Mental hälsa och hjärtsjukdom - ett försummat samband

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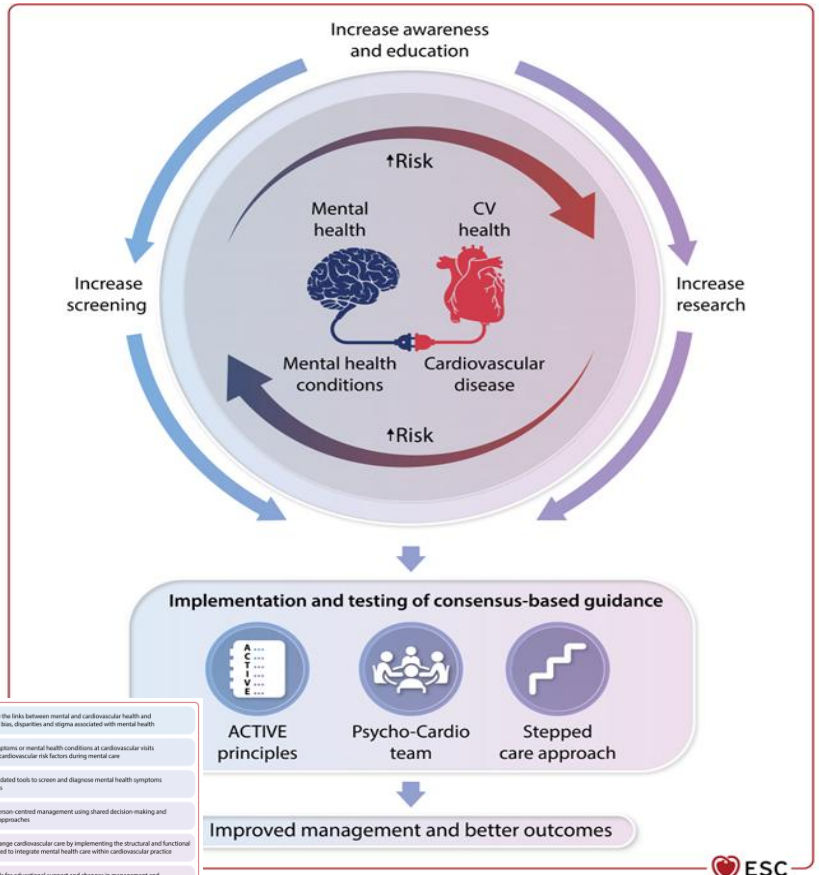
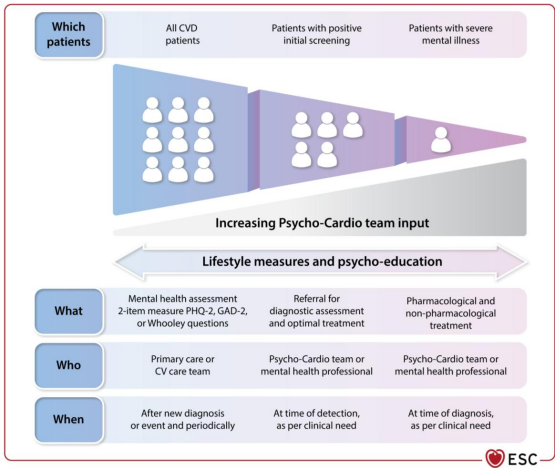
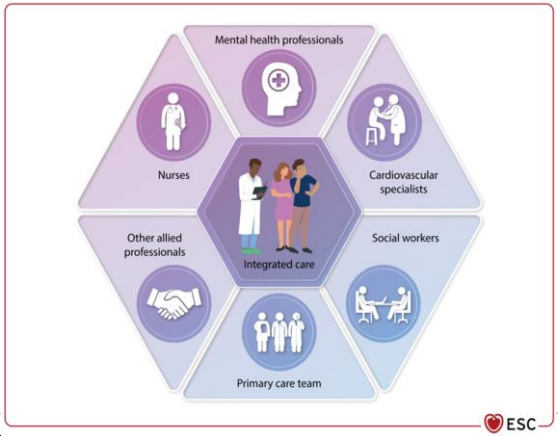
ESC Consensus Statement on Mental Health & CVD





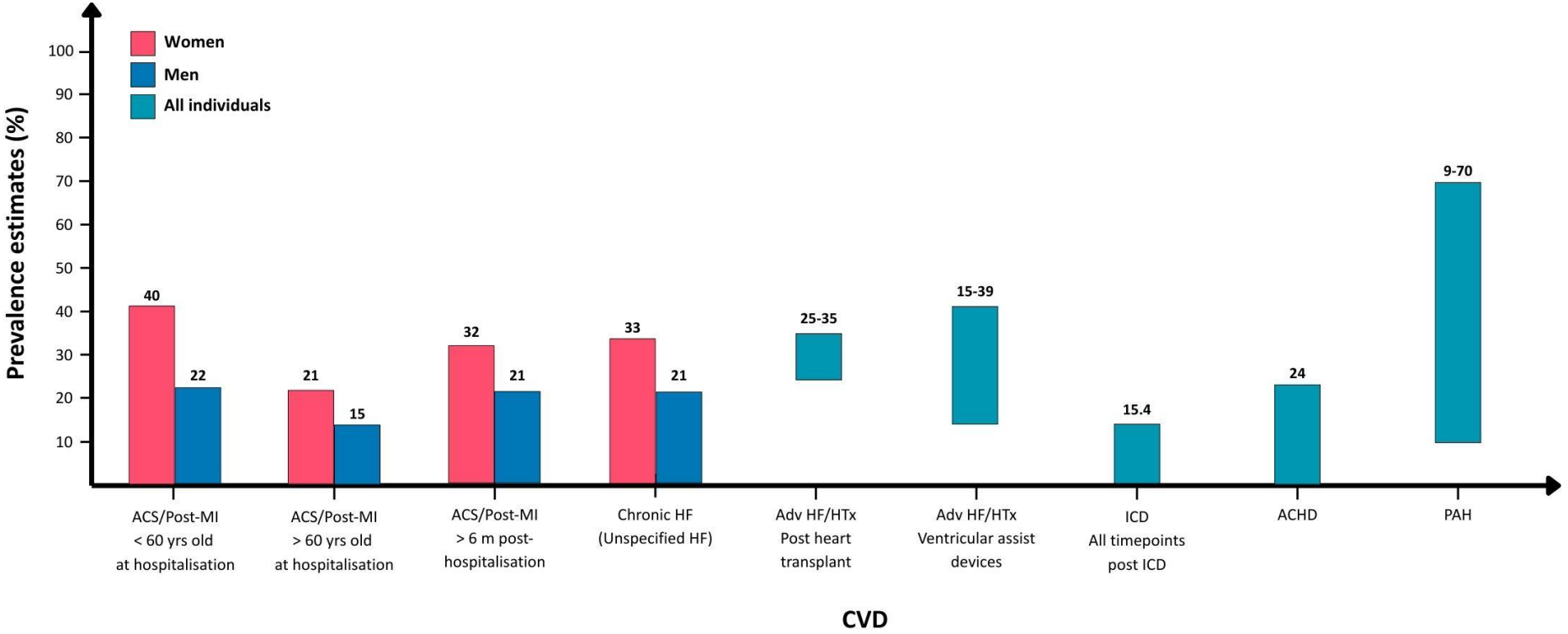


2023 ESC Clinical Consensus Statement on mental health and cardiovascular disease

Bueno H. *Eur Heart J* 2025; 46(41):4156-4225 (European Heart Journal, doi: 10.1093/eurheartj/ehaf191)

Kardiovaskulär risk och associationen till mental hälsa hos patienter med känd kardiovaskulär sjukdom

Prevalence of depression/depressive symptoms in people with CVD



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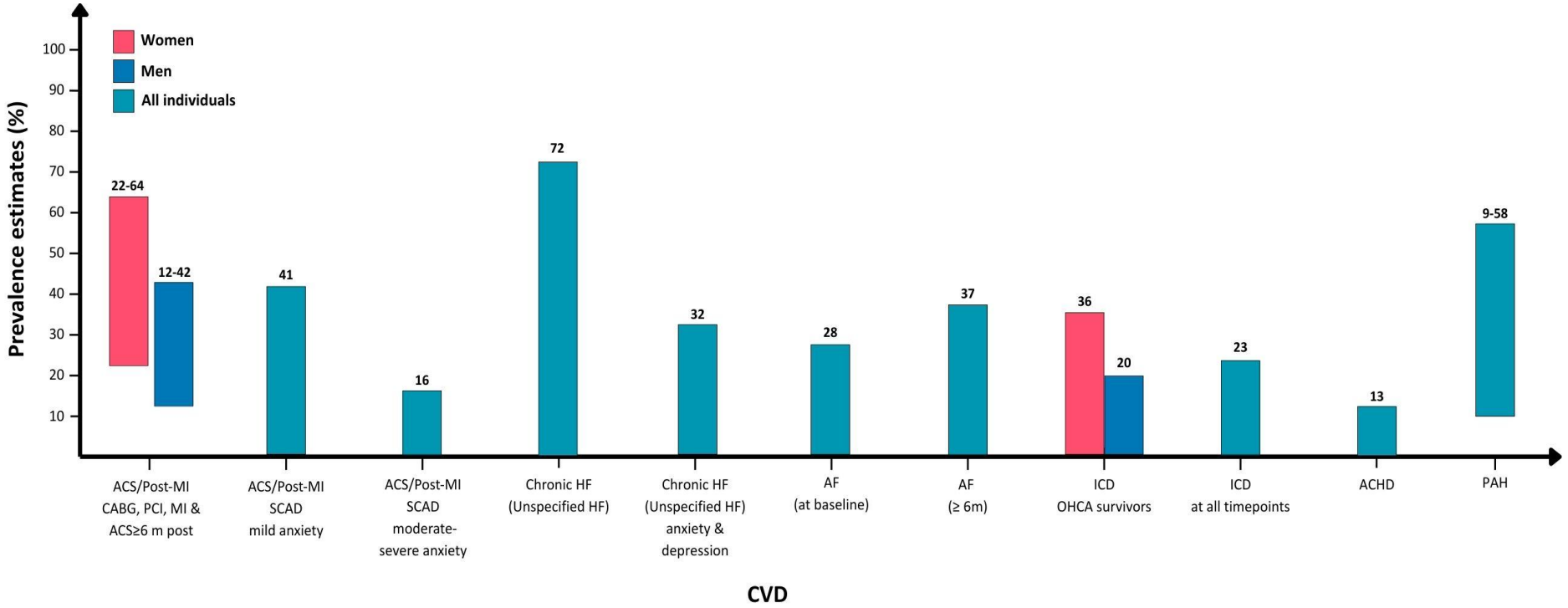
Prevalence of anxiety/anxiety symptoms in people with CVD



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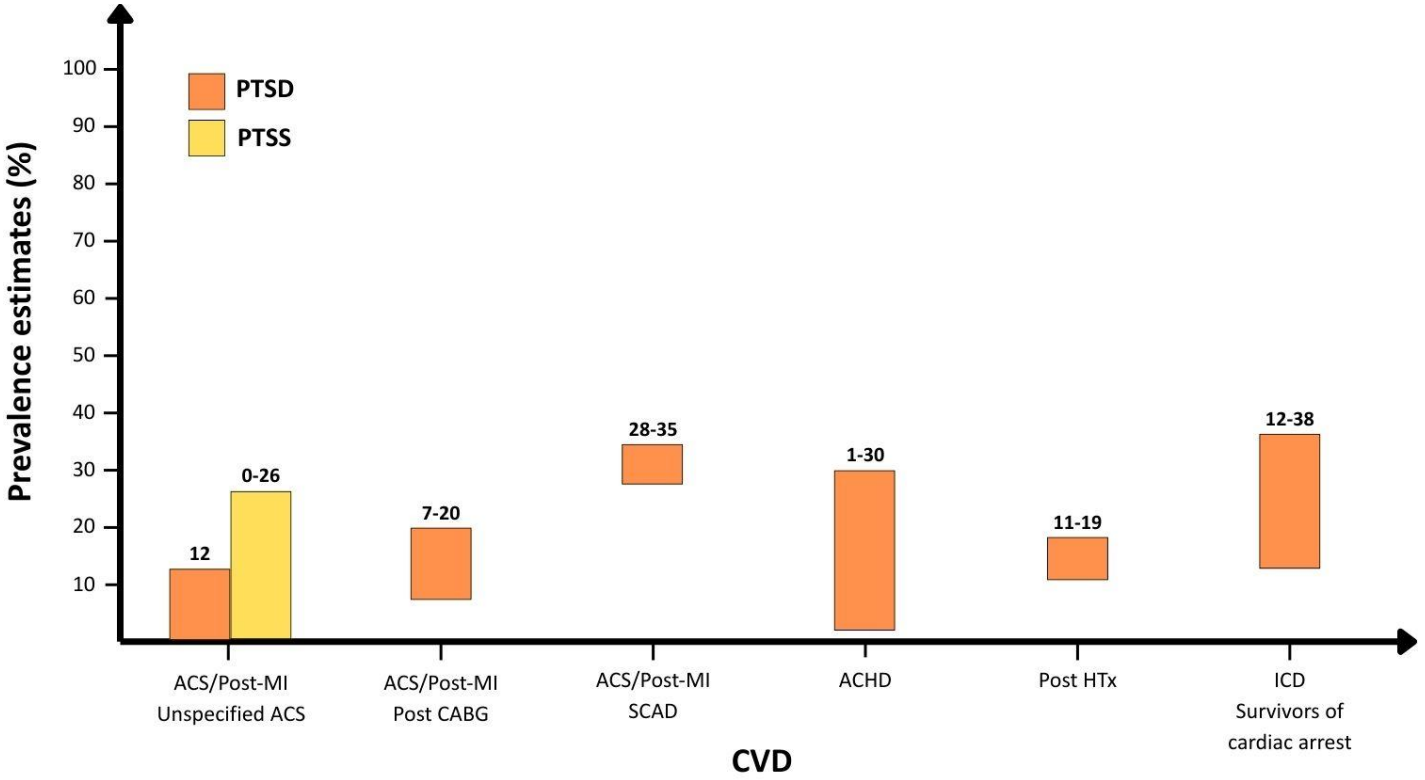
Prevalence of post-traumatic stress disorder/post-traumatic stress symptoms in people with CVD



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Impact of Mental Health Conditions in Individuals with CVD

DEPRESSION

- **Post-MI →** ↑ **22% all-cause mortality**
  ↑ **13% CV events** per SD increase in depression z-score
- **In HF →** ↑ **x2 risk of death or CV events**.
  ↓ **Rates of adherence** to treatment

ANXIETY

- **3 months post MI** → ↑ **x2 risk of CV events and all-cause mortality**
- **Persons with ICD** → **Strong predictor of mortality**
  → Linked to **unhealthy lifestyles**
  → **May improve adherence**

CARDIAC DISEASE-INDUCED PTSD SYMPTOMS

→ **Mixed results**

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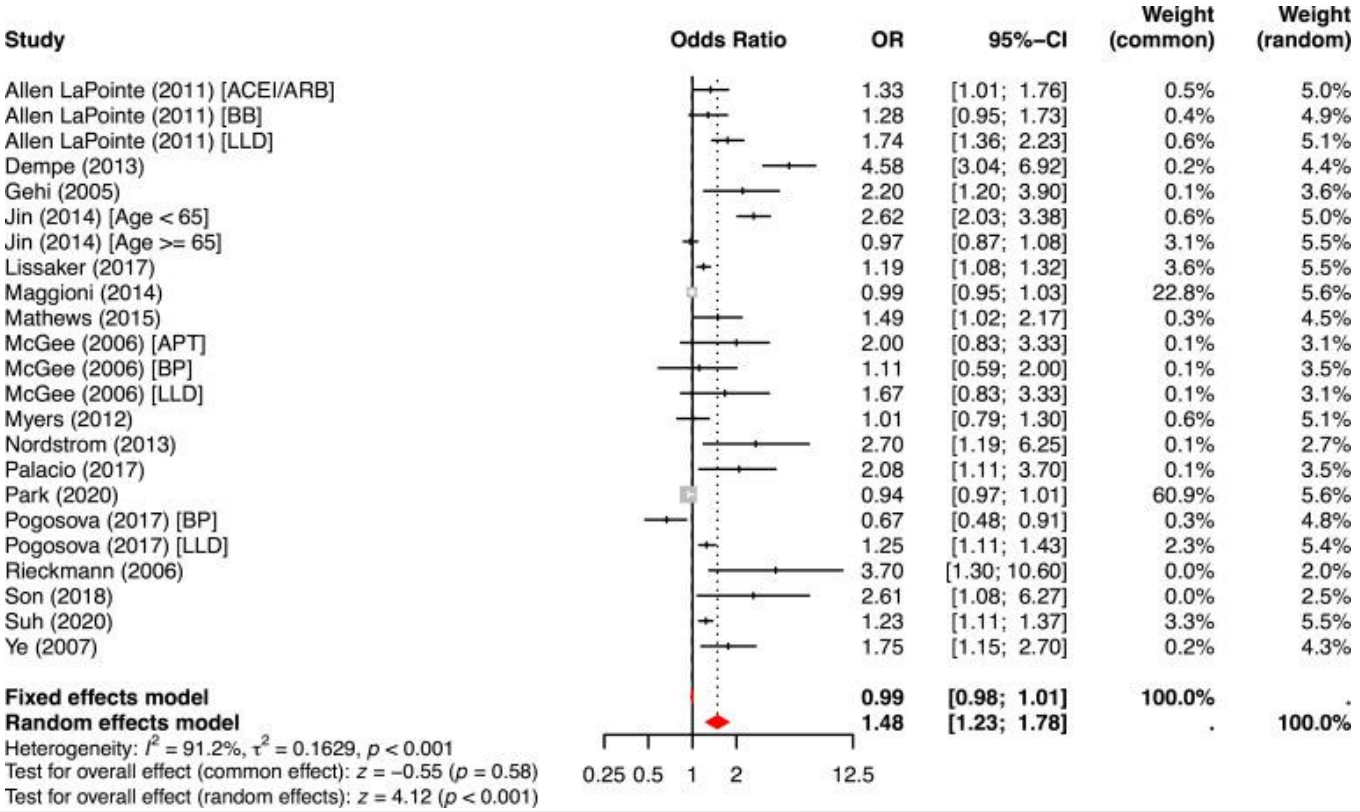
Impact of depression on medication non-adherence in CAD: Systematic review and meta-analysis.



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Kardiovaskulär risk och associationen till mental hälsa hos patienter utan känd kardiovaskulär sjukdom

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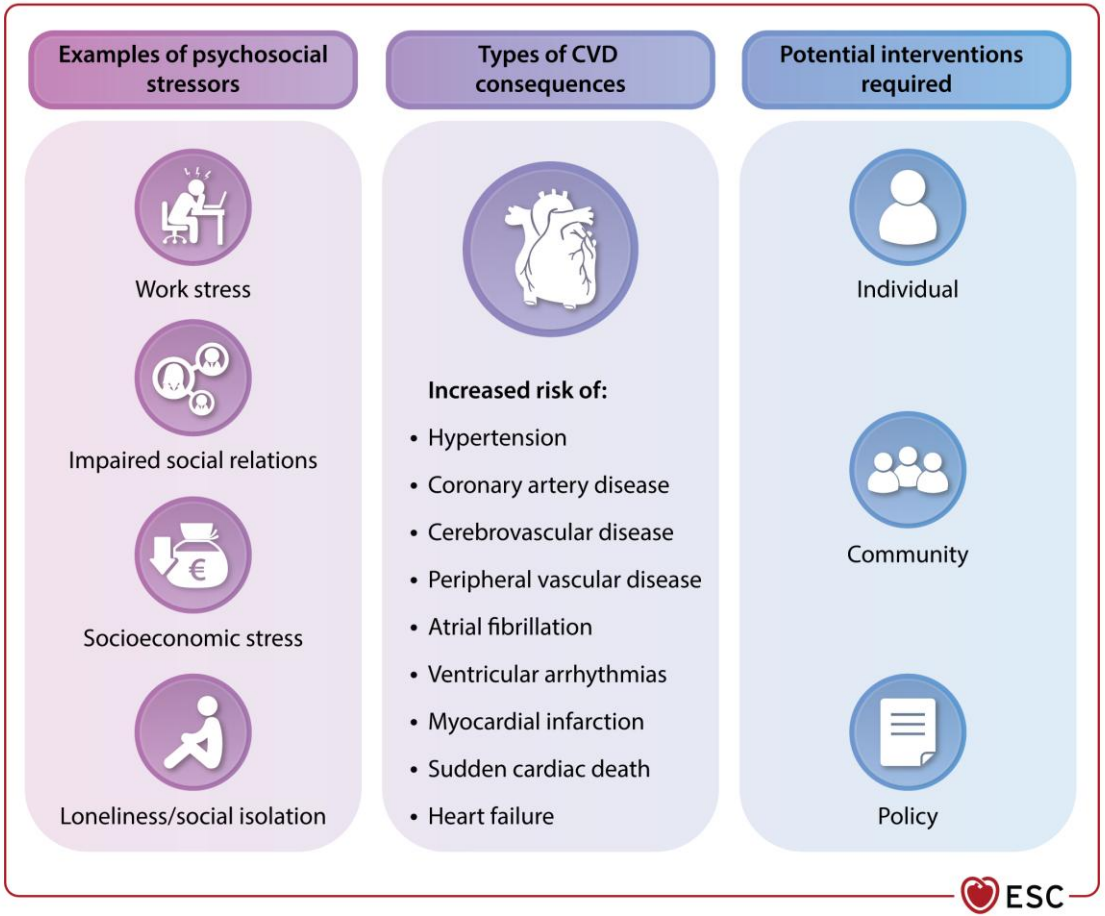
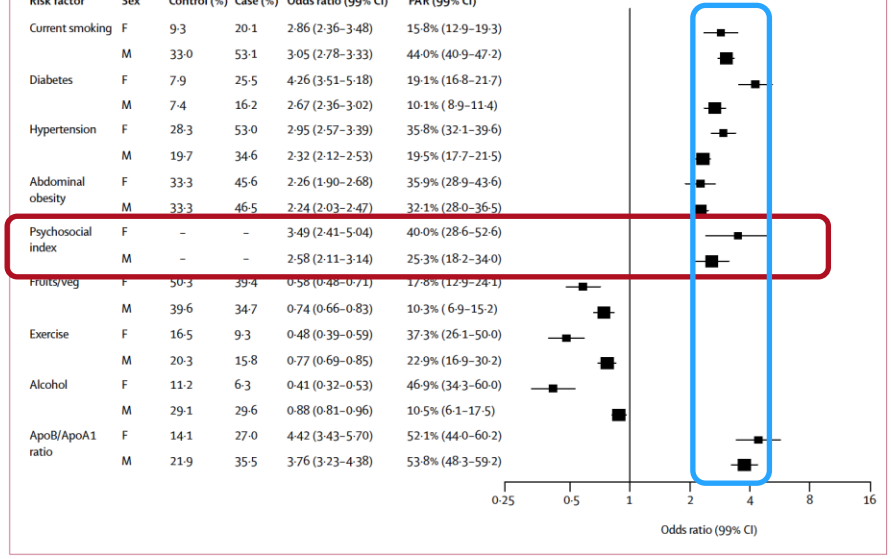
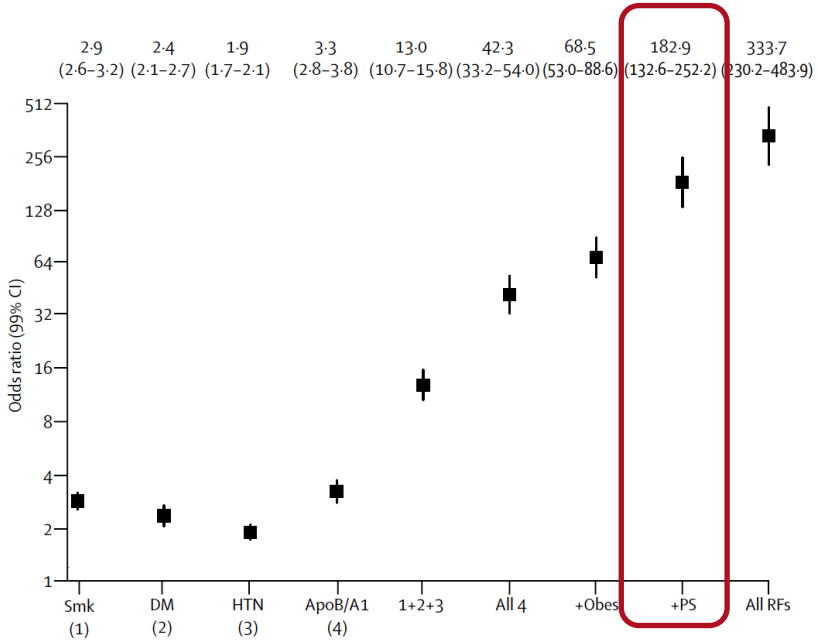
Sources of psychosocial stress as risk factors for cardiovascular disease



INTERHEART: psychosocial adversity and acute MI

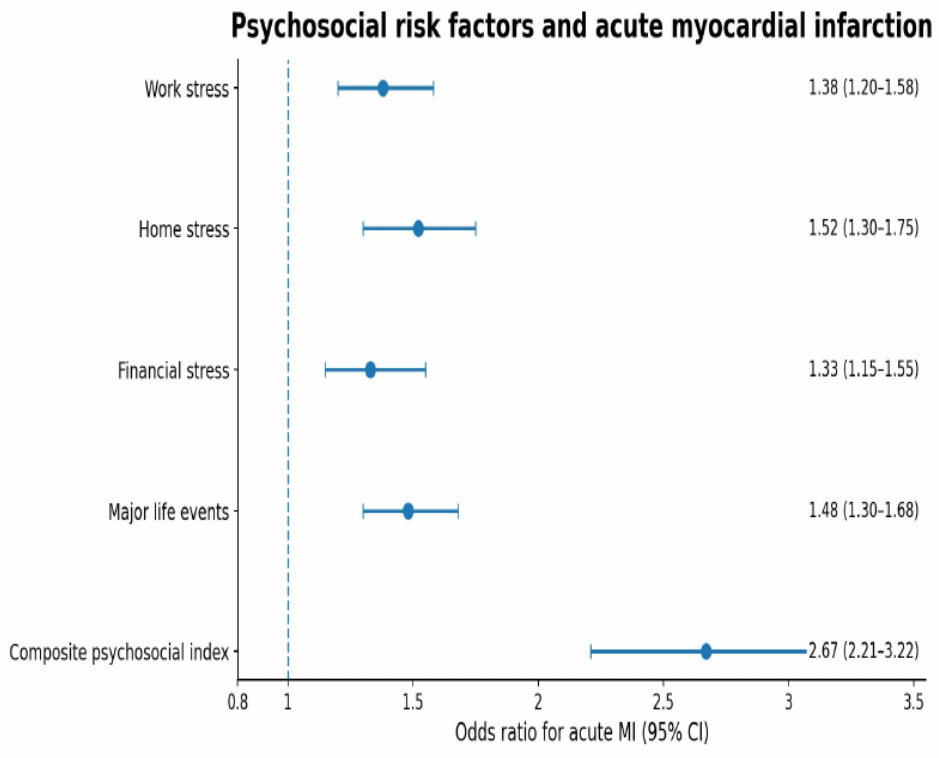
Risk factor	Sex	Control (%)	Case (%)	Odds ratio (99% CI)	PAR (99% CI)
Current smoking	F	9·3	20·1	2·86 (2·36–3·48)	15·8% (12·9–19·3)
	M	33·0	53·1	3·05 (2·78–3·33)	44·0% (40·9–47·2)
Diabetes	F	7·9	25·5	4·26 (3·51–5·18)	19·1% (16·8–21·7)
	M	7·4	16·2	2·67 (2·36–3·02)	10·1% (8·9–11·4)
Hypertension	F	28·3	53·0	2·95 (2·57–3·39)	35·8% (32·1–39·6)
	M	19·7	34·6	2·32 (2·12–2·53)	19·5% (17·7–21·5)
Abdominal obesity	F	33·3	45·6	2·26 (1·90–2·68)	35·9% (28·9–43·6)
	M	33·3	46·5	2·24 (2·03–2·47)	32·1% (28·0–36·5)
Psychosocial index	F	–	–	3·49 (2·41–5·04)	40·0% (28·6–52·6)
	M	–	–	2·58 (2·11–3·14)	25·3% (18·2–34·0)
Fruits/veg	F	50·3	39·4	0·58 (0·48–0·71)	17·8% (12·9–24·1)
	M	39·6	34·7	0·74 (0·66–0·83)	10·3% (6·9–15·2)
Exercise	F	16·5	9·3	0·48 (0·39–0·59)	37·3% (26·1–50·0)
	M	20·3	15·8	0·77 (0·69–0·85)	22·9% (16·9–30·2)
Alcohol	F	11·2	6·3	0·41 (0·32–0·53)	46·9% (34·3–60·0)
	M	29·1	29·6	0·88 (0·81–0·96)	10·5% (6·1–17·5)
ApoB/ApoA1 ratio	F	14·1	27·0	4·42 (3·43–5·70)	52·1% (44·0–60·2)
	M	21·9	35·5	3·76 (3·23–4·38)	53·8% (48·3–59·2)





Rosengren A, et al. Lancet. 2004;364:953–962. https://pubmed.ncbi.nlm.nih.gov/15364186/

INTERHEART: psychosocial adversity and acute MI



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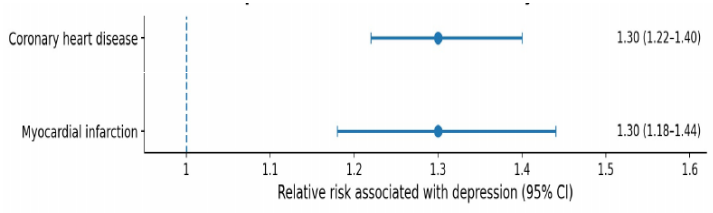
Meta-analyses: Depression precedes:

CHD / MI



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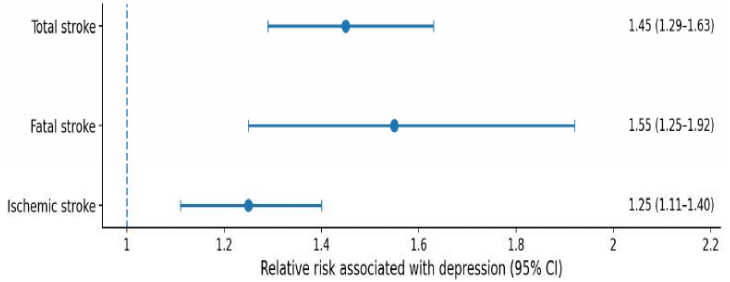
and Stroke



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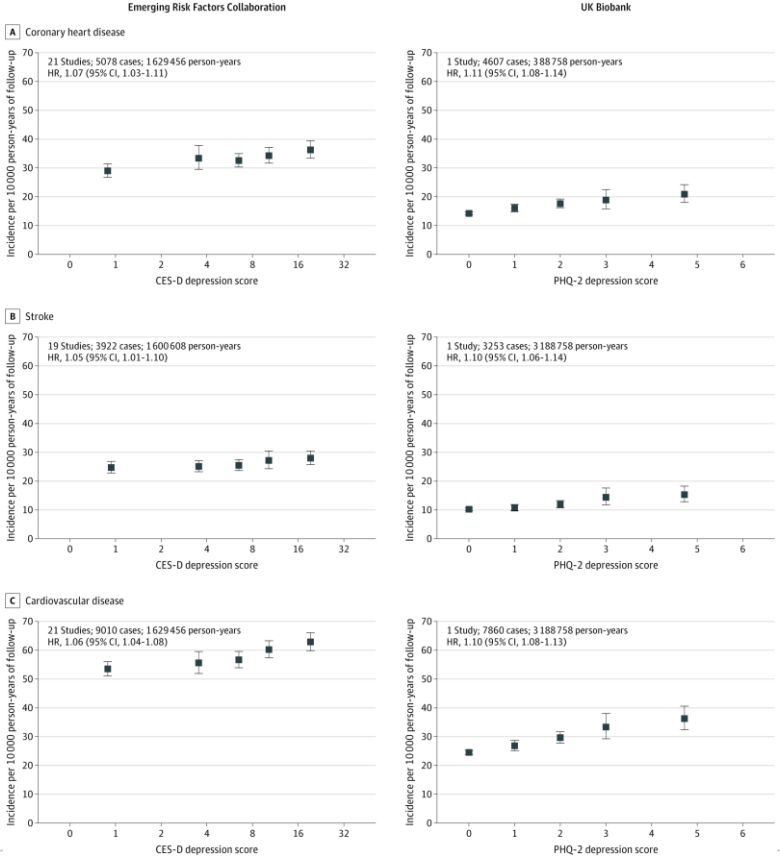
Graded CVD relationship between depressive symptoms and CV risk



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(European Heart Journal, doi: 10.1093/eurheartj/ehaf191)

Mental Health Conditions and Cardiovascular Risk

Depression

- Independently associated with **incident CVD, all-cause and combined CVD/ mortality** with HR or OR from 1.14 to 1.55
  - Increased HF risk
  - New & recurring **AF, VT/VF and SCD**



Anxiety

- Independently associated with **increased risk of CVD and/or CV mortality**.
  - The relationship between anxiety and arrhythmias and HF is less clear



PTSD/PTSS

- Linked to **25%-50% higher risk of CVD, including HF, MI and CV mortality**, even after adjustment for depression and other factors.



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Positive mental health states as predictors of better CV health

Subjective Well-Being (SWB)

- **Psychological well-being**, high life satisfaction, joy, optimism and happiness.
- An individual with SWB is **satisfied** with life, has a **sense of purpose**, and possesses **meaning in life**.
- **Sense of coherence**, a person's view of life and capacity to respond to stressful situations

Evidence

- **The positive survival impact of SWB** was significant both in men and women, but more protective in men.
- **Positive affect** was associated with lower risk of CHD and **optimism** with a lower incidence of HF.
- **Sexual well-being** in overall well-being in CVD.

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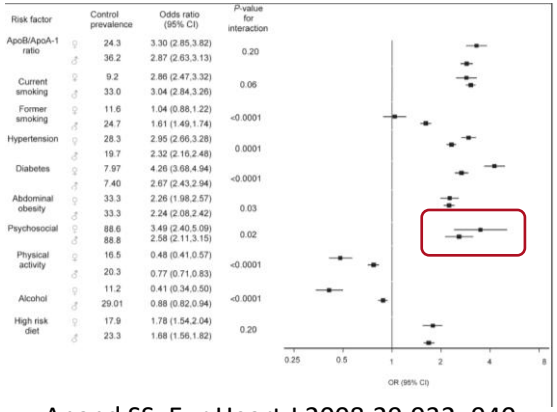
Depression and sex differences in incident CVD



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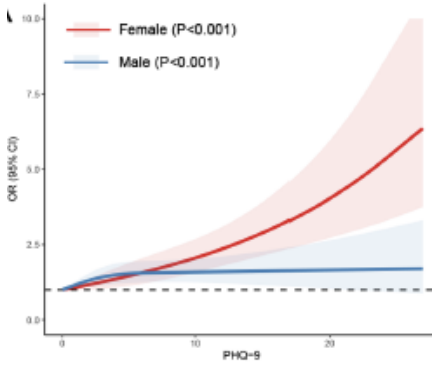

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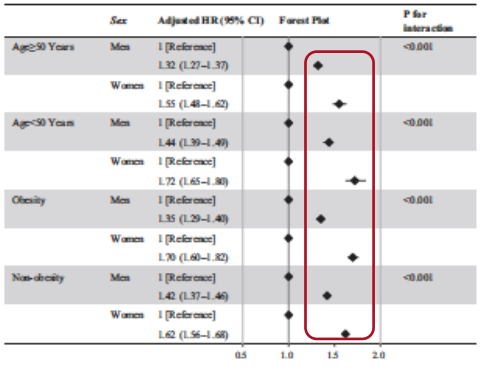

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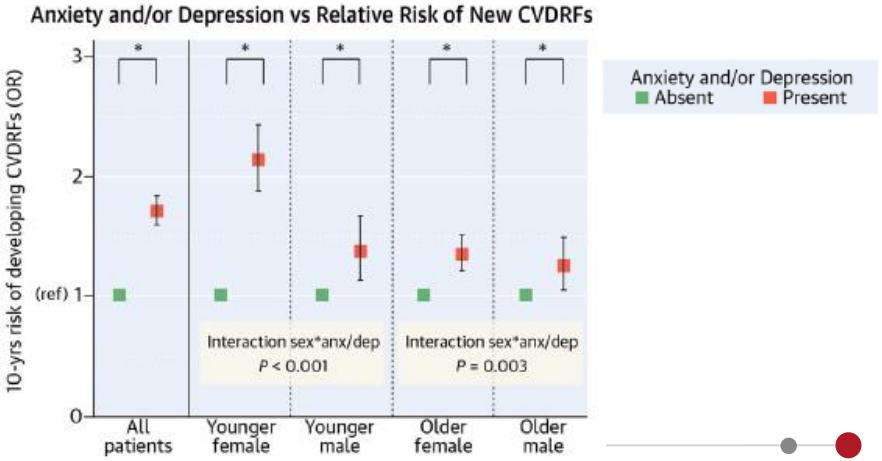

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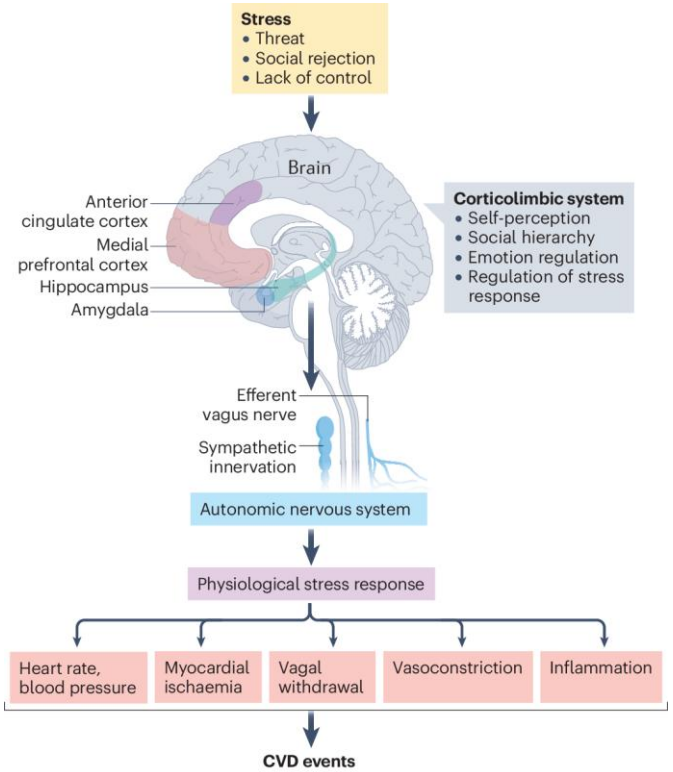
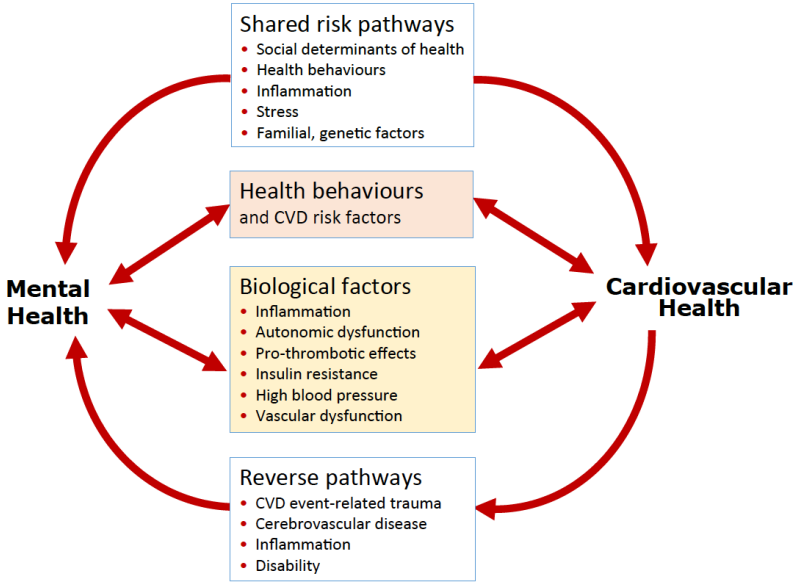
Mechanisms linking stress and cardiovascular disease: Behavioural and biological pathways



Vaccarino V. Nature Review Cardiol 2024



Vaccarino V. Lancet Regional Health - Europe 2025;56: 101373

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Severe mental illness (SMI) and cardiovascular disease

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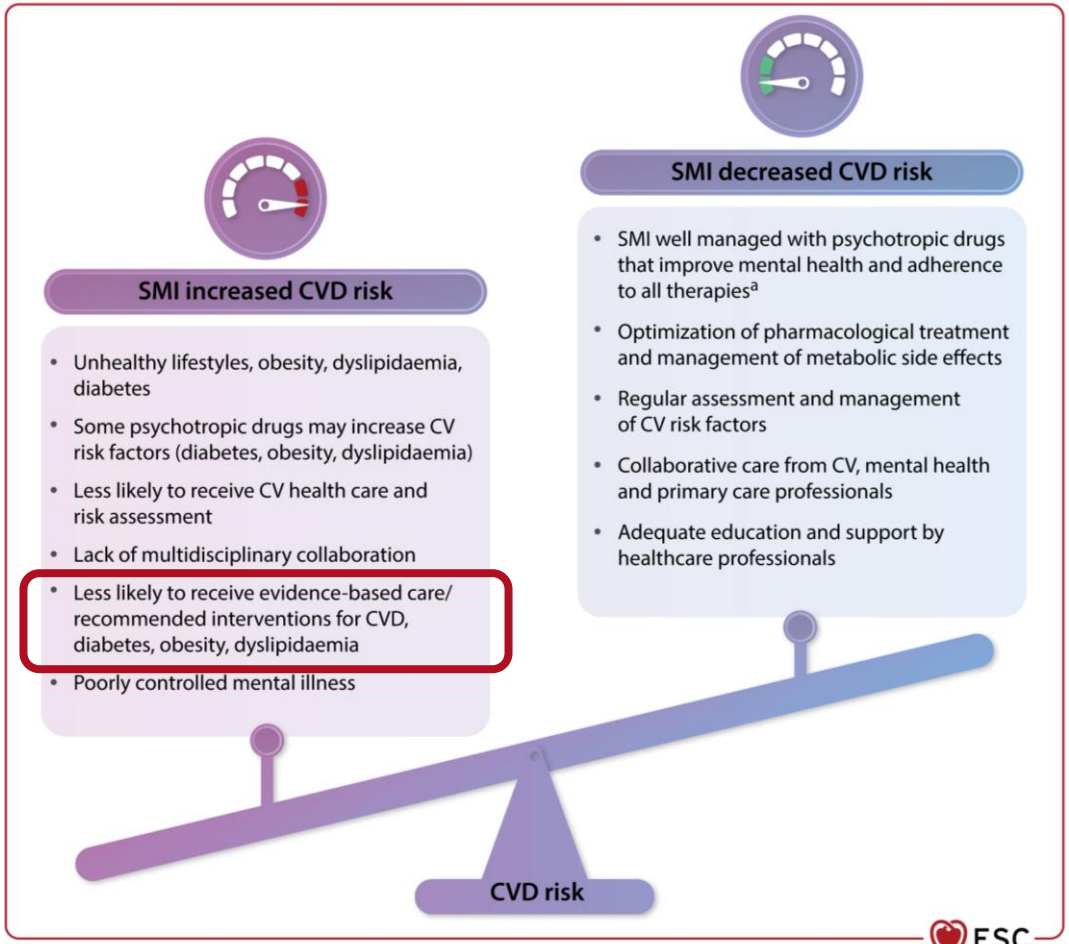
(European Heart Journal; doi: 10.1093/eurheartj/ehaf191)

Multifactorial aetiology of CV risk in people with severe mental illness

Life expectancy is >14 years shorter than among those without SMI!!



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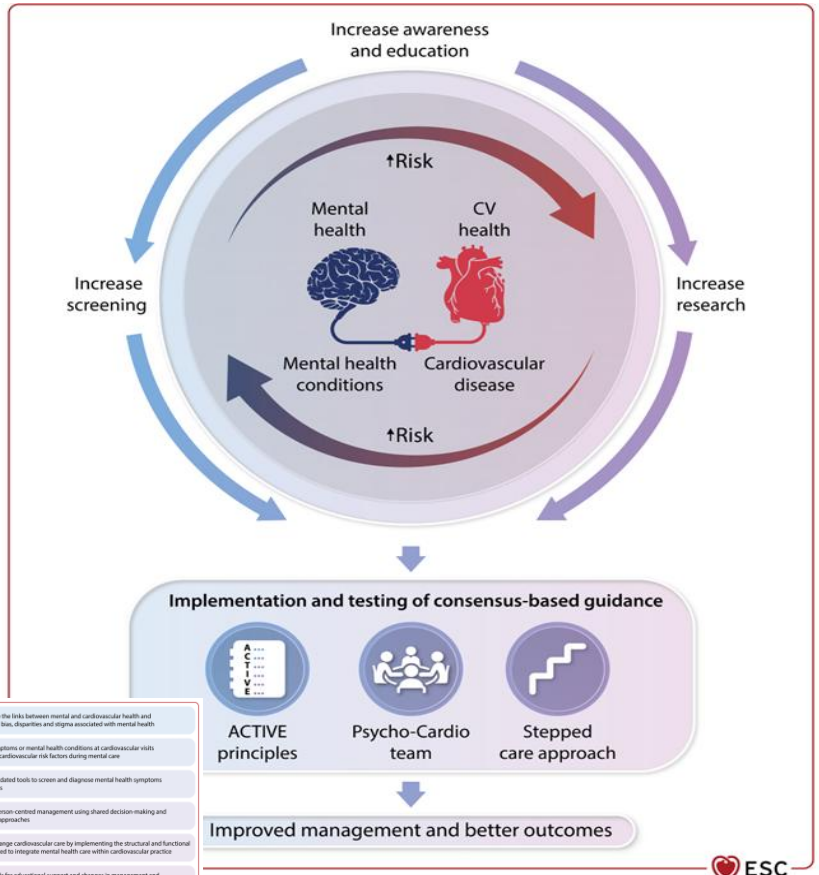

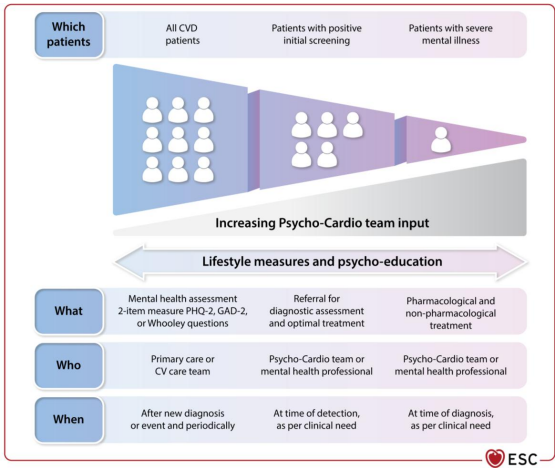

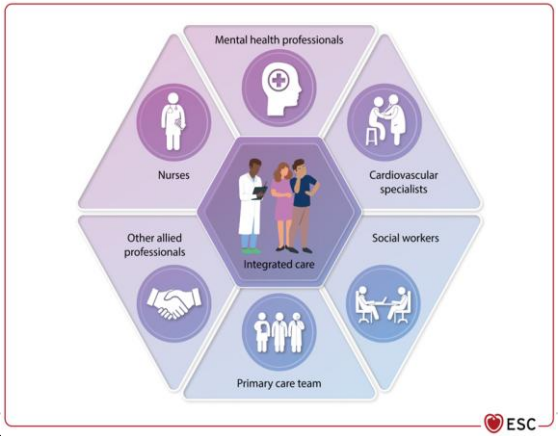

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Screening and management of mental illness and cardiovascular disease

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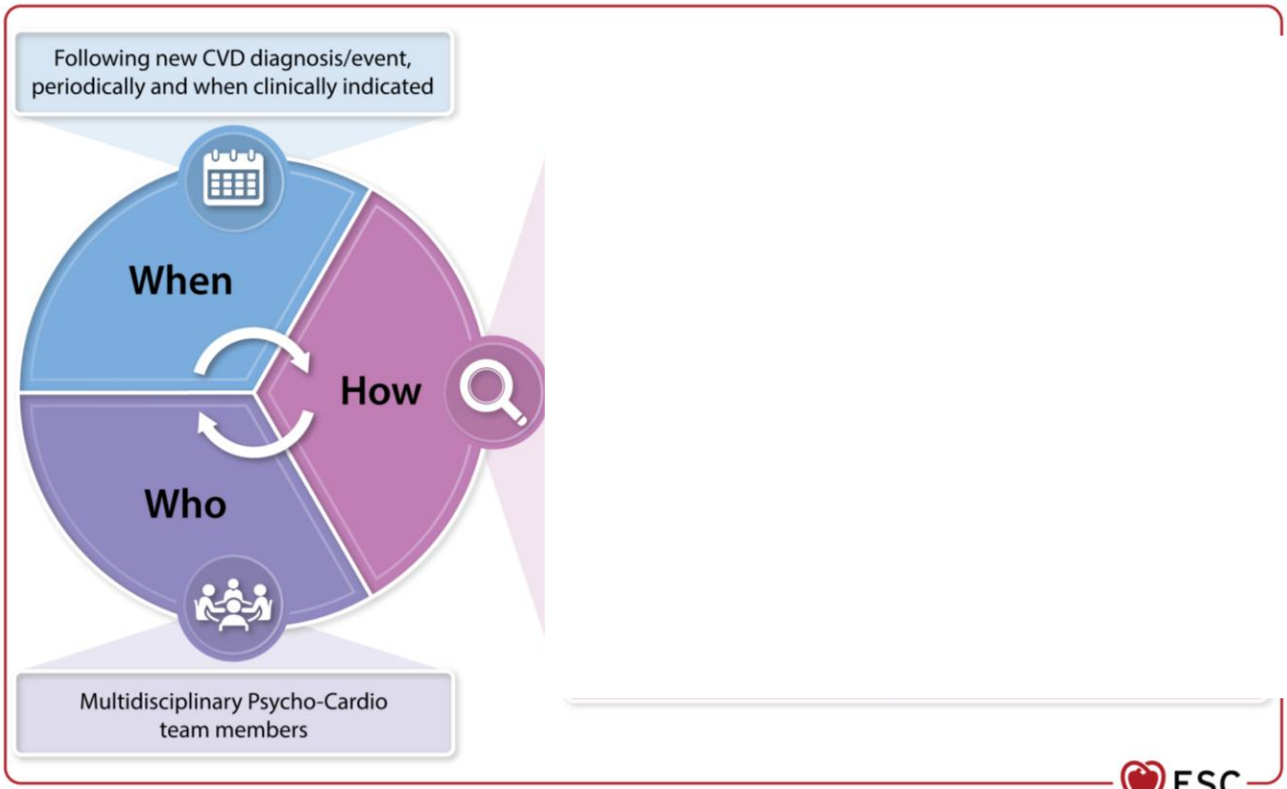
Screening for mental health in patients with CVD

- Depression and anxiety is often overlooked in the routine care of people with CVD and/or considered ‘normal’ reactions to individual clinical/prognostic burden of disease.
- Assessment of mental health status should be performed routinely within CVD clinical practice and implemented when the context of local capacity and capability allows.
- A clinical history is an opportunity of assessing mental health symptoms. If there is clinical suspicion, formal screening with validated tools is advised.

Screening for mental health conditions in people with CVD – the when, who and how?



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Screening tools for anxiety and depression symptoms: Psychometric properties and timing for use

Psychometric property	Whooley questions	GAD-2	PHQ-2 ≥ 2 points
Sensitivity	95%	91%	97%
Specificity	65%	37%	48%

The **Whooley questions**:

- During the past month, have you often been bothered by feeling down, depressed, or hopeless?
- During the past month, have you often been bothered by having little interest or pleasure in doing things?

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Screening tools for anxiety and depression symptoms: Psychometric properties and timing for use

Timing of screening	Measurement	
	Anxiety symptoms	Depressive symptoms
1. Following a new diagnosis of CVD, a CV event or procedure. May be during first hospitalization	GAD-2 followed by GAD-7 if positive	PHQ-2 followed by PHQ-9 if positive
2. At follow-up (e.g. annually) to determine change from baseline or previous measurement		
3. Anytime based on clinical judgement		

Screening in itself does not help people with MH

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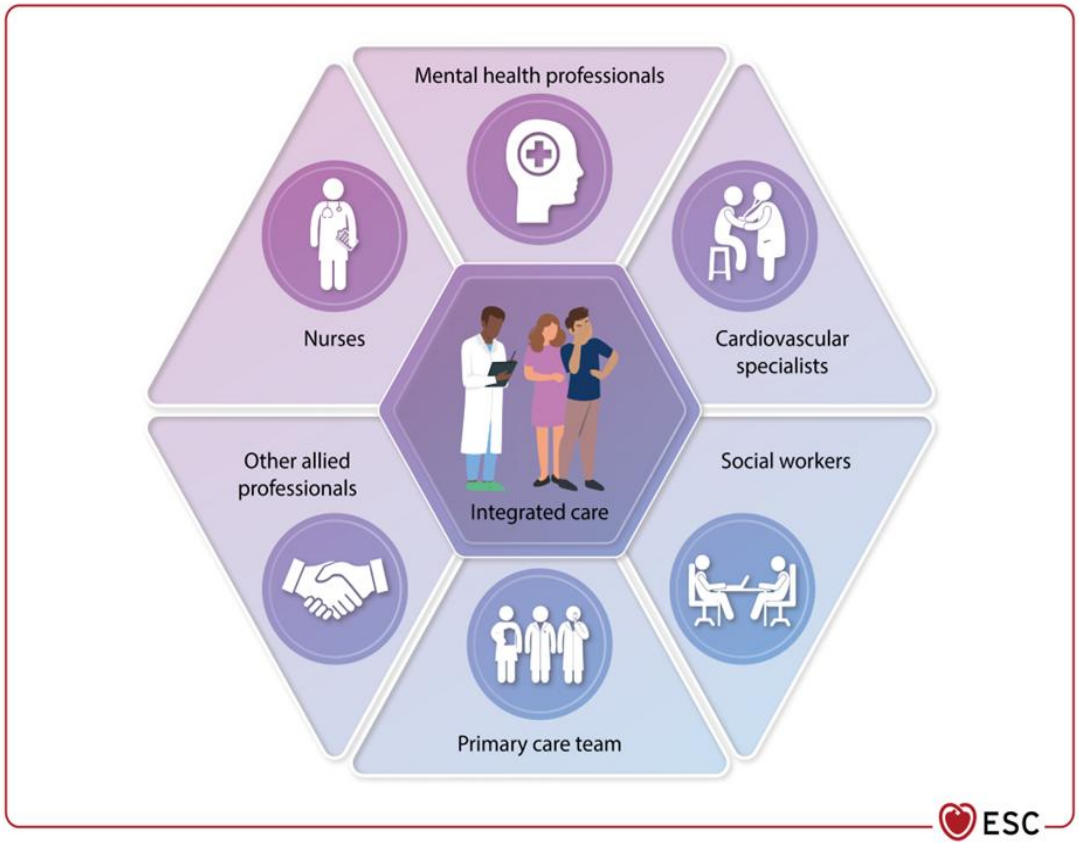
The Psycho-Cardio Team



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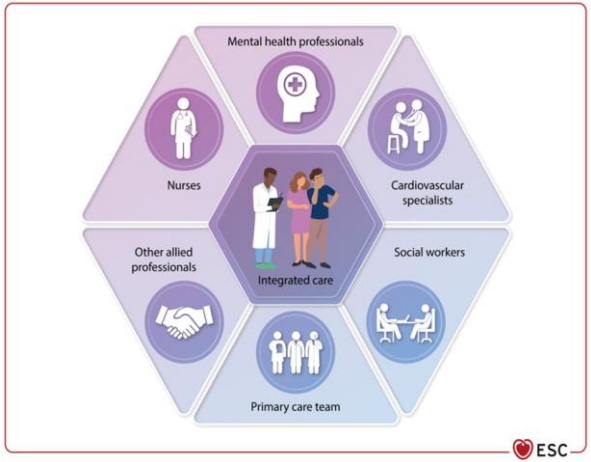
Psycho-Cardio Team



Psycho-Cardio teams are needed to structure pathways for:

- Screening
- Referral
- Treatment of people with suspected or established mental health conditions and CVD.

Psycho-Cardio teams must define who is responsible for the assessment of mental health conditions and how and when it will be done, tailoring it to the specific context and resources.

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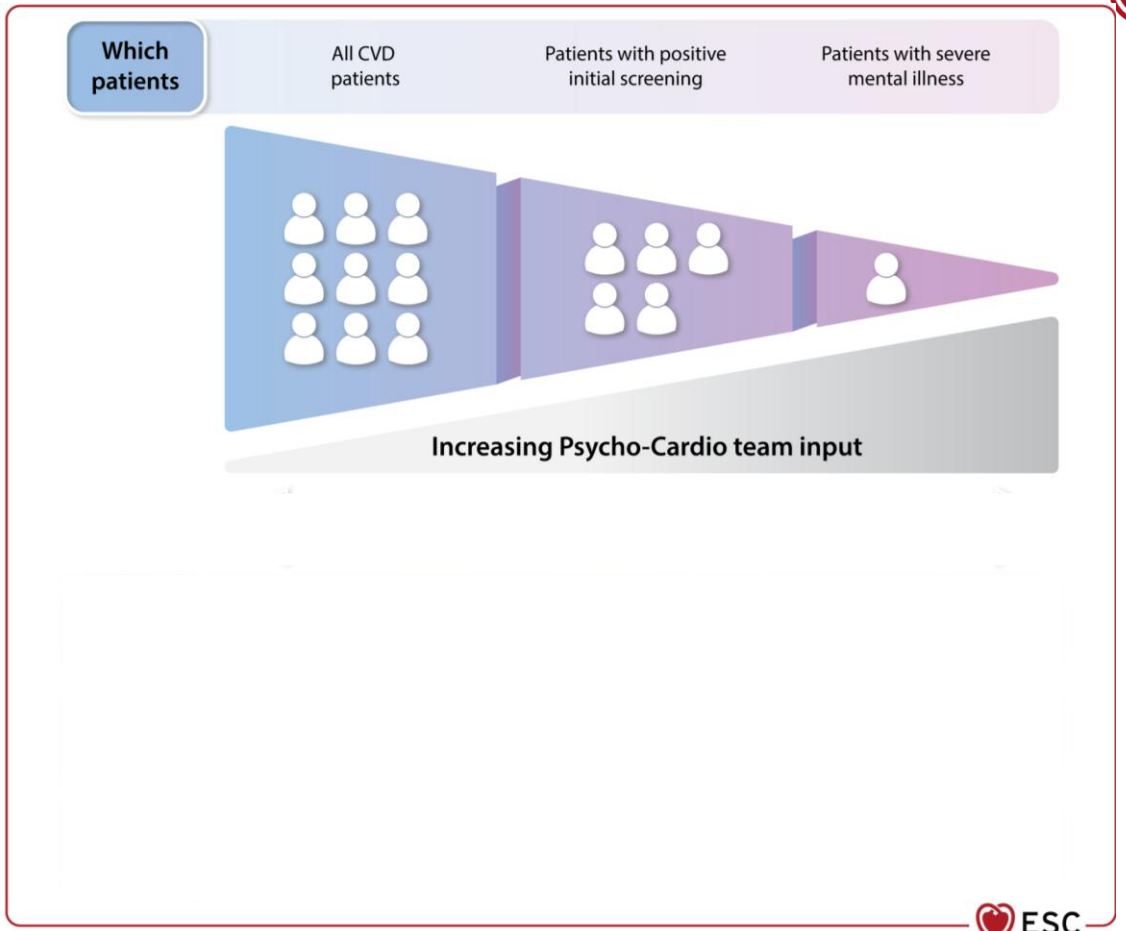
Stepped care model for assessing and managing mental health conditions in people with CVD



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Next steps after initial screening

- High scoring on a screening questionnaire needs *referral* for diagnostic assessment and appropriate treatment by a mental health professional.
- A *stepped care approach* to manage mental health conditions is reasonable based on preferences, severity of symptoms and condition, and available resources.
- *Tailored intervention programmes* aimed at alleviating distress of people coping with CVD and caregivers may be useful.
- *Psychological therapies* may be helpful for people experiencing depression and/or anxiety, while *lifestyle measures and psycho-education* are useful for *all* CVD patients.
- *Cardiac rehabilitation* is an opportunity for screening people for depression and anxiety and can contribute to improve mental health after CV events.

Management of mental health conditions

- Management of MH conditions usually starts with *non-pharmacological therapies* (psychotherapy and lifestyle changes)
- Medical interventions including *pharmacotherapy* may be needed for people with CVD who are diagnosed with mental health disorders, especially for severe symptoms of depression, anxiety or PTSD
- In some people with CVD, *combination therapy* of psychological interventions plus medication may be useful

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Non-pharmacological interventions

1. Communication, education, and support

- Empathy, active listening, communication, patient and caregiver education

2. Psychological interventions

2.1. Psycho-education

2.2. Social prescribing

2.3. Other psychological interventions

- Relaxation, cognitive-behavioural techniques (CBT), emotional support, client-led discussion, exposure therapy

3. Lifestyle interventions

- Physical activity, balanced diet, stress management techniques (e.g. mindfulness and yoga), adequate sleep, positive coping strategies

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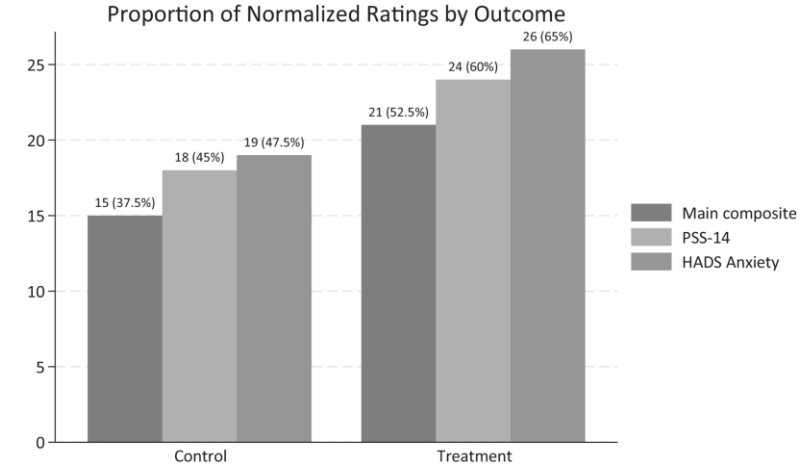
eSMINC study - iCBT



N=88

Patients with MINOCA or Takotsubo

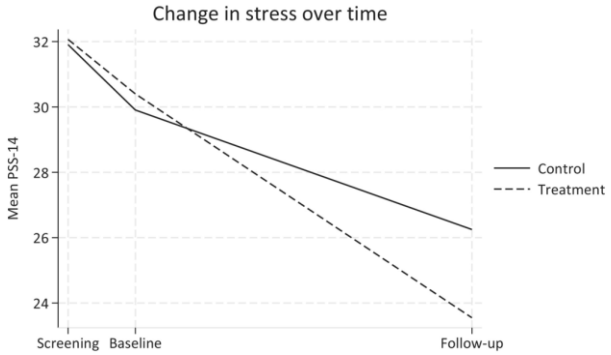
Multi-center RCT (wait list controls)

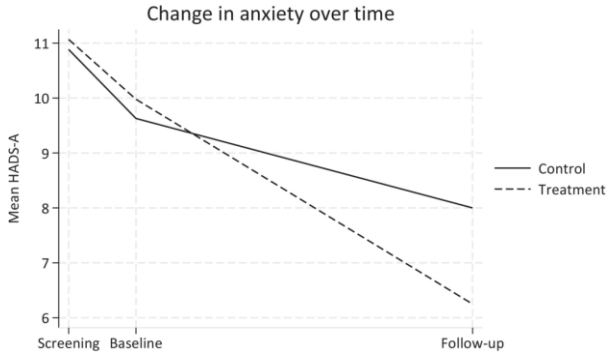
Main composite outcome of normalized outcomes

OR 2.37 [95% CI, 0.88–6.38], P=0.09

Only the difference for HADS- A was statistically significant OR, 2.75 [95% CI, 1.01–7.51], P = 0.049

For PSS-14 OR was 2.18 [95% CI, 0.81–5.85], P = 0.123





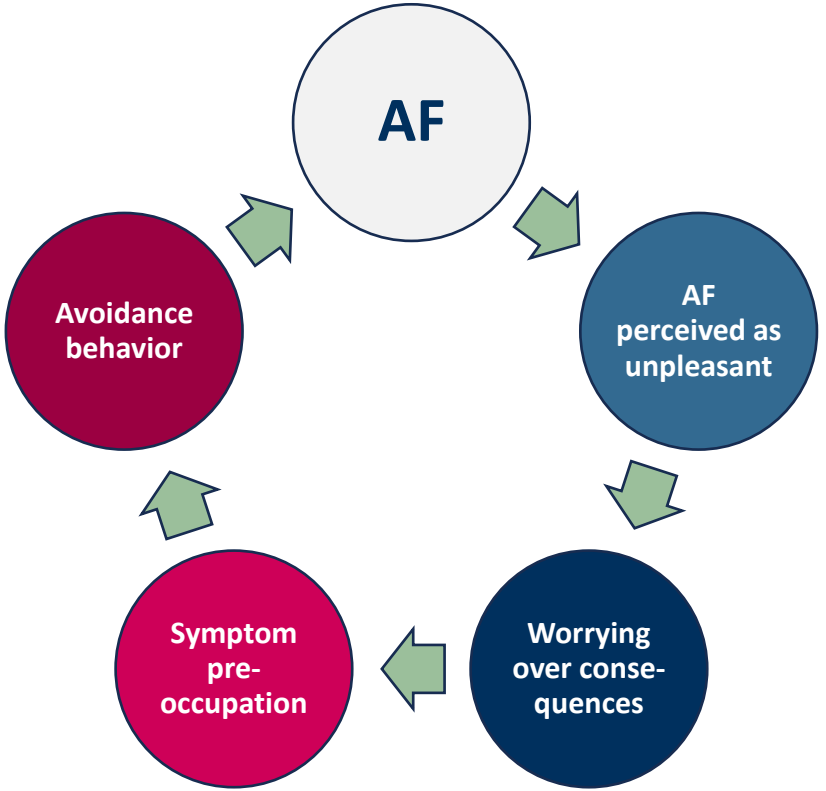
Leissner P JAHA; 2026; 15:e047311. DOI: 10.1161/JAHA.125.047311
(European Heart Journal, doi: 10.1093/eurheartj/ehaf191)

Cardiac anxiety

Worries
- Get heart attack or stroke
- Get AF at work, travel, social activity
- Do something that triggers new AF episode

Symptom preoccupation
- Excessive focus on heart rhythm
- Constantly monitoring cardiac activity
- Perceive ordinary cardiac activity as dysfunction

Avoidance behavior
- Travel
- Physical activity
- Social situations



Cognitive behavioral therapy



Cognitive Behavioral Therapy Improves Quality of Life in Patients With Symptomatic Paroxysmal Atrial Fibrillation

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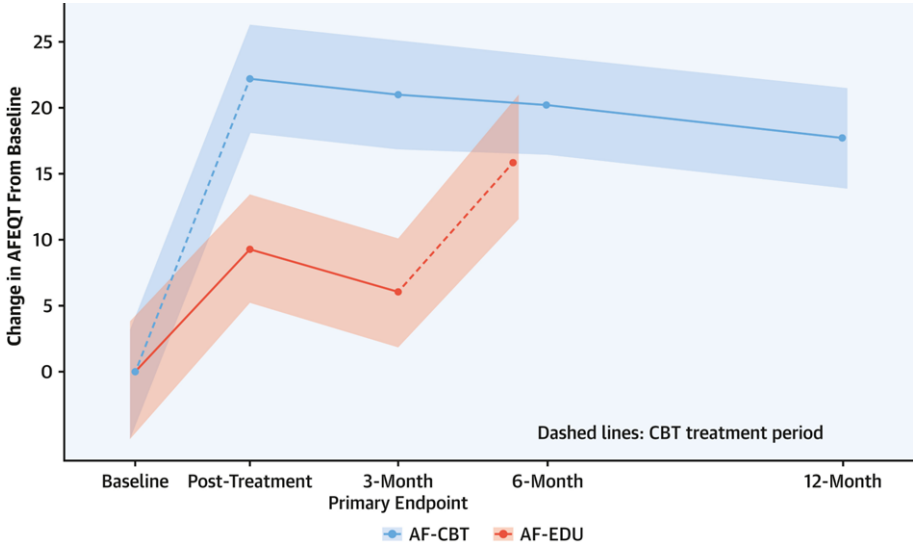
n = 127, symptomatic paroxysmal AF
Age: 65.4 yrs, 58% women
Internet based
Exposure based CBT

Changes in AFEQT from baseline



Primary and secondary outcomes

Quality of life (AFEQT)	**+15.0** (10.1 - 19.8)	**<0.001**
Cardiac anxiety (CAQ)	–9.9 (-12.4 - 7.4)	<0.001
Functional disabilty (WHODAS)	–5.5 (-8.7 - 2.2)	0.001
AF symptom frequency (SCL)	–4.9 (-6.7 - 3.2)	<0.001
AF symptom severity (SCL)	–4.1 (-5.7 - 2.4)	<0.001
AF severity (AFSS)	–3.7 (-5.3 - 2.2)	<0.001
Depression (PHQ-9)	–1.3 (-2.3 - 0.2)	0.023

Särnholm et al, JACC 2023; 82 (1) 46-56

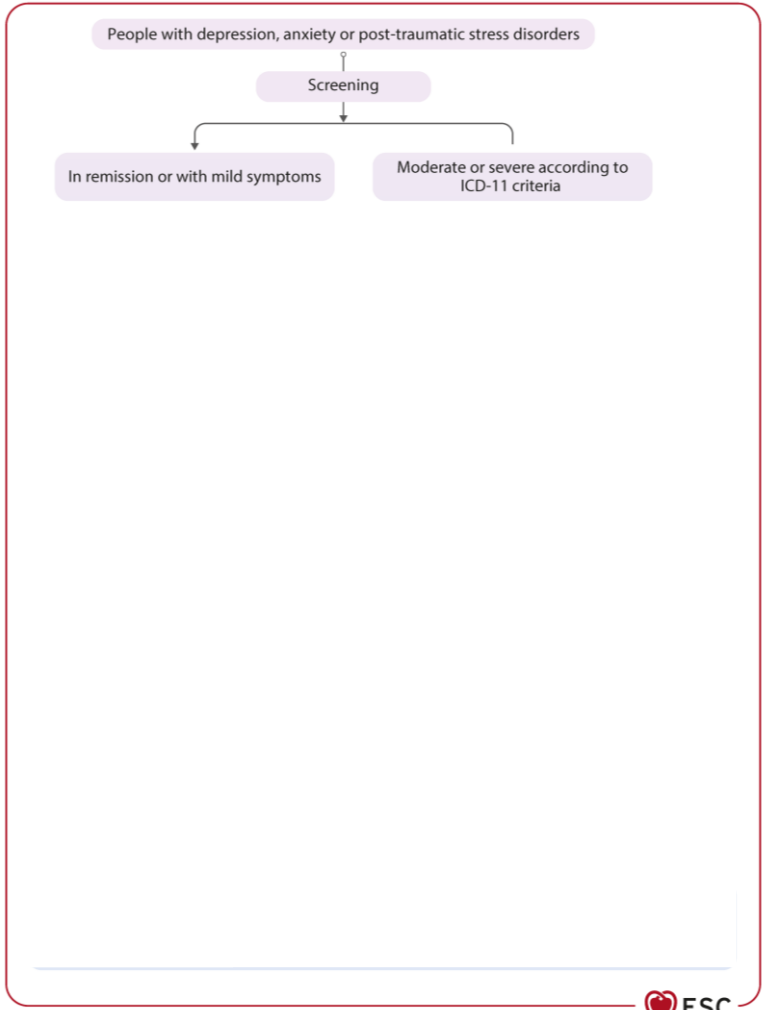
Medical interventions - Pharmacotherapy

- Antidepressant use is advised for those with *moderate to severe anxiety disorders and depression* under the guidance of qualified mental health professionals
- The *use of antidepressants in HF is only advisable in severe depression symptoms* where the risk of untreated depression outweighs the risk of taking antidepressants
- In people with ventricular arrhythmias, antidepressants associated with an increased propensity to prolong QTc (such as TCAs and possibly citalopram/escitalopram in high dosages), may be *switched to newer antidepressants with better safety profiles*
- *Therapeutic drug monitoring* is advisable to optimize pharmacotherapy and minimize potential side effects and clinically relevant drug interactions, given the frequent interactions between antidepressants and CV drugs affecting their efficacy and safety

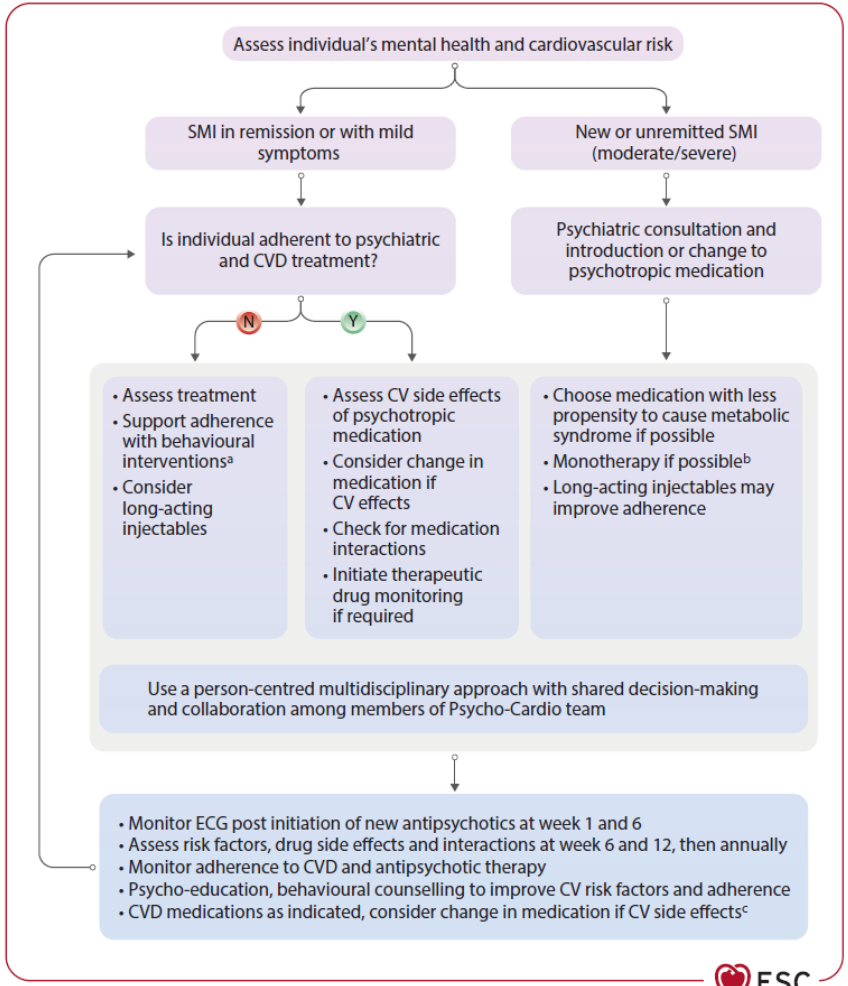
Pharmacotherapy

- *Avoiding benzodiazepines* as first-line therapy in the management of anxiety and depression is advised.
- *Anxiolytics, sedatives, and hypnotics are overused* and overprescribed in the general population, especially among the elderly and people with mental health conditions, so careful selection of indications is advisable.

Pharmacological management of CVD and depression, anxiety or post-traumatic stress disorders

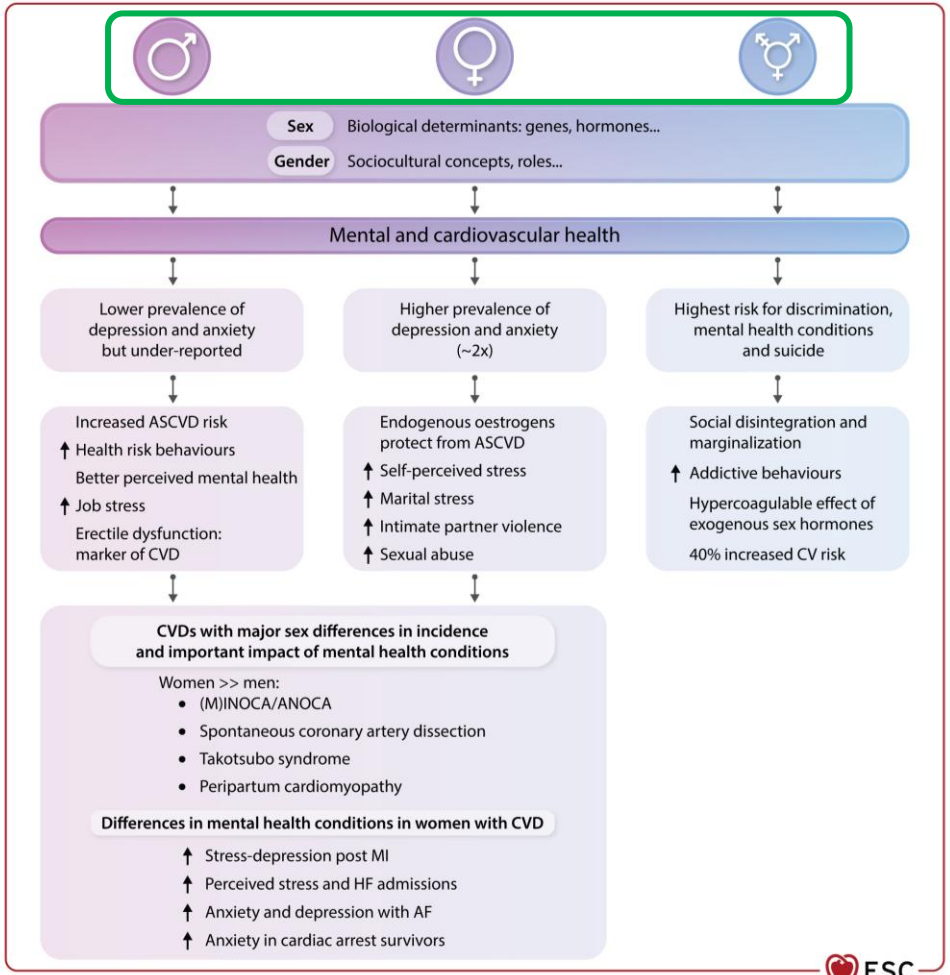


Management of people with cardiovascular disease and severe mental illness



Eur Heart J. 2025 Nov 3;46(41):4156-4225.
2025 ESC Clinical Consensus Statement on mental health and cardiovascular disease
(European Heart Journal; doi: 10.1093/eurheartj/ehaf191)

Sex and gender differences in the psycho-cardio interaction



Eur Heart J. 2025 Nov 3;46(41):4156-4225.
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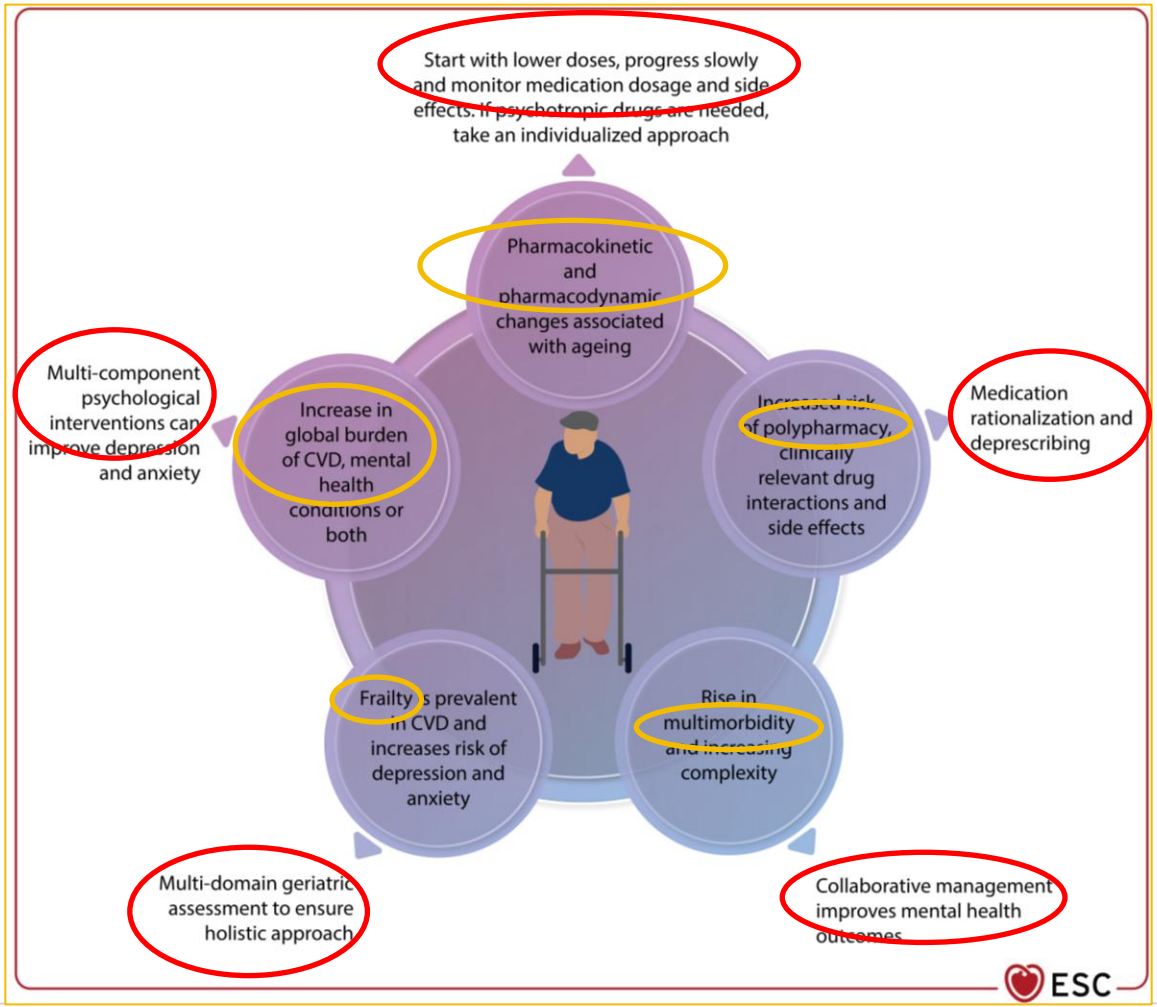
Ageing, mental disorders, and CVD

Individualized treatment



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Konklusion (1)

- Multi-direktionellt samband mellan kardiovaskulär sjukdom och mental hälsa som depression, ångest och PTSD som alla ökar KV risken
- Positiv mental hälsa som optimism, lycka och hög tillfredsställelse i livet minskar KV risken
- Psyko-sociala faktorer (social isolering, ensamboende, dålig ekonomi, stress på arbetet) ökar risken
- Sjukvårdspersonal bör känna till sambanden – vid misstanke implementera ett integrerat Psycho-Cardio team
- ACTIVE principerna (*Acknowledge, Check, Tools, Implement, Venture, Evaluate*)
- Screening för mental hälsa (ångest, depression, och PTSD) bör göras rutinmässigt
- Initial screening -enkel två-fråge utvärdering, som kan utvidgas till längre vid misstanke om mental ohälsa
- Denna bör göras tidigt i kontakten, under uppföljningen och när som helst vid klinisk misstanke
- En stegvis approach med skräddarsydd behandling för mental hälsa vid KV sjd rekommenderas

Konklusion (2)

- Medicinsk behandling inklusive läkemedel kan behövas
- Antidepressesiva läkemedel endast till de med måttlig eller uttalad ångest eller depression
- Anxiolytika, sedativa, och sömnmedel överanvänds i den allmänna populationen, särskilt bland äldre – stor restriktivitet
- Farmakologisk behandling med anxiolytika eller antidepressive måste alanseras mot risker med biverkningar och läkemedelsinteraktioner
- Patienter med SMI har en mycket dålig prognos och dör ofta av sin hjärt-kärlsjukdom i förtid
- Speciella patientkaraktäristika (kön, ålder, frailty SES, komorbiditeter, mm) bör bedömas noga vid val av behandlingsalternativ