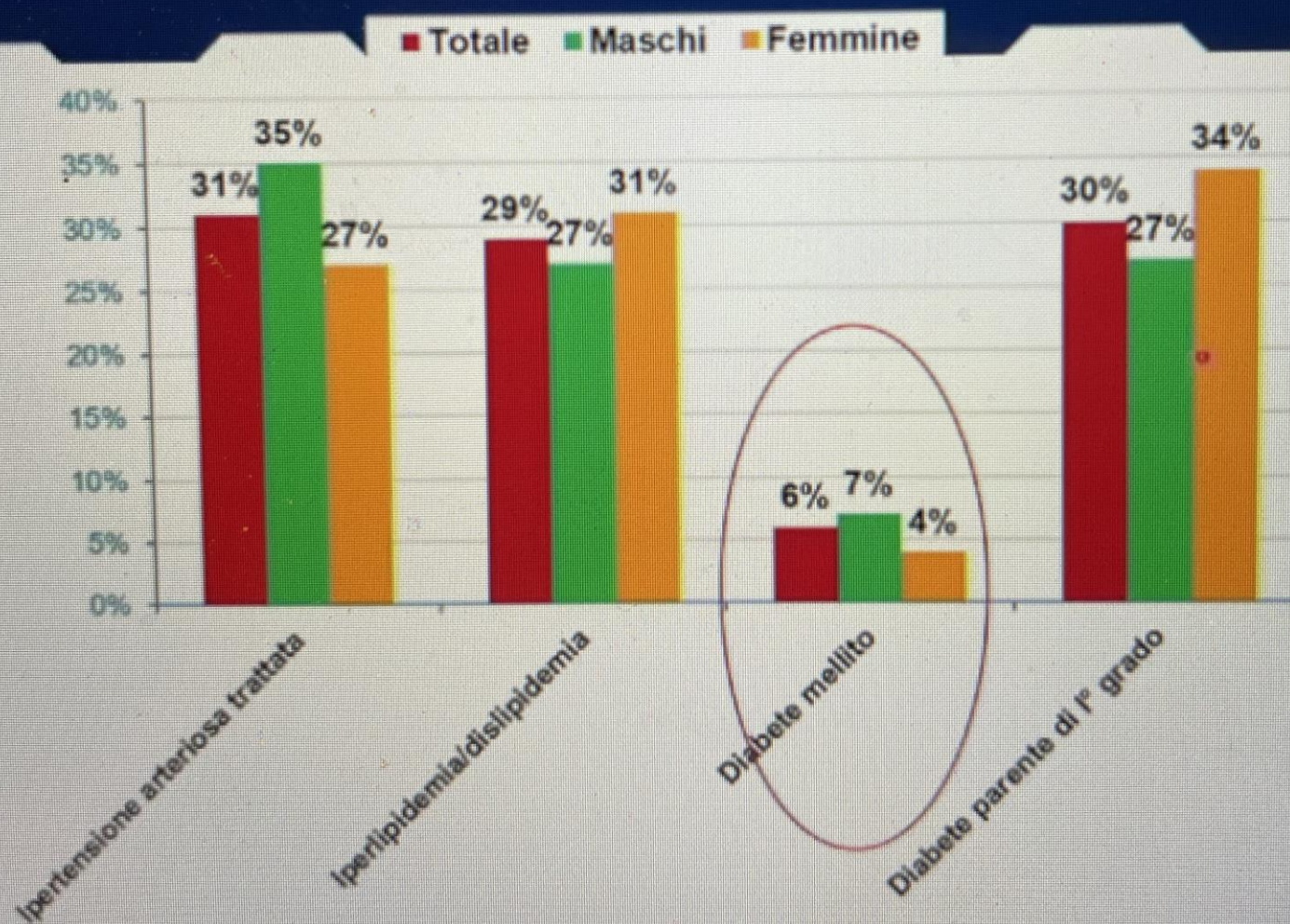
Fattori di Rischio	
Obesità addominale (Circonferenza addominale)	≥102 cm (Uomini) / ≥88 cm (Donne)
Trigliceridi	
HDL-C	Uomini < 40 mg/dL / Donne < 50 mg/dL
Pressione Arteriosa	≥130/85 mmHg
Glicemia a digiuno	≥100 mg/dL

Studio PROSPECT: prevalenza sdr metabolica < 65y

♂ 45.5% vs ♀ 68%

I numeri di Banca del Cuore 2017-2019

Fattori di rischio (1)



2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS

The Task Force for the management of atrial fibrillation of the European Society of Cardiology (ESC)

Developed with the special contribution of the European Heart Rhythm Association (EHRA) of the ESC

Endorsed by the European Stroke Organisation (ESO)

In 2010, the estimated numbers of men and women with AF world- wide were **20.9 million and 12.6 million**, respectively, with higher incidence and prevalence rates in developed countries. **One in four** middle-aged adults in Europe and the US will develop AF. By 2030, 14 – 17 million AF patients are anticipated in the European Union, with **120 000 – 215 000** newly diagnosed patients per year. Estimates suggest an AF prevalence of approximately **3% in adults** aged 20 years or older

Terapia FA

CHA₂DS₂-VASc Score

		Score
C	Congestive Heart Failure/LV Dysfunction	1
H	Hypertension	1
A	Age ≥ 75 Years	2
D	Diabetes Mellitus	1
S	Stroke (TIA/TE)	2
V	Vascular Disease ^[a]	1
A	Age 65-74 Years	1
S	Sex (female)	1

a. Prior myocardial infarction, peripheral artery disease, aortic plaque.
LV = left ventricular; TE = thromboembolism; TIA = transient ischemic attack

of dyslipidaemias: lipid modification to reduce cardiovascular risk

9.2.3 Hormone therapy

Currently prescribed third-generation, low-dose oestrogen–progestin oral contraceptives do not appear to increase adverse coronary events³⁹⁰ and can be used, after baseline lipid profile assessment, in women with acceptable TC levels. In contrast, alternative contraceptive measures should be recommended in women with hypercholesterolaemia [LDL-C >4 mmol/L (>160 mg/dL)] or with multiple risk factors, and in those at high-risk of thrombotic events.³⁹¹ Oestrogen replacement therapy, despite some favourable effects on lipid profiles, has not been demonstrated to reduce CV risk and cannot be recommended for CVD prevention in women.³⁹² No lipid-lowering drugs should be administered during pregnancy and the period of breastfeeding because data on possible adverse effects are lacking. However, bile

Effetti della terapia ormonale sostitutiva

Protettivi

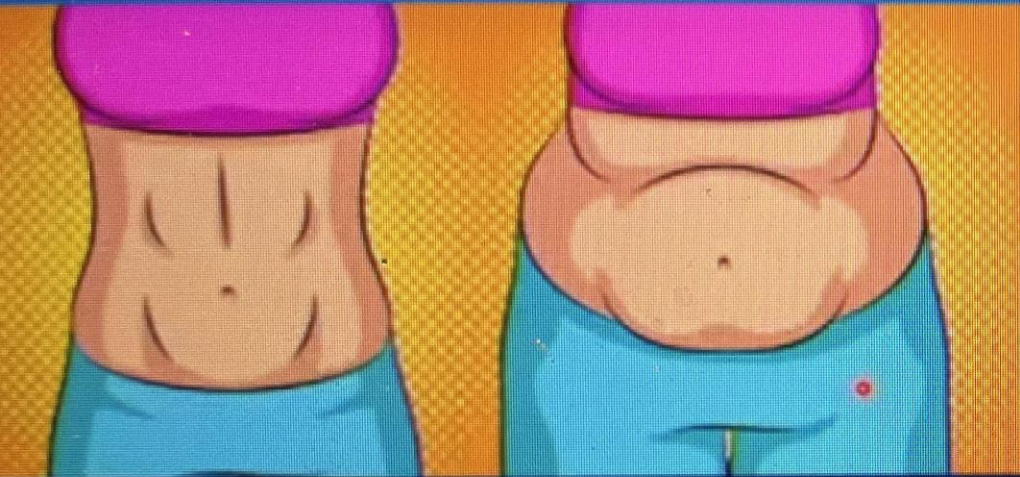
- Aumento HDL, calo LDL e Lp(A)
- Inibizione dell'iperplasia dell'intima
- Promozione angiogenesi
- Antiossidante
- Aumenta sensibilità all'insulina
- Inibisce aumento adiposità addominale

Dannosi

- Aumento livelli Proteina C Reattiva
- Attivazione delle metalloproteasi
- Azione pro-coagulante

ESTROGENI – effetti

Effetti favorevoli



↓ col LDL

↑ col HDL

↓ Fibrogeno

Menopausa

Cessazione
funzionalità
ovarica



**ALTERAZIONI
METABOLICHE**

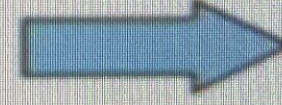
↑ Adiposità
addominale

↑ Trigliceridi

↑ Glucosio

↑ Insulina

↑ LDL



**RISCHIO
CARDIOVASCOLARE**

ESTROGENI – effetti

Effetti favorevoli

LIPIDI

↓ col LDL
↑ col HDL

Coagulazione

↓ Fibrogeno

Infiammazione

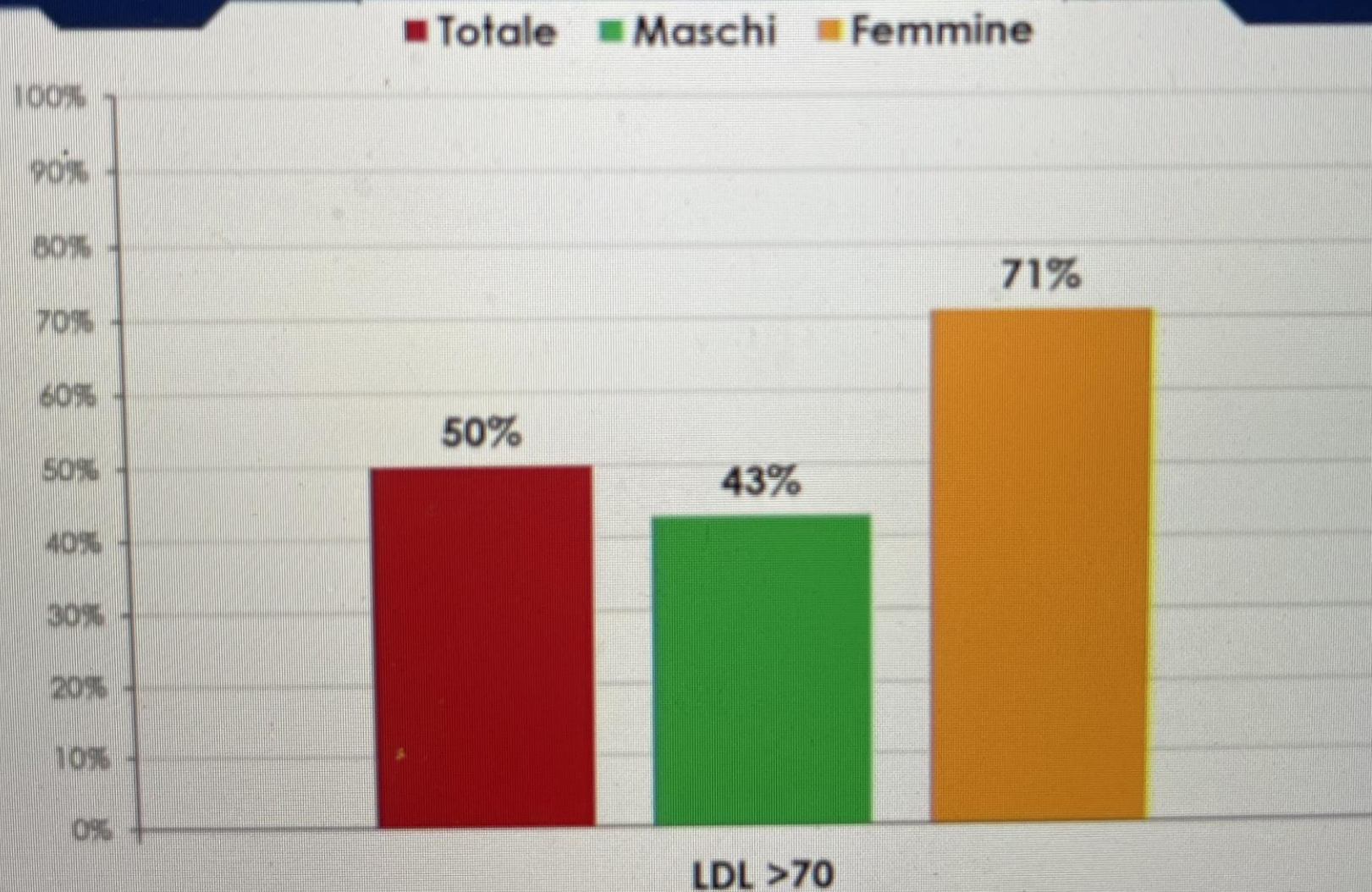
↓ Molecole di adesione

Funzione endoteliale
Pressione arteriosa

↓ Attività dell'enzima ACE
↓ Endotelina -1
↑ Sintesi Ossido Nitrico
↓ Proliferaz cell musc lisce

I numeri di Banca del Cuore

Colesterolo LDL >70 mg/dL in soggetti con storia di CAD



Donne con SCA meno sottoposte ad angiografia coronarica

Table 4 (Continued)

Author	Study period	Data source	Sample size	Key outcomes
De Luca et al ¹⁴	2004-2013	Uniflow/Onco National registry Italy	13235 acute MI STEMI - 48% (6421) age 74.7% (70.6% men)	
De Luca et al ¹⁵	2001-2010	Uniflow/Onco National registry Italy	13235 acute MI STEMI - 48% (6421) age 74.7% (70.6% men)	
Coronary et al ¹⁶	1994-2004	NHANES	1.1 million AMI patients (46.7% women) 65-85 years 132,737 acute MI - 55 years	

Table 4 (Continued)

Author	Study period	Data source	Sample size	Key outcomes
Udelson et al ¹⁷	2008-2011	Onco-ri, Canada registry	22,495 AMI patients (24.5% women)	<ul style="list-style-type: none"> Women received less revascularization than men at 30-day admission (25.1% vs 31.2%) One-year death or AMI was higher in women (13.7% vs 12.4%), primarily driven by higher rates of mortality (11.1% vs 10.2%) AMI rates increased in younger women Over time, 30-day mortality decreased similarly in men and women without evidence of interaction Younger women had greater risk of 30-day mortality in all cause per
De Luca et al ¹⁸	2000-2009	British Columbia Canada ACS registry	30,428 AMI patients (7.7% < 35 years) (24.4% women)	<ul style="list-style-type: none"> Women with STEMI had 20% greater age-adjusted risk of death than men (OR 1.20, 95% CI = 1.08-1.33) Younger women with STEMI but not NSTEMI had higher rates of in-hospital mortality than men Female gender but not sex was an independent predictor of all-cause outcomes However, female in-hospital and death rates decreased with greater revascularization (HR 0.45, 95% CI = 0.25-0.85) while trend for greater mortality was not seen in women with STEMI (HR 1.16, 95% CI = 0.95-1.42) When adjusted for revascularization, there was no sex-specific mortality difference Women presented less often with STEMI (20% vs 17%) Women presented less often with typical chest pain (27% vs 30%) More women had GRACE scores >100 at presentation Even after adjustment for symptoms, GRACE scores, and year of enrollment, women with STEMI had less revascularization than men Female sex was an independent predictor of 30-day (HR 1.17, 95% CI = 1.11-1.24) and 1-year (HR 1.16, 95% CI = 1.10-1.22) mortality Women underwent less revascularization than men While women had higher revascularization and PCI rates than men, other rates Women with STEMI had greater in-hospital mortality than men (OR 1.15, 95% CI = 1.1-1.2) Women had similar adjusted risk of MACE and secondary endpoints leading to men Revascularization was used in fewer young women than men (28.1% vs 34.7%) Revascularization was used in fewer women than men (28.0% vs 34.7%) Overall, women had better adjusted survival than men except in younger women and women presenting with STEMI Younger women < 60 years had higher mortality than men Women were less likely to be prescribed guideline therapies There were no changes in these trends over time
Hair et al ¹⁹	2007-2009	Canadian Society of Cardiology registry	45,312 PCI patients (7.3% women) 51.2% AMI	
Puller et al ²⁰	2008-2012	GRACE/PLAAT study	Patients 18-85 years of age (27% women) 626 men	
Sabatini et al ²¹	2008-2012	National In-Hospital ACS Survey Database	11,304 ACS patients - 2,747 (24%) < 65 years of age 407 women	

DE Luca et al 2014
13235 pts da 5 registri
italiani
27.9% donne

NON riperfusione
19% donne vs 5% uomini

pPCI
66% donne vs 83% uomini

¹⁴Uniflow/Onco
National
Registry
(UNIFLOW/ONCO)



European Heart Journal 2013, 34, 507-516
doi:10.1093/eurheartj/ehs376

CURRENT OPINION

Women and research on cardiovascular diseases in Europe: a report from the European Heart Health Strategy (EuroHeart) project

Donne sottorappresentate negli studi clinici
27.3%, range 19–34.6%

Pamela Douglas, primo presidente donna della ACC, 1986:

«la differente risposta maschile e femminile rende inaccurata l'assunzione secondo cui i risultati dei trials possono essere estesi a tutti»

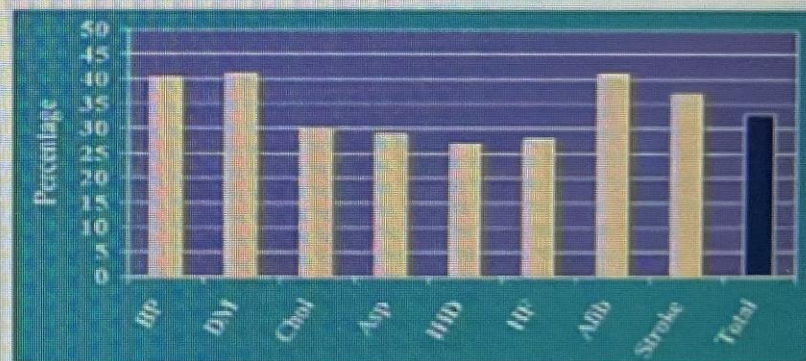


Figure 2 Percentage of women in clinical trials. Abbreviations as in Figure 1.

13 randomized trials on ischaemic heart disease enrolled 90 400 patients and **only 24 756 were women**

CENTRAL ILLUSTRATION Knowledge, Attitudes and Beliefs Regarding Cardiovascular Disease in Women:
The Women's Heart Alliance

#1 Cardiovascular disease (CVD) is the top cause of death in women in the U.S.
CVD kills more women than all cancers combined

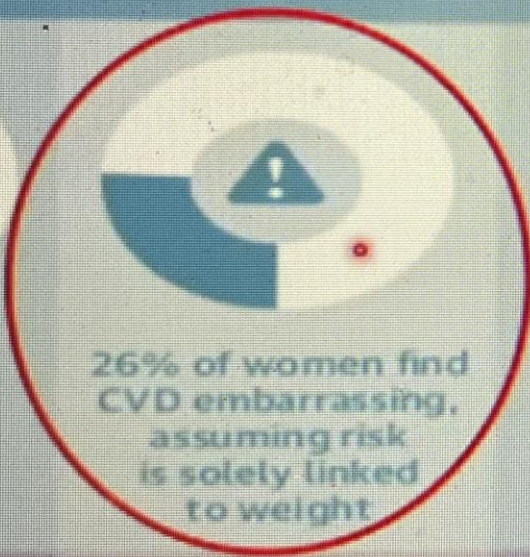
400,000 women died from CVD in 2016 (U.S.A.)

And yet ...



Only 45% of women know CVD is #1 killer

A need to raise awareness of risk and symptoms of heart disease



26% of women find CVD embarrassing, assuming risk is solely linked to weight

A need to de-stigmatize the disease risk by countering stereotypes with facts



Only 40% of routine care includes a heart risk check

A need to invest in women's CVD research and physician education/training



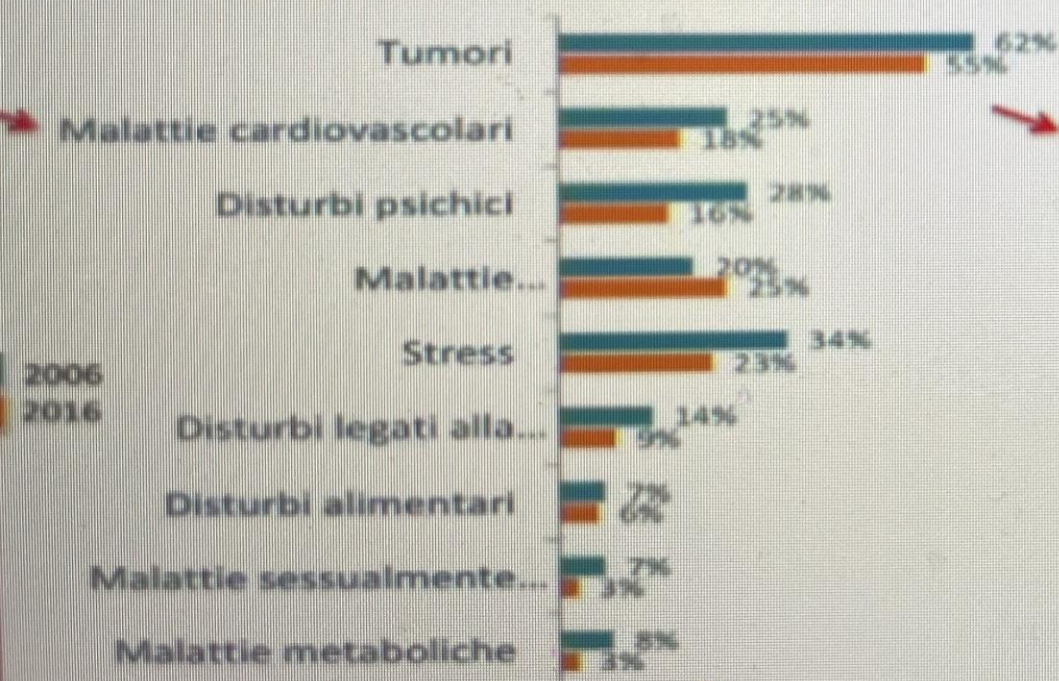
Only 39% of primary care physicians (PCPs) make CVD a top priority



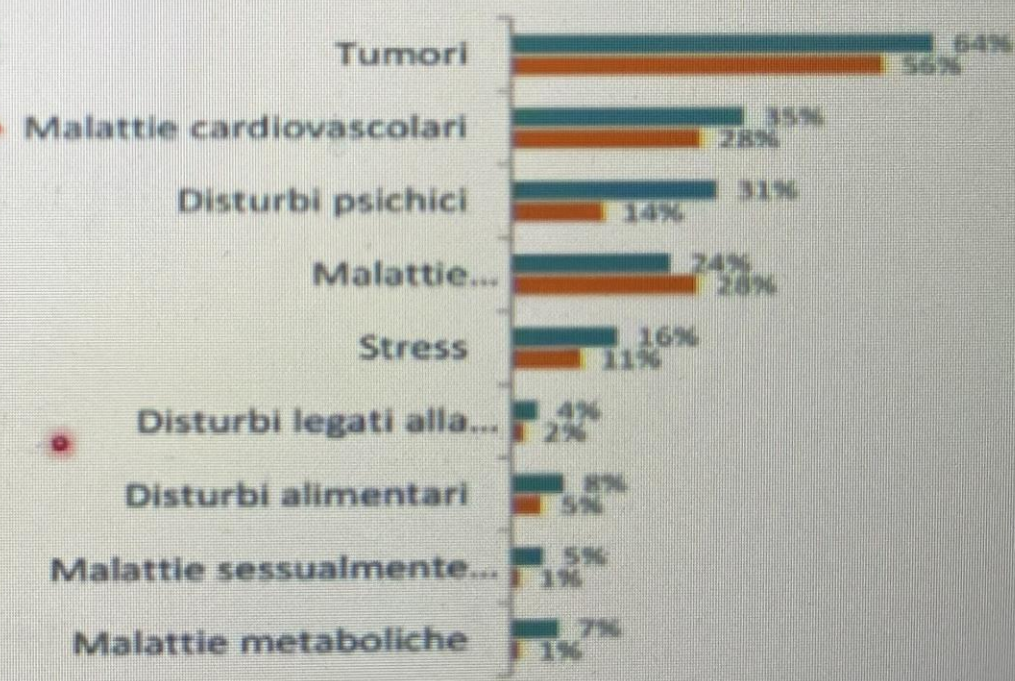
Only 22% of PCPs and 42% of cardiologists feel well prepared to assess CVD risk

Donne e salute: cosa le preoccupa maggiormente?

Preoccupazioni per sé



Preoccupazioni per gli altri

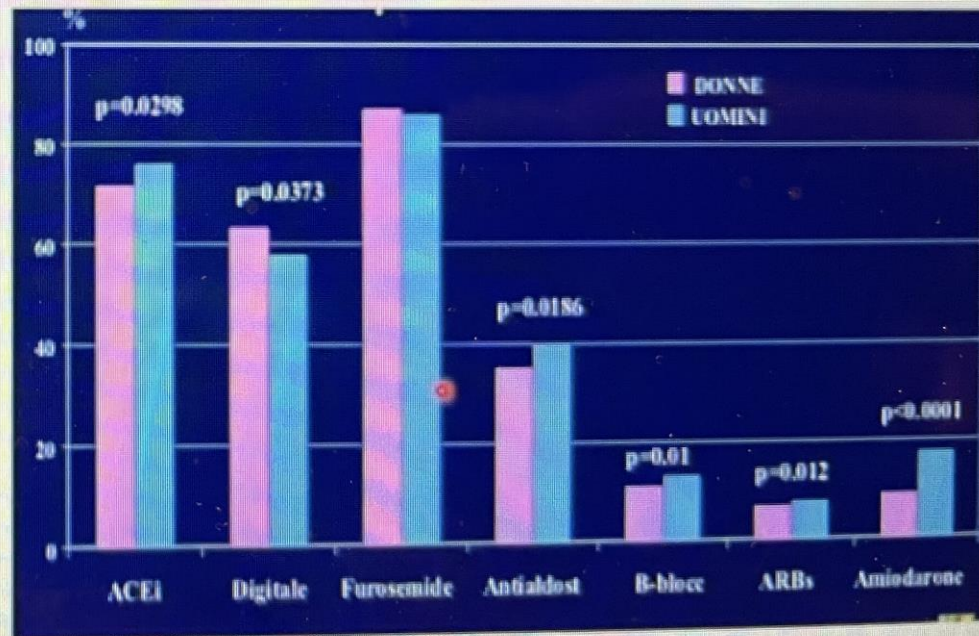


Donne con scompenso cardiaco

Meno esami diagnostici



Meno terapie EBM



Tempi / ritardi nelle donne sottoposte a pPCI

Studies reporting age-specific and sex-specific performance parameters for patients with acute coronary syndrome published after 2010

Number of patients	PCI rate	Outcome of interest	OR (95% CI)
4723 patients with STEMI	72% W	Door-to-balloon > 90 min	OR 1.13; 95% CI: 1.13 to 1.91
			OR 1.27; 95% CI: 1.27 to 1.93
			OR 1.40; 95% CI: 1.40 to 1.95
			OR 0.53; 95% CI: 0.53 to 1.45
			OR 7.37; 95% CI: 7.37 to 11.75
			OR 3.93; 95% CI: 3.93 to 6.13
		Recommended timeframe	
41 264 women			OR 0.9 to 0.93
		W55-64.9 y vs M55-64.9 y	OR 0.81; 95% CI: 0.70 to 0.92
		W65-74.9 y vs M65-74.9 y	OR 0.93; 95% CI: 0.79 to 1.10
		W≥75 y vs M≥75 y	OR 0.97; 95% CI: 0.83 to 1.14

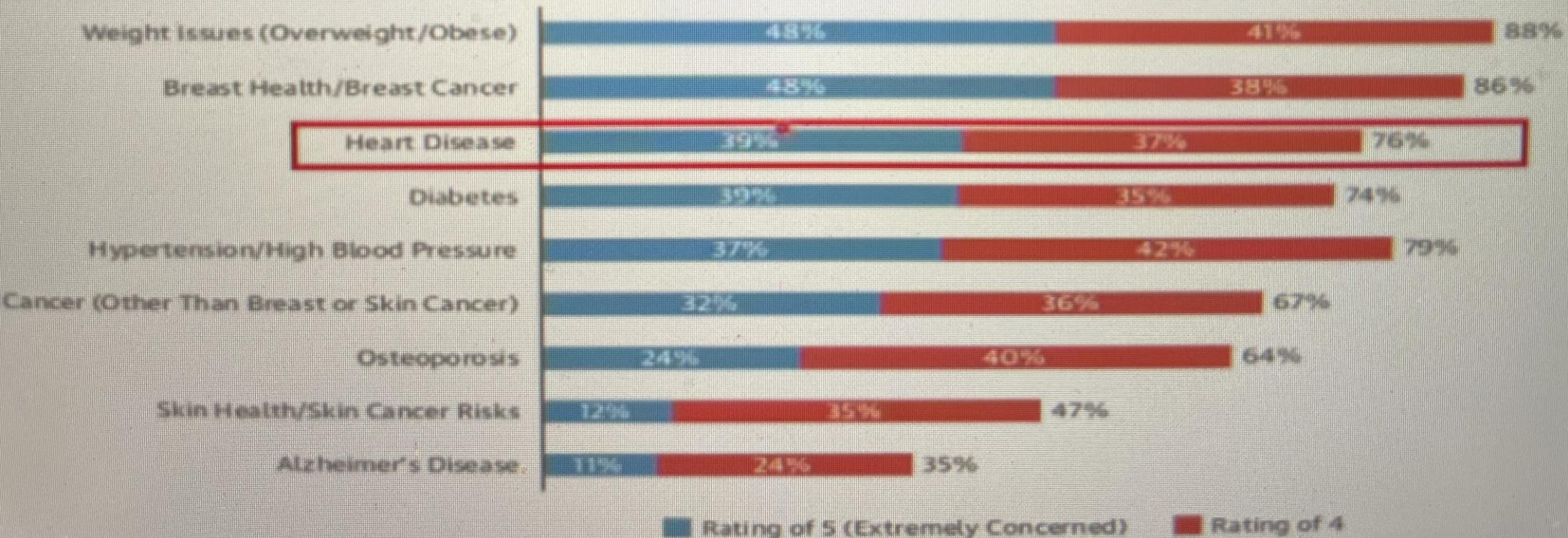
DTB time > di quanto raccomandato da LG, specie <65y

MI, myocardial infarction; M, men; NSTEMI, non-STEMI; PCI, percutaneous coronary intervention; STEMI, ST-segment elevation myocardial infarction; W, women

Salute del cuore della donna: solo **terza** fra le priorità per MMG e Cardiologi

FIGURE 2 Level of Concern for Top Health Issues Among PCPs

Level of Concern for Top Health Issues
among Primary Care Physicians
-rank ordered by % extremely concerned-



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AHA/ACOG PRESIDENTIAL ADVISORY

Promoting Risk Identification and Reduction of Cardiovascular Disease in Women Through Collaboration With Obstetricians and Gynecologists

A Presidential Advisory From the American Heart Association and the American College of Obstetricians and Gynecologists

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**Aumentare la consapevolezza
rispetto alla salute cardiovascolare della donna**

'La comunità è abituata a pensare alla gestione della salute femminile con approccio «a bikini» (cioè concentrato sulla mammella e sui problemi ginecologici)'

Nanette Wenger (a partire dal 1985)

piuttosto «**education remains pivotal**», a tutti i livelli:

ruolo anche del ginecologo (spesso il primo medico con cui la donna viene in contatto)

alcuni dati riportano che **solo il 33% di giovani donne** affronta il tema con il ginecologo pur avendo (31%) in anamnesi eventi prognosticamente sfavorevoli quali diabete/ipertensione in gravidanza o pre-eclampsia, parto prematuro.

Husbands' Hearts and Women's Health: Gender, Age, and Heart Disease in Twentieth-Century America

Cara Kiernan Fallon

Published by Johns Hopkins University Press
DOI: <https://doi.org/10.1353/bhm.2019.0073> 2019

1948

Husbands' Hearts and Women's Health 501

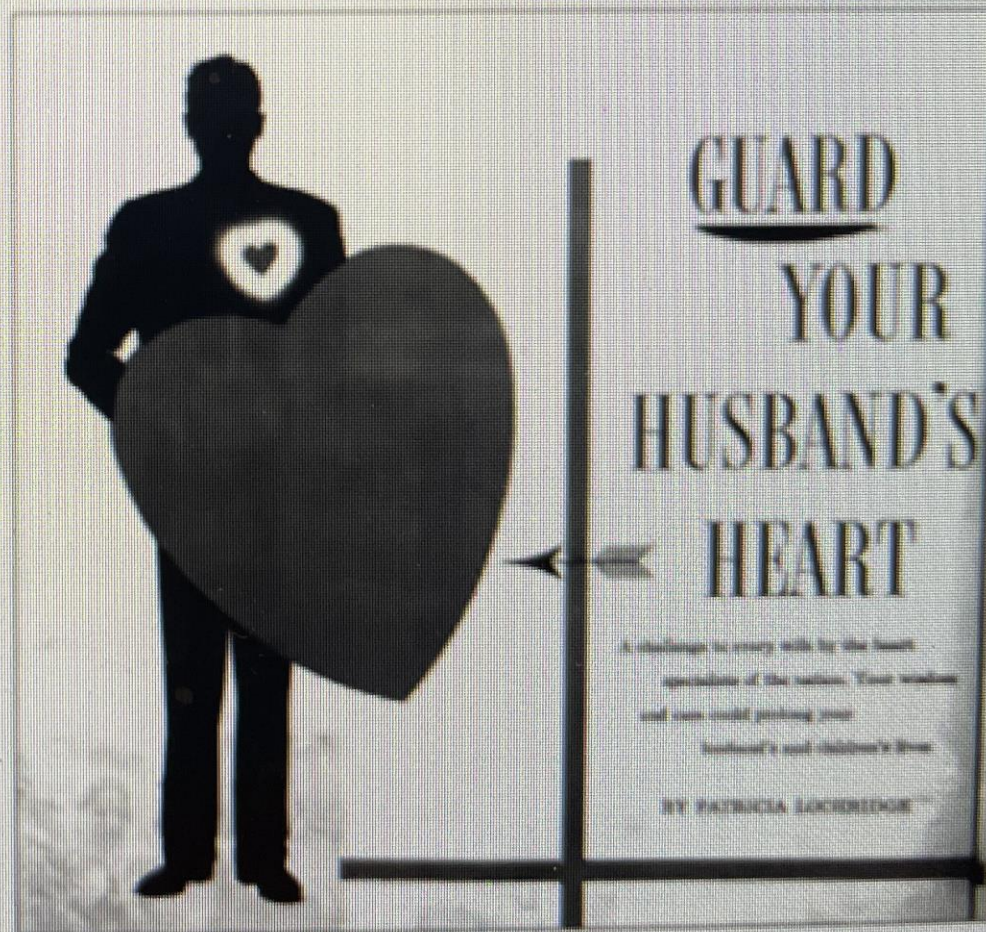
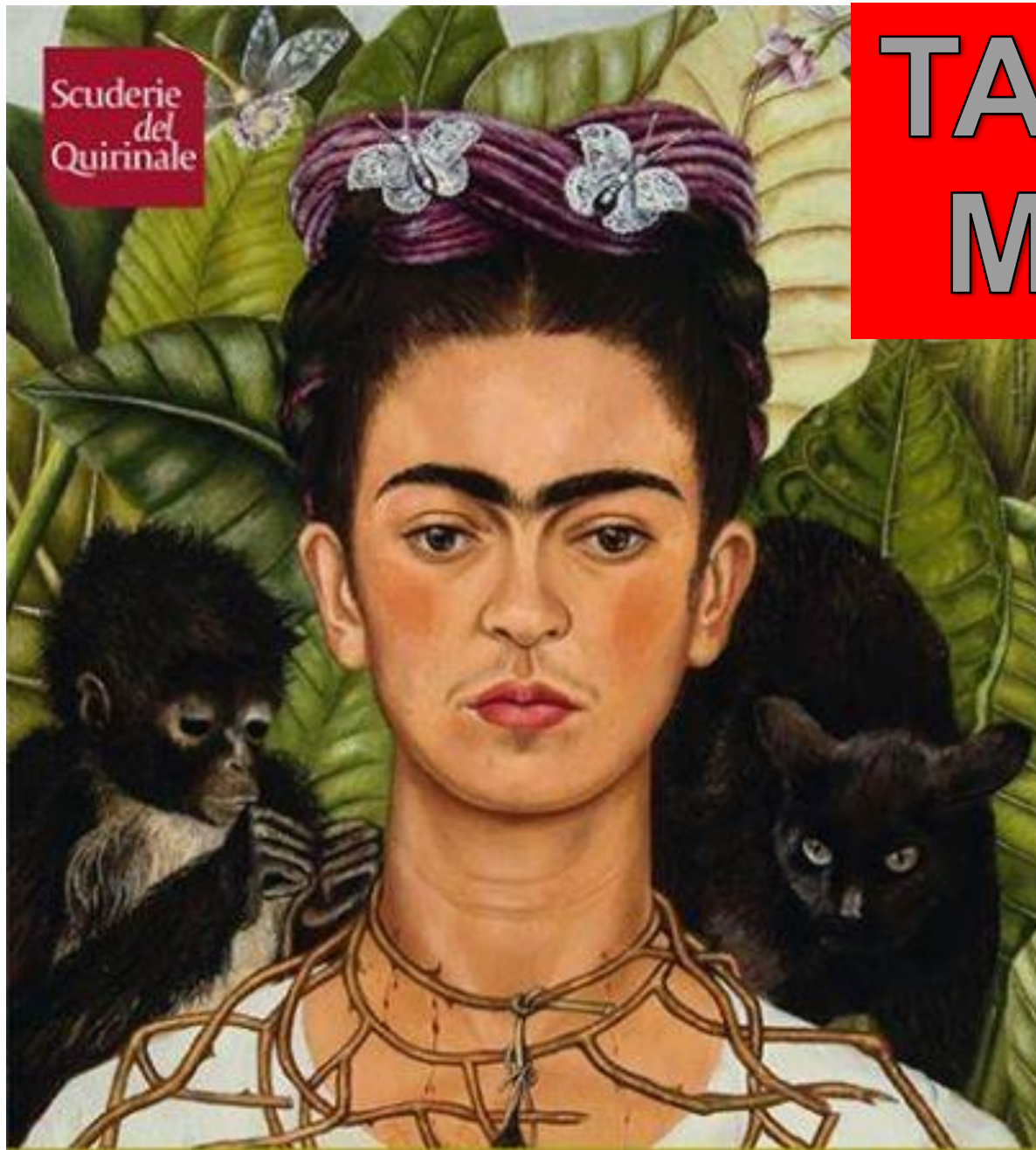


Figure 1. Patricia Lockridge, "Guard Your Husband's Heart," *Woman's Home Companion*, January 1948, 36-37.



Nickolas Muray
Young Frida painting Portrait of Mrs Jean Wight, 1931
Carbon Print, New York

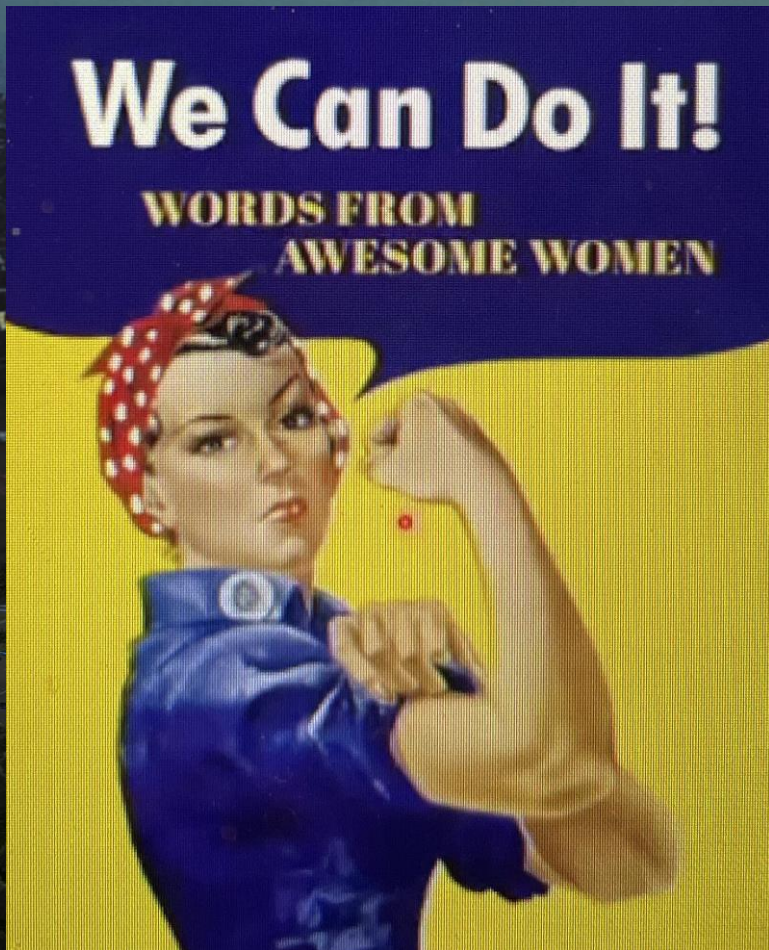
Scuderie
del
Quirinale



TAKE HOME
MESSAGE

FRIDA KAHLO

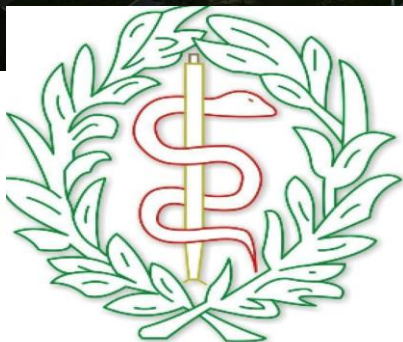
Scuderie del Quirinale Roma, via XXIV Maggio 16 20 marzo - 31 agosto 2014



GRAZIE



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