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L'attività fisica come strumento per la prevenzione delle malattie croniche e la promozione della salute

I benefici dell'attività fisica nell'anziano

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Stile di vita e salute

- Anche nei Paesi più ricchi, le persone meno fortunate sono più colpite dalle malattie e hanno una speranza di vita significativamente più breve rispetto alle persone ricche. Queste disuguaglianze nella salute non solo costituiscono una grave ingiustizia sociale, ma hanno attirato l'attenzione degli studiosi su alcuni dei più potenti determinanti della salute nelle società moderne. In particolare hanno portato ad una crescente consapevolezza della significativa influenza sulla salute dell'ambiente sociale e di quelli che sono conosciuti come determinanti sociali.

Stile di vita e salute

- ▣ Secondo quanto riportato dall'OMS, nel 2008, alle malattie croniche sono attribuibili 35 milioni di morti nel mondo (60% della mortalità globale), praticamente un valore doppio rispetto a quello imputabile a malattie infettive (incluse HIV/AIDS, tubercolosi e malaria), malattie materno-infantili e carenze nutritive multiple.
- ▣ In particolare, alle patologie cardiovascolari, al cancro, al diabete e alle patologie respiratorie è dovuto il carico maggiore di mortalità nell'ambito delle malattie croniche. E', peraltro, inequivocabilmente dimostrato che tali patologie (che hanno notevoli ripercussioni sulla qualità di vita dei pazienti e delle loro famiglie e sui costi economici e sociali che la società deve sopportare) sono in larga parte prevenibili e controllabili intervenendo sui fattori di rischio.

Gran parte del carico di malattia in Europa è dovuto a una manciata di malattie, collegate da fattori di rischio comuni e determinanti di salute

Tabella 1: decessi e carico di malattia dovuti alle malattie croniche nella Regione europea dell'Oms, per causa (stime del 2005)

Cause	Carico di malattia (migliaia di Daly)	% di tutte le cause	decessi (migliaia)	% di tutte le cause
malattie cardiovascolari	34.421	23%	5.067	52%
disturbi neuropsichiatrici	29.370	20%	264	3%
tumori maligni	17.025	11%	1.855	19%
malattie dell'apparato digerente	7.117	5%	391	4%
malattie respiratorie	6.835	5%	420	4%
disturbi degli organi di senso	6.339	4%	0	0%
malattie muscolo-scheletriche	5.745	4%	26	0%
diabete	2.319	2%	153	2%
malattie del cavo orale	1.018	1%	0	2%
totale delle malattie croniche	115.339	77%	8.210	86%
totale per tutte le cause	150.322		9.564	

Fonte: *Prevenire le malattie croniche: un investimento vitale*¹

Fattori di Rischio per Patologie Croniche

- ▣ fumo di sigaretta
- ▣ dieta scorretta
- ▣ uso di alcool
- ▣ inattività fisica
- ▣ età e sesso in generale il rischio cardiovascolare inizia ad aumentare in modo importante nell'uomo dopo i 45 anni e nella donna dopo i 55 anni.

In Europa quasi il 60% del carico di malattia è causato da sette fattori di rischio principali:

- ▣ ipertensione (12,8%)
 - ▣ tabagismo (12,3%)
 - ▣ alcool (10,1%)
 - ▣ eccesso di cole-sterolo (8,7%)
 - ▣ sovrappeso (7,8%)
 - ▣ scarso consumo di frutta e verdura (4,4%)
 - ▣ inattività fisica (3,5%)
- ▣ Anche il diabete è stato riconosciuto fra i fattori di rischio principali e può favorire lo sviluppo di malattie cardiovascolari.

Stile di vita e salute

- ❑ In larga misura le due maggiori cause di morte (malattie cardiache e tumori) sono prevenibili attraverso la prevenzione primaria (stili di vita più salutari) o secondaria (diagnosi precoce, ad esempio attraverso gli screening).
- ❑ Le malattie croniche hanno un'origine multifattoriale e derivano da interazioni complesse tra gli individui e il loro ambiente, ma anche dalle effettive opportunità di promozione della salute e di riduzione dei principali rischi.



Organizzazione Mondiale della Sanità

La strategia europea per la prevenzione e il controllo delle malattie croniche
Investire nella prevenzione e nel controllo delle malattie croniche potrebbe migliorare la qualità della vita e il benessere sia a livello individuale che sociale. Nella Regione europea dell'Oms, almeno l'86% dei decessi e il 77% del carico di malattia sono dovuti a questo vasto gruppo di patologie, accomunate da fattori di rischio, determinanti di salute e opportunità di intervento. Una migliore condivisione dei benefici ottenuti grazie a interventi efficaci avrebbe un impatto significativo, in termini di salute e di bilancio, per tutti gli Stati membri.

La prevenzione e il controllo delle malattie croniche

- ▣ Le malattie croniche hanno un impatto significativo sulla salute e sull'assistenza socio-sanitaria, in termini di morte prematura, cronicità o disabilità.
- ▣ Il 70-80% delle spese sanitarie sono stanziato proprio per queste patologie, anche perché questi pazienti gravano a lungo sui servizi di cura e assistenza. I costi sanitari e il rischio di ricoveri inutili aumentano notevolmente al crescere delle comorbidità.

Prevenzione Primaria

- ▣ • “...research suggests that the greatest future decline in disability may result from reductions in lifestyle risk factors... A study initiated at an average age of 68 years documented **postponement of disability by 7.7 years** in those who **exercised**, had **normal body mass indexes** and **did not smoke**...”

James F. Fries, 2002 Editorial JAMA

Reduced disability and mortality among aging runners: a 21-year longitudinal study

- ❑ Exercise has been shown to improve many health outcomes and well-being of people of all ages. Long-term studies in older adults are needed to confirm disability and survival benefits of exercise.

- ❑ Multivariate analyses showed that runners had a significantly lower risk of an HAQ-DI score of 0.5

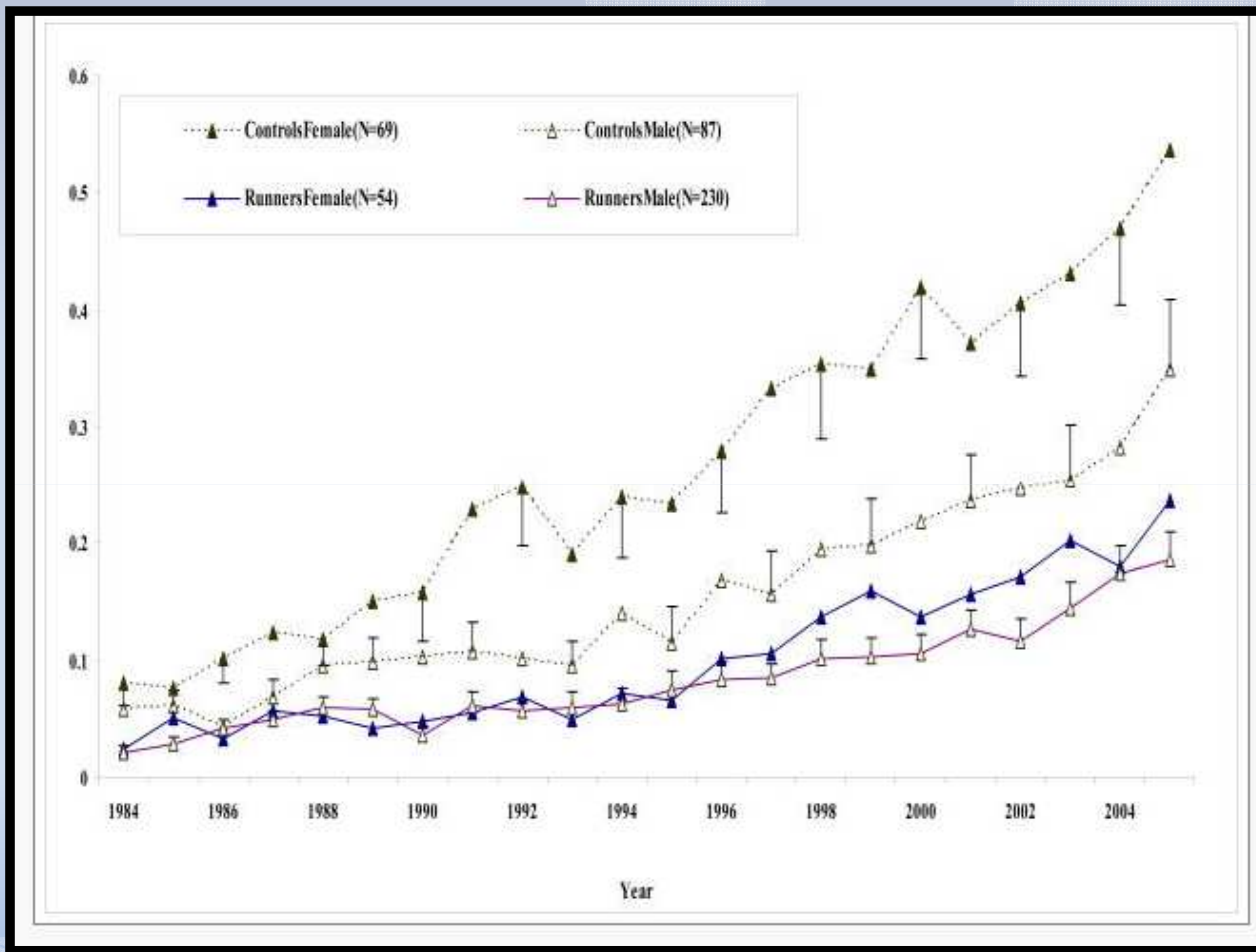
(disability assessed by the Health Assessment Questionnaire Disability Index (HAQ-DI; scored from 0 [no difficulty] to 3 [unable to perform])

- ❑ At 19 years, 15% of runners had died compared with 34% of controls.

CONCLUSION:

- ❑ Vigorous exercise (running) at middle and older ages is associated with reduced disability in later life and a notable survival advantage.

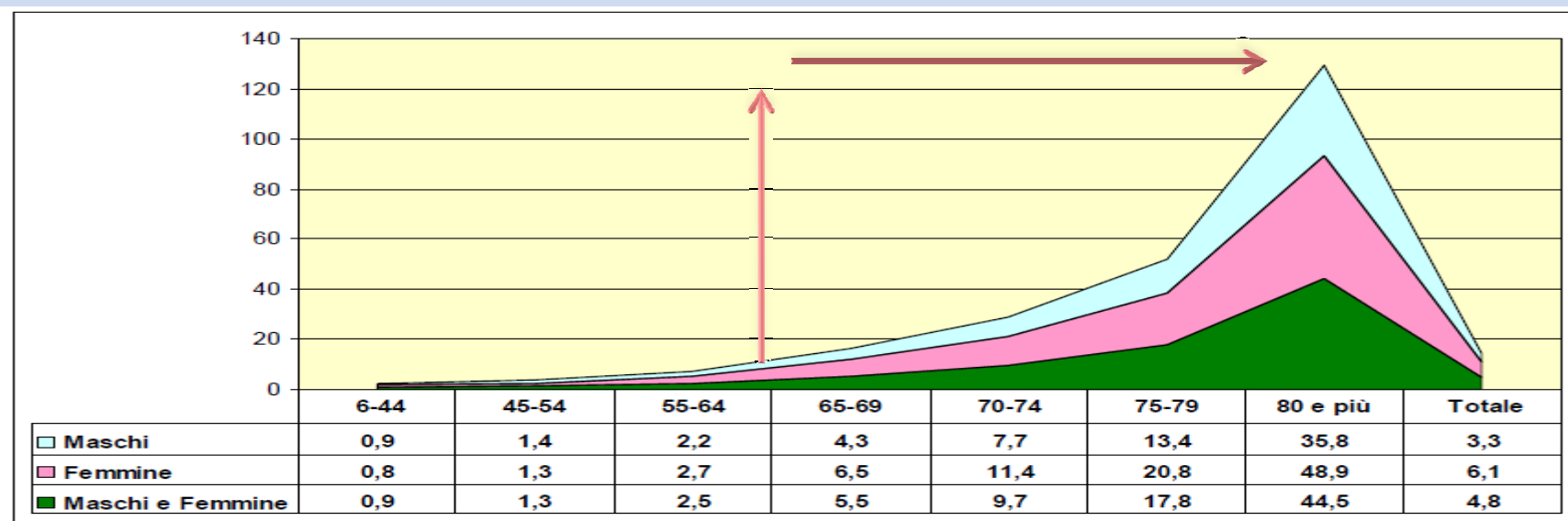
Reduced disability and mortality among aging runners: a 21-year longitudinal study



Correlazione Malattie Croniche - Disabilità

Le malattie cronico degenerative affliggono, con almeno una malattia grave, il 59,4 % degli individui con disabilità

Persone di 6 e più anni disabili per età e sesso 2005



Fonte: Rapporto Nazionale sulle Condizioni ed il Pensiero degli Anziani - una società diversa - promosso da IRCCS INRCA per l'Agenzia Nazionale dell'Invecchiamento - Ageing Society - Osservatorio Terza Età, Federsanità Anci. Graf. 2.13 pag 149

Physical Activity Among Persons Aging with Mobility Disabilities

Evidence illustrates that even among those with disabilities, physical activity can reduce secondary chronic conditions, reduce pain, and improve physical function . Research on the benefits of physical activity among persons aging with mobility disability has lacked longitudinal studies and examination of important potential health benefits such as cognitive function. Correlates of physical activity among persons aging with mobility disabilities are also understudied.

(Institute of Medicine report on the Future of Disability in America 2008)

Health Benefits of Physical Activity for Older Adults with Mobility Impairment

- ▣ For persons who already have a disability, adopting a physically active lifestyle can help prevent or control secondary conditions as well as further declines in functioning and further loss of mobility. Because persons with mobility disability are at higher risk for secondary conditions that physical activity can prevent, adopting a physically active lifestyle could potentially result in greater health benefits among older persons with disability .
- ▣ U.S. Department of Health and Human Services, *The Surgeon General's Call to Action to Improve the Health and Wellness of Persons with Disabilities*, Public Health Service, Rockville, Md, USA, 2005.
- ▣ M. Field and A. Jette, *The Future of Disability in America*, Institute of Medicine, Washington, DC, USA, 2007

Health Benefits for Older Adults with Mobility Impairment

- Generally, the health benefits of an active lifestyle among older persons with disabilities appear to be similar to older populations without disability. Research conducted on individuals with disability has shown physical activity to positively affect hypertension, manage cardiovascular disease and osteoarthritis, and reduce spasticity. There is moderate evidence that physical activity reduces secondary conditions prevalent in persons with mobility disabilities, including pain and fatigue .Mortality in people with CHD is related to low fitness.
- Due to a lack of studies, evidence is limited that physical activity improves healthy weight and metabolic health among persons with mobility disabilities. There is some evidence that physical activity improves weight and metabolic factors among persons with SCI and arthritis .

□ S. E. Boslaugh and E. M. Andresen, "Correlates of physical activity for adults with disability," *Preventing Chronic Disease*, vol. 3, no. 3, p. A78, 2006.

□ *Healthy People 2010: Understanding and Improving Health*, U.S. Department of Health and Human Services, Washington, DC, USA, 2nd edition, 2000

□ *Physical Activity Guidelines for Americans*, U.S. Department of Health and Human Services, 2008

□ M. Petter, C. Blanchard, K. A. Kemp, A. S. Mazoff, and S. N. Ferrier, "[Correlates of exercise among coronary heart disease patients: review, implications and future directions](#)," *European Journal of Cardiovascular Prevention and Rehabilitation*, vol. 16, no. 5, pp. 515–526, 2009.

□ I. Hutton, G. Gamble, G. Mclean, H. Butcher, P. Gow, and N. Dalbeth, "[Obstacles to action in arthritis: a community case-control study](#)," *International Journal of Rheumatic Diseases*, vol. 12, no. 2, pp. 107–117, 2009.

Physical Functioning Benefits of an active lifestyle among older adults with disabilities

- ❑ Research conducted on individuals with disability has shown physical activity to increase overall fitness and prevent functional decline .In particular, research suggests moderate to strong evidence that aerobic exercise improves cardiorespiratory fitness in persons with lower limb loss,stroke, and walking speed and distance in persons with stroke. Exercise also was noted to improve physical function and delay disability among those with osteoarthritis and rheumatic conditions . There is moderately strong evidence that resistance training improves muscular strength in persons with stroke .
- ❑ J. H. Rimmer, "Health promotion for people with disabilities: the emerging paradigm shift from disability prevention to prevention of secondary conditions," *Physical Therapy*, vol. 79, no. 5, pp. 495-502, 1999
- ❑ S. E. Boslaugh and E. M. Andresen, "Correlates of physical activity for adults with disability," *Preventing Chronic Disease*, vol. 3, no. 3, p. A78, 2006.
- ❑ *Healthy People 2010: Understanding and Improving Health*, U.S. Department of Health and Human Services, Washington, DC, USA, 2nd edition, 2000
- ❑ Physical Activity Guidelines Advisory Committee, *Physical Activity Guidelines Advisory Committee Report, 2008*, U.S. Department of Health and Human Services, Washington, DC, USA, 2008

Physical Functioning Benefits of an active lifestyle among older adults with disabilities

- ▣ A Cochrane review of physical fitness interventions for stroke found that cardiorespiratory interventions that included walking resulted in improved walking speed, endurance, and reduced dependence while walking . Another review found that physical rehabilitation programs were effective in improving physical state, including functioning with ADLs, flexibility, and strengthening
- ▣ D. H. Saunders, C. A. Greig, G. E. Mead, and A. Young, "Physical fitness training for stroke patients," *Cochrane Database of Systematic Reviews (Online)*, no. 4, Article ID CD003316, 2009.
- ▣ A. Forster, R. Lambley, and J. B. Young, "[Is physical rehabilitation for older people in long-term care effective? findings from a systematic review](#)," *Age and Ageing*, vol. 39, no. 2, pp. 169–175, 2010.

Mental Health Benefit of an active lifestyle among older adults with disabilities

- ▣ Research conducted on individuals with disability has shown physical activity to improve quality of life and reduce depression

- ▣ *Healthy People 2010: Understanding and Improving Health*, U.S. Department of Health and Human Services, Washington, DC, USA, 2nd edition, 2000.
- ▣ J. H. Rimmer, "Health promotion for people with disabilities: the emerging paradigm shift from disability prevention to prevention of secondary conditions," *Physical Therapy*, vol. 79, no. 5, pp. 495–502, 1999.

Other Findings

- A main finding was that physical activity is safe and effective for people with disabilities. Few adverse outcomes were reported. The report concluded that research evidence is lacking regarding: the dose of physical activity needed to confer health benefits, and longitudinal studies on the health benefits of physical activity among persons with a variety of disabling health conditions.
- An understudied area of concern is the health effects of prolonged sedentary behavior in persons aging with mobility disabilities. Television time, even after adjustment for physical activity, is independently associated with increased risk for obesity, type 2 diabetes, CVD mortality, and all-cause mortality. This has not been studied among old populations with disability.
- Further evidence of the relationship between television watching and health outcomes among persons with disabilities is needed.
- There is evidence that adults over 60 spend more time watching television than other age groups. Greater television use was related to lower life satisfaction among older adults in one study.
- More research is needed on specific health benefits of physical activity, which are under-examined among persons aging with mobility disability and may show promising relationships (e.g., variables such as weight status, progression of illness, mental health, and cognitive functioning).

- N. Owen, G. N. Healy, C. E. Matthews, and D. W. Dunstan, "[Too much sitting: the population health science of sedentary behavior](#)," *Exercise and Sport Sciences Reviews*, vol. 38, no. 3, pp. 105–113, 2010.
- D. W. Dunstan, E. L. M. Barr, G. N. Healy, et al., "[Television viewing time and mortality: the Australian diabetes, obesity and lifestyle study \(AusDiab\)](#)," *Circulation*, vol. 121, no. 3, pp. 384–391, 2010.
- C. A. Depp, D. A. Schkade, W. K. Thompson, and D. V. Jeste, "Age, affective experience, and television use," *American Journal of Preventive Medicine*, vol. 39, pp. 173–178, 2010.

Cognitive Health Benefit of an active lifestyle among older adults with disabilities

- Research shows that exercise interventions can improve cognitive functioning among people with existing mild cognitive impairment. A promising avenue of future research is to examine whether exercise interventions can improve cognitive function among persons with mobility disability who are at risk for cognitive impairments as they age.
- Six months of high-intensity aerobic exercise had sex-specific effects on cognition, glucose metabolism, and hypothalamic-pituitary-adrenal axis and trophic activity despite comparable gains in cardiorespiratory fitness and body fat reduction. For women, aerobic exercise improved performance on multiple tests of executive function, increased glucose disposal during the metabolic clamp, and reduced fasting plasma levels of insulin, cortisol, and brain-derived neurotrophic factor. For men, aerobic exercise increased plasma levels of insulinlike growth factor I and had a favorable effect only on Trails B performance. This study provides support, using rigorous controlled methodology, for a potent nonpharmacologic intervention that improves executive control processes for older women at high risk of cognitive decline. Moreover, our results suggest that a sex bias in cognitive response may relate to sex-based differences in glucometabolic and hypothalamic-pituitary-adrenal axis responses to aerobic exercise.

Dolore ... e solitudine



Tempo impiegato in attività in 786 anziani ospiti di RSA in Italia

