MALATTIE REUMATICHE, DISABILITA' E MEDICINA DI GENERE

Regione Puglia

ASLBA

SEMINARIO ECM

Che genere di prevenzione!

La fragilità nel lavoro tra differenze di genere ed invecchiamento

DISCLOSURES

I have the following potential conflict(s) of interest to report:

Name of commercial company

- BMS
- Fidia
- Grunenthal
- Menarini
- Novartis
- Pfizer

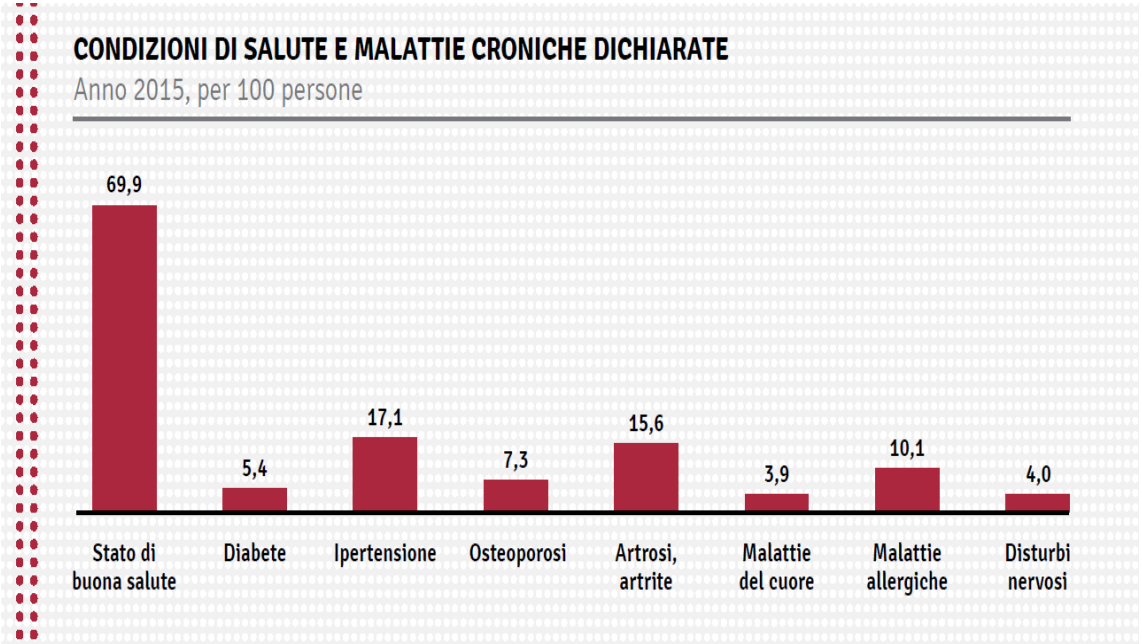
Istat 90 1926-2016

Connessi al paese

Salute e sanità

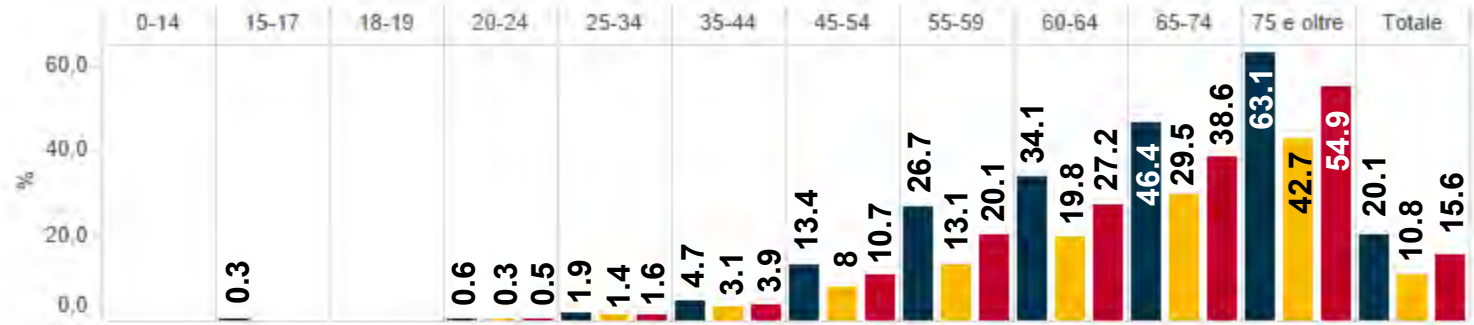
STATO DI SALUTE DEGLI ITALIANI
INDAGINE ISTAT 2015

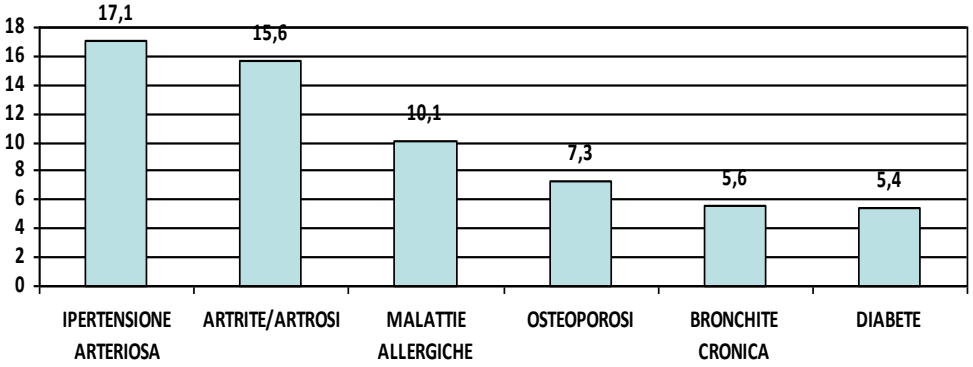
Le malattie dichiarate %		
Malattie	Malattie dichiarate %	
	Maschi	Femmine
Malattie allergiche	13,1	14,2
Diabete	5,6	5,6
Celiachia	0,3	0,7
Ipertensione arteriosa	16,0	18,5
Infarto del miocardio	2,7	1,1
Angina pectoris	0,8	0,6
Altre malattie del cuore	3,7	4,2
Ictus, emorragia cerebrale	1,3	1,5
Bronchite cronica, enfisema	3,9	3,7
Asma	4,2	4,3
Insufficienza renale cronica	1,3	1,2
Malattie della tiroide	1,5	8,4
Artrosi,artrite	11,2	21,5
Osteoporosi	1,7	12,4
Disturbi del comportamento alimentare (bulimia, anoressia)	0,3	0,6
Ansietà cronica	1,9	4,2
Depressione	2,9	5,7
Ansia o Depressione	3,7	7,5
Cirrosi epatica	0,3	0,2
Tumore maligno	1,5	1,8
Cefalea o emicrania ricorrente	6,9	14,5
Parkinsonismo	0,3	0,5
Alzheimer, demenze senili	0,5	1,3
Altra malattia cronica	2,8	2,9



LE MALATTIE REUMATICHE IN ITALIA

Prevalenza per 100 persone della stessa classe di età e sesso





FONTE ISTAT ANNO 2015

quotidianosanità.it

Studi e Analisi

17 APR - Le donne vivono in media più degli uomini: 84,6 anni contro gli 80,1 del sesso maschile. Ma come li vivono?

Le donne sono quelle con maggiori limitazioni funzionali secondo l'Istat: ne ha il 7,1% contro il 3,8% degli uomini e tranne fino ai 35 anni la prevalenza è maggiore in tutte le età con il picco, ovviamente vista la vista media maggiore, tra le over 80. E tra i tipi di limitazioni funzionali è delle donne il primato del confinamento, con una media, sempre secondo l'Istat del 3,4% contro 1,5% degli uomini, di limitazione nelle funzioni con il 4,5% contro il 2,3% dei maschi, delle limitazioni nel movimento: 3,5% contro 1,7% e e nelle limitazioni di vista, udito e parole con l'1,8% medio rispetto all'1,2% dei maschi, unico indicatore di limitazioni questo con valori più vicini tra loro.

L'Istat assegna anche un punteggio per lo stato fisico e per quello psicologico nei due sessi. Per le donne in media è 49,6 quello fisico e 47,9 quello psicologico, mentre per gli uomini il punteggio è maggiore e raggiunge 51,9 quello fisico e 50,1 quello psicologico.

Premesse

Le malattie muscoloscheletriche (MMS) rappresentano un gruppo di affezioni molto diffuse e la causa più frequente di disabilità e di assenza dal lavoro nella popolazione, come dimostrato da molti studi internazionali ed in particolare dal più importante studio epidemiologico effettuato in Gran Bretagna

UK health performance: findings of the Global Burden of Disease Study 2010

Christopher J L Murray†, Michael A Richards, John N Newton, Kevin A Fenton, H Ross Anderson, Charles Atkinson*, Derrick Bennett*, Eduardo Bernabé*, Hannah Blencowe*, Rupert Bourne*, Tasanee Braithwaite*, Carol Brayne*, Nigel G Bruce*, Traolach S Brugha*, Peter Burney*, Mukesh Dherani*, Helen Dolk*, Karen Edmond*, Majid Ezzati*, Abraham D Flaxman*, Tom D Fleming*, Greg Freedman*, David Gunnell*, Roderick J Hay*, Sally J Hutchings*, Summer Lockett Ohno*, Rafael Lozano*, Ronan A Lyons*, Wagner Marcenes*, Mohsen Naghavi*, Charles R Newton*, Neil Pearce*, Dan Pope*, Lesley Rushton*, Joshua A Salomon*, Kenji Shibuya*, Theo Vos*, Haidong Wang*, Hywel C Williams*, Anthony D Woolf*, Alan D Lopez, Adrian Davis*

Summary

Background The UK has had universal free health care and public health programmes for more than six decades. Several policy initiatives and structural reforms of the health system have been undertaken. Health expenditure has increased substantially since 1990, albeit from relatively low levels compared with other countries. We used data from the Global Burden of Diseases, Injuries, and Risk Factors Study 2010 (GBD 2010) to examine the patterns of health loss in the UK, the leading preventable risks that explain some of these patterns, and how UK outcomes compare with a set of comparable countries in the European Union and elsewhere in 1990 and 2010.

Lancet 2013; 381: 997–1020
Published Online
March 5, 2013
http://dx.doi.org/10.1016/S0140-6736(13)60355-4

See **Comment** page 970

*Authors listed alphabetically

LE MALATTIE REUMATICHE SI ASSOCIANO AD UN INCREMENTO DELLA MORTALITA'

AMERICAN COLLEGE OF RHEUMATOLOGY

Rheumatic diseases are life-threatening

People with rheumatic diseases have to face both the frightening idea of being diagnosed with a potentially crippling disease, as well as the reality that they might die 10 to 15 years earlier than expected,[38] which can be overwhelming and devastating.

Every year thousands of Americans die from lupus complications.[39] Additionally, mortality rates for people with diffuse scleroderma are 5 to 8 times greater than people of the same age and gender without the disease.[40] Life expectancy is also shorter among patients with RA than in the general population, and survival rates in patients with poorly controlled disease are comparable to those for Hodgkin's disease, diabetes mellitus and advanced coronary artery disease.[41] The most recent North American study of mortality among people with RA found a standardized mortality ratio of 2.26 among people with RA compared to the general population. That is, people with RA are more than two times more likely to die than people of the same age in the general population.[12]

Arthritis Foundation®

Cause-specific mortality in a large population-based cohort of patients with rheumatoid arthritis in Italy

F. Ometto[1], U. Fedeli[2], E. Schievano[2], C. Botsios[1], L. Punzi[1], M.C. Corti[2]

[1]*Rheumatology Unit, Department of Medicine (DIMED), University of Padova, Italy;*
[2]*Epidemiological Department, Veneto Region, Italy.*

Abstract

Objective

The aim of our study was to investigate cause-specific mortality in rheumatoid arthritis (RA) subjects living in Italy.

Methods

We identified in the electronic archive of the Veneto Region patients aged 20–89 years who were exempt from co-payment for RA in January 2010, and linked them with the archive of causes of deaths of the period 2010-2015. Causes of death were coded according to the International Classification of Diseases, 10th Edition. Standardised mortality ratios (SMRs) with 95% confidence intervals were computed as the ratios between deaths observed in the cohort, and those expected according to age- and gender-specific regional mortality rates.

Results

Overall, 16,098 residents diagnosed with RA and aged 20–89 years were enrolled in the cohort. The overall follow-up amounted to 88,599 person-years, with 2,142 registered decedents. The most common causes of death were circulatory diseases (36.6%), neoplasms (24.2%), and respiratory diseases (8.3%). Overall mortality was increased in RA subjects (SMR=1.42, confidence interval 1.36–1.48). Mortality was significantly increased from circulatory (SMR=1.56, 1.45–1.67), respiratory (SMR=1.83, 1.57–2.12), digestive (SMR=1.93, 1.60–2.32), infectious (SMR=2.34, 1.88-2.89), haematological diseases (SMR=3.22, 2.04-4.83), and falls (SMR=1.95, 1.19–3.01). RA was the underlying cause of death in 6.1% of all deaths in the cohort and was mentioned in 25.4% of death certificates.

Conclusion

In our study, a 42% excess risk of death was observed among subjects with RA compared with the general population. Cardiovascular disease is the primary cause of premature death in RA. Adverse effects of therapy and comorbidities should be adequately monitored in RA subjects.

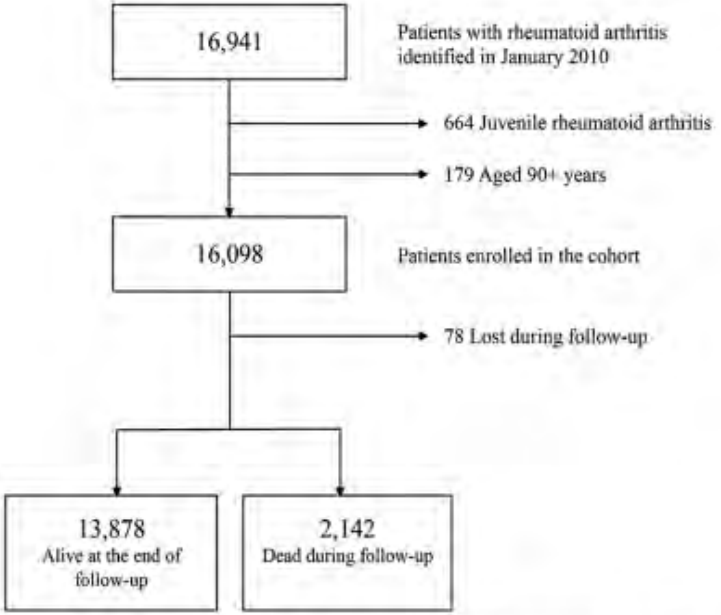


Fig. 1. Schematic design of enrolment and follow-up of patients with rheumatoid arthritis.

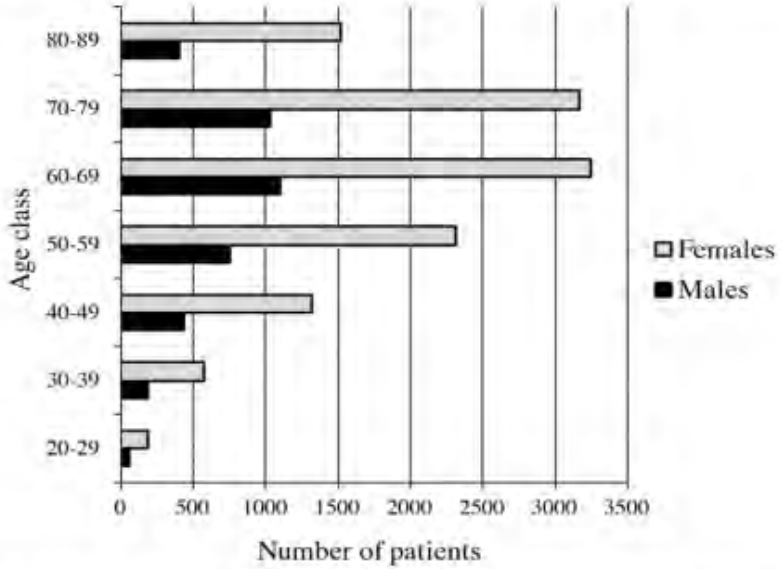


Fig. 2. Demographics of the study population at the beginning of follow-up: 16,098 patients with rheumatoid arthritis aged 20-89 years, Veneto Region (Italy), January 2010.

Table I. Number of deaths and standardised mortality ratio (SMR) with 95% Confidence Interval (CI) in a cohort of 16,098 patients with rheumatoid arthritis. Reference = expected deaths based on gender- and age-specific mortality rates in the Veneto Region (Italy), 2010-2015.

	n. deaths	SMR (CI)
Certain infectious and parasitic diseases (A00-B99)	88	2.34 (1.88-2.89)
Septicaemia (A40–A41)	66	3.07 (2.37-3.90)
Neoplasms (C00-D48)	519	0.98 (0.90-1.07)
Malignant neoplasm of stomach (C16)	25	1.04 (0.67-1.54)
Malignant neoplasms of colon, rectum and anus (C18-C21)	51	0.96 (0.71-1.26)
Malignant neoplasm of pancreas (C25)	45	1.04 (0.76-1.39)
Malignant neoplasms of trachea, bronchus and lung (C33-C34)	102	1.10 (0.89-1.33)
Malignant neoplasm of breast (C50)	44	0.87 (0.63-1.16)
Non-Hodgkin's lymphoma (C82-C85)	21	1.36 (0.84-2.08)
Leukaemia (C91-C95)	22	1.31 (0.82-1.99)
Diseases of the blood and blood-forming organs (D50-D89)	23	3.22 (2.04-4.83)
Endocrine, nutritional and metabolic diseases (E00-E90)	57	0.96 (0.73-1.25)
Diabetes mellitus (E10-E14)	43	0.93 (0.67-1.26)
Mental and behavioural disorders (F00-F99)	50	0.90 (0.67-1.18)
Dementia (F00-F03)	44	0.86 (0.62-1.15)
Diseases of the nervous system (G00-G99)	61	0.89 (0.68-1.14)
Alzheimer's disease (G30)	27	0.90 (0.59-1.31)
Diseases of the circulatory system (I00-I99)	783	1.56 (1.45-1.67)
Hypertensive diseases (I10-I15)	101	1.51 (1.23-1.83)
Ischaemic heart diseases (I20-I25)	247	1.51 (1.33-1.71)
Other heart diseases (I00-I09, I26-I51)	201	1.64 (1.42-1.88)
Cerebrovascular diseases (I60-I69)	182	1.43 (1.23-1.65)
Diseases of the respiratory system (J00-J99)	177	1.83 (1.57-2.12)
Pneumonia (J12-J18)	61	2.22 (1.70-2.86)
Chronic lower respiratory diseases (J40–J47)	54	1.47 (1.10-1.92)
Interstitial pulmonary diseases (J84)	20	3.47 (2.12-5.36)
Diseases of the digestive system (K00-K93)	117	1.93 (1.60-2.32)
Vascular disorders of intestine (K55)	21	2.40 (1.48-3.66)
Diseases of liver (K70-K76)	20	0.95 (0.58-1.47)
Diseases of the musculoskeletal system (M00-M99)	149	17.3 (14.7-20.4)
Rheumatoid arthritis (M05-M06)	130	63.3 (52.9-75.2)
Diseases of the genitourinary system (N00-N95)	27	1.29 (0.85-1.88)
External causes of mortality (V01-Y84)	70	1.65 (1.28-2.08)
Falls (W00-W19)	20	1.95 (1.19-3.01)
All causes	**2142**	**1.42 (1.36-1.48)**

42% OF INCREASED RISK OF DEATH IN SUBJECTS WITH RA COMPARED TO THE GENERAL POPULATION

Table II. Number of deaths and standardised mortality ratio (SMR) with 95% Confidence Interval (CI) in patients with rheumatoid arthritis, by gender and age class. Reference = expected deaths based on gender- and age-specific mortality rates in the Veneto Region (Italy), 2010-2015.

	Males		Females	
	n	SMR (CI)	n	SMR (CI)
All causes				
20-64 yrs	62	1.50 (1.15-1.93)	106	1.54 (1.26-1.86)
65-74 yrs	141	1.30 (1.10-1.54)	235	1.41 (1.23-1.60)
75-89 yrs	452	1.32 (1.20-1.45)	1146	1.47 (1.39-1.56)
Neoplasms (C00-D48)				
20-64 yrs	21	1.03 (0.64-1.58)	52	1.17 (0.87-1.53)
65-74 yrs	50	0.91 (0.67-1.20)	79	0.87 (0.69-1.09)
75-89 yrs	117	1.03 (0.85-1.23)	200	0.98 (0.85-1.12)
Circulatory system (I00-I99)				
20-64 yrs	16	1.86 (1.06-3.02)	18	2.07 (1.23-3.28)
65-74 yrs	43	1.62 (1.17-2.18)	62	1.80 (1.38-2.30)
75-89 yrs	179	1.48 (1.27-1.71)	465	1.53 (1.40-1.68)
Respiratory system (J00-J99)				
20-64 yrs	3	2.94 (0.59-8.59)	4	2.62 (0.71-6.71)
65-74 yrs	6	1.31 (0.48-2.85)	14	2.23 (1.22-3.74)
75-89 yrs	54	1.76 (1.33-2.30)	96	1.82 (1.47-2.30)

Table III. Contribution of specific diseases selected as the underlying cause of death, or mentioned anywhere in the death certificate, among 2,142 decedents from a cohort of 16,098 patients with rheumatoid arthritis.

	Underlying cause	Any mention
Septicaemia (A40–A41)	3.1%	13.6%
All neoplasms (C00-D48)	24.2%	29.8%
Diabetes mellitus (E10-E14)	2.0%	11.8%
Dementia, Alzheimer (F01-F03, G30)	3.3%	7.0%
Hypertensive diseases (I10-I15)	4.7%	17.4%
Ischaemic heart diseases (I20-I25)	11.5%	20.7%
Cerebrovascular diseases (I60-I69)	8.5%	14.7%
Pneumonia (J12-J18)	2.8%	11.6%
Chronic lower respiratory diseases (J40–J47)	2.4%	8.4%
Interstitial pulmonary diseases (J84)	0.9%	1.9%
Rheumatoid arthritis (M05-M06)	6.1%	25.4%

LE MALATTIE REUMATICHE SI ASSOCIANO AD UN INCREMENTO DELLA MORTALITA'

Rheumatic diseases are life-threatening

People with rheumatic diseases have to face both the frightening idea of being diagnosed with a potentially crippling disease, as well as the reality that they might die 10 to 15 years earlier than expected,[38] which can be overwhelming and devastating.

Every year thousands of Americans die from lupus complications.[39] Additionally, mortality rates for people with diffuse scleroderma are 5 to 8 times greater than people of the same age and gender without the disease.[40] Life expectancy is also shorter among patients with RA than in the general population, and survival rates in patients with poorly controlled disease are comparable to those for Hodgkin's disease, diabetes mellitus and advanced coronary artery disease.[41] The most recent North American study of mortality among people with RA found a standardized mortality ratio of 2.26 among people with RA compared to the general population. That is, people with RA are more than two times more likely to die than people of the same age in the general population.[12]

Women and minorities are disproportionately affected

It is estimated that 1 in 12 women will develop a rheumatic disease during her lifetime, and she is likely to be affected in the prime of her life. Left untreated, it can affect all aspects of a woman's life – from dating and starting a family to raising children and being a productive worker.

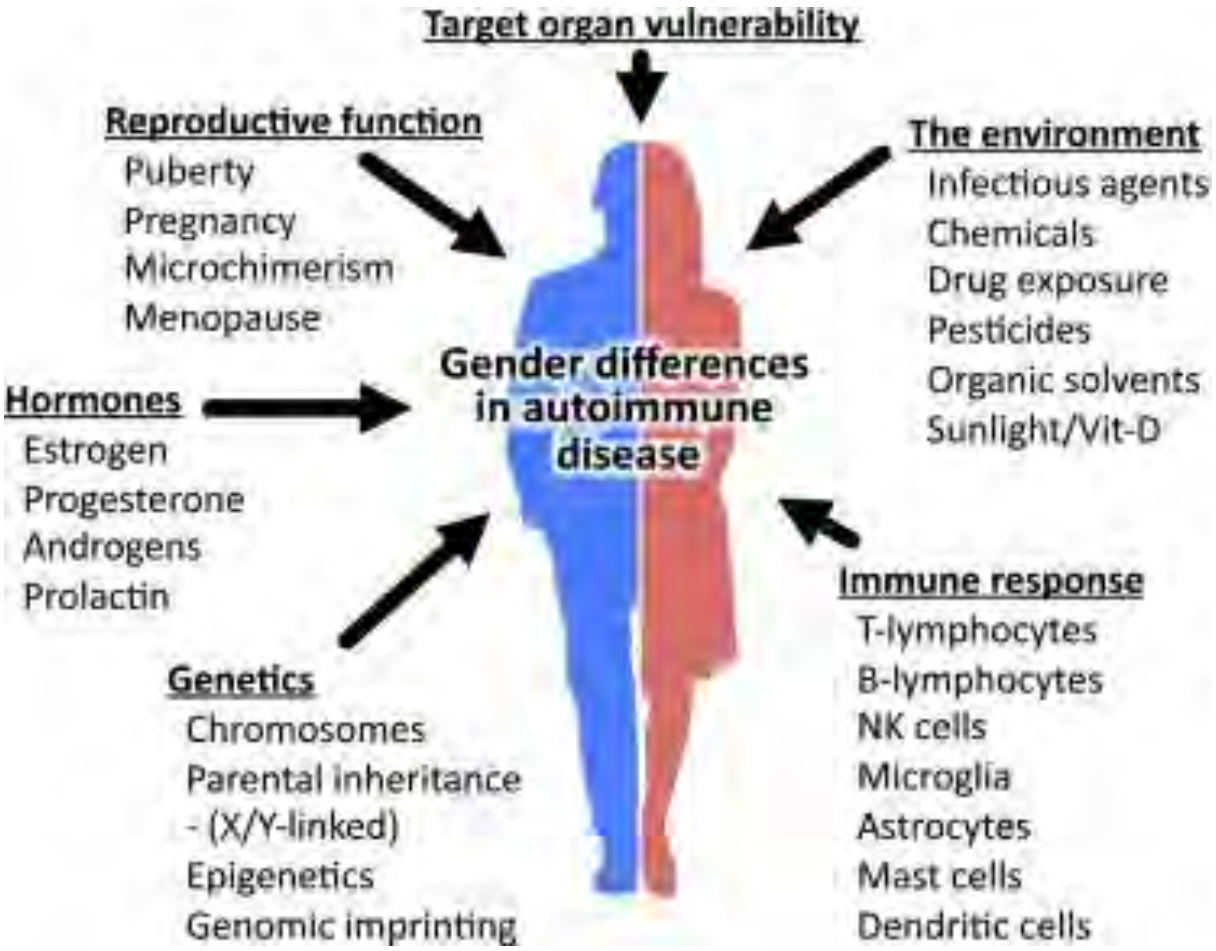
Ninety percent of people with lupus are women between the ages of 15 and 45,[42] and the risk of miscarriages, stillbirths and premature deaths is substantially increased for these women.[43]

American College of Rheumatology

Arthritis Foundation®

… inflammatory rheumatic diseases with arthritis, cause more disability in America than heart disease, cancer or diabetes.[2]

LE MALATTIE REUMATICHE COLPISCONO SOPRATTUTTO LE DONNE


Target organ vulnerability
Reproductive function
Puberty
Pregnancy
Microchimerism
Menopause
The environment
Infectious agents
Chemicals
Drug exposure
Pesticides
Organic solvents
Sunlight/Vit-D
Gender differences in autoimmune disease
Hormones
Estrogen
Progesterone
Androgens
Prolactin
Immune response
T-lymphocytes
B-lymphocytes
NK cells
Microglia
Astrocytes
Mast cells
Dendritic cells
Genetics
Chromosomes
Parental inheritance
- (X/Y-linked)
Epigenetics
Genomic imprinting

PREVALENZA DELLE PRINCIPALI MALATTIE AUTOIMMUNI SECONDO IL SESSO

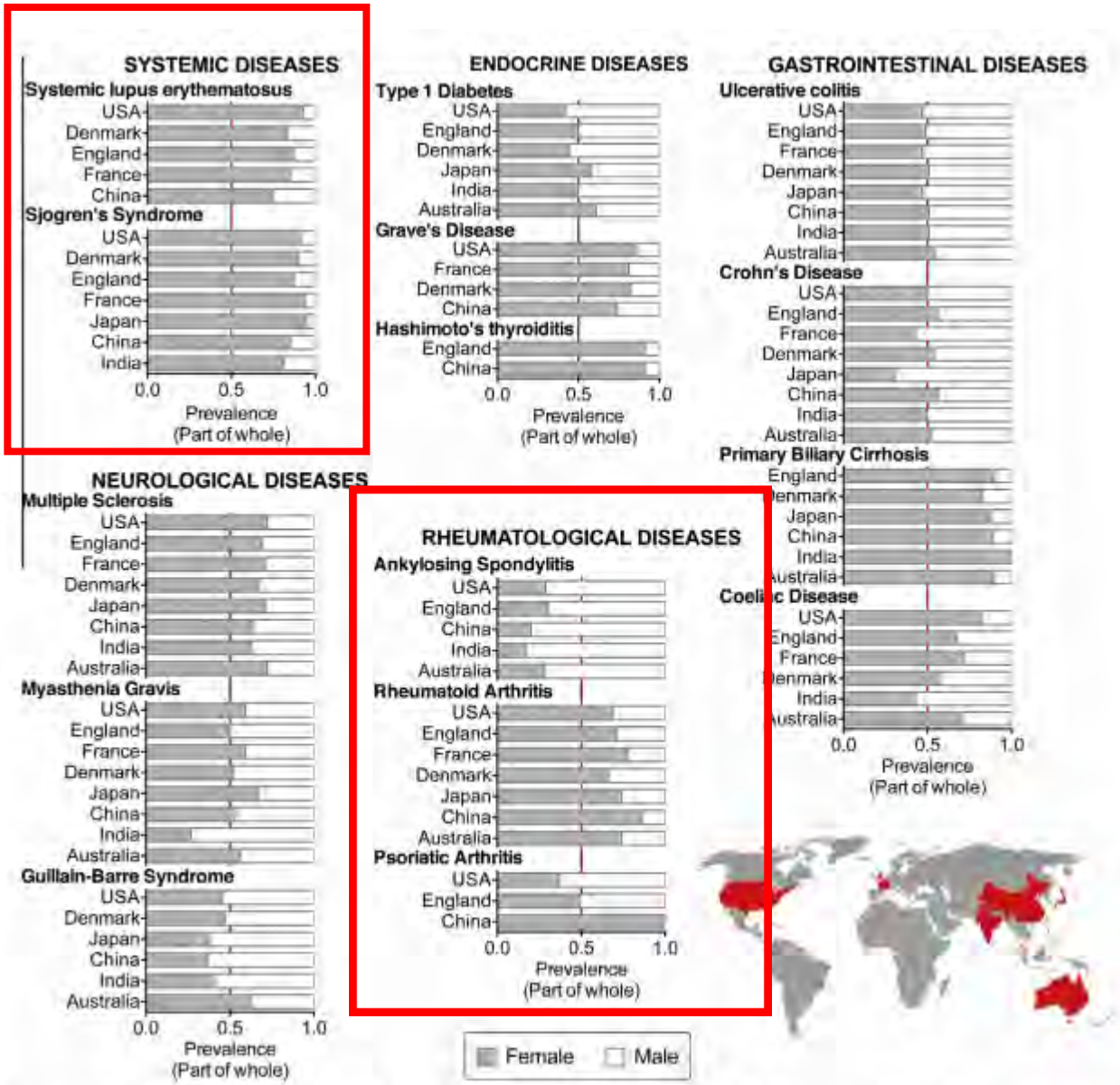


Fig. 1. Prevalence of autoimmune disease in USA, England, France, Denmark, Japan, China, India, and Australia. There is a very high gender bias toward females for systemic

Ngo ST et al. Front Neuroendocrinol 2014

AMERICAN COLLEGE OF RHEUMATOLOGY

Rheumatic diseases are life-threatening

People with rheumatic diseases have to face both the frightening idea of being diagnosed with a potentially crippling disease, as well as the reality that they might die 10 to 15 years earlier than expected,[38] which can be overwhelming and devastating.

Every year thousands of Americans die from lupus complications.[39] Additionally, mortality rates for people with diffuse scleroderma are 5 to 8 times greater than people of the same age and gender without the disease.[40] Life expectancy is also shorter among patients with RA than in the general population, and survival rates in patients with poorly controlled disease are comparable to those for Hodgkin's disease, diabetes mellitus and advanced coronary artery disease.[41] The most recent North American study of mortality among people with RA found a standardized mortality ratio of 2.26 among people with RA compared to the general population. That is, people with RA are more than two times more likely to die than people of the same age in the general population.[12]

Women and minorities are disproportionately affected

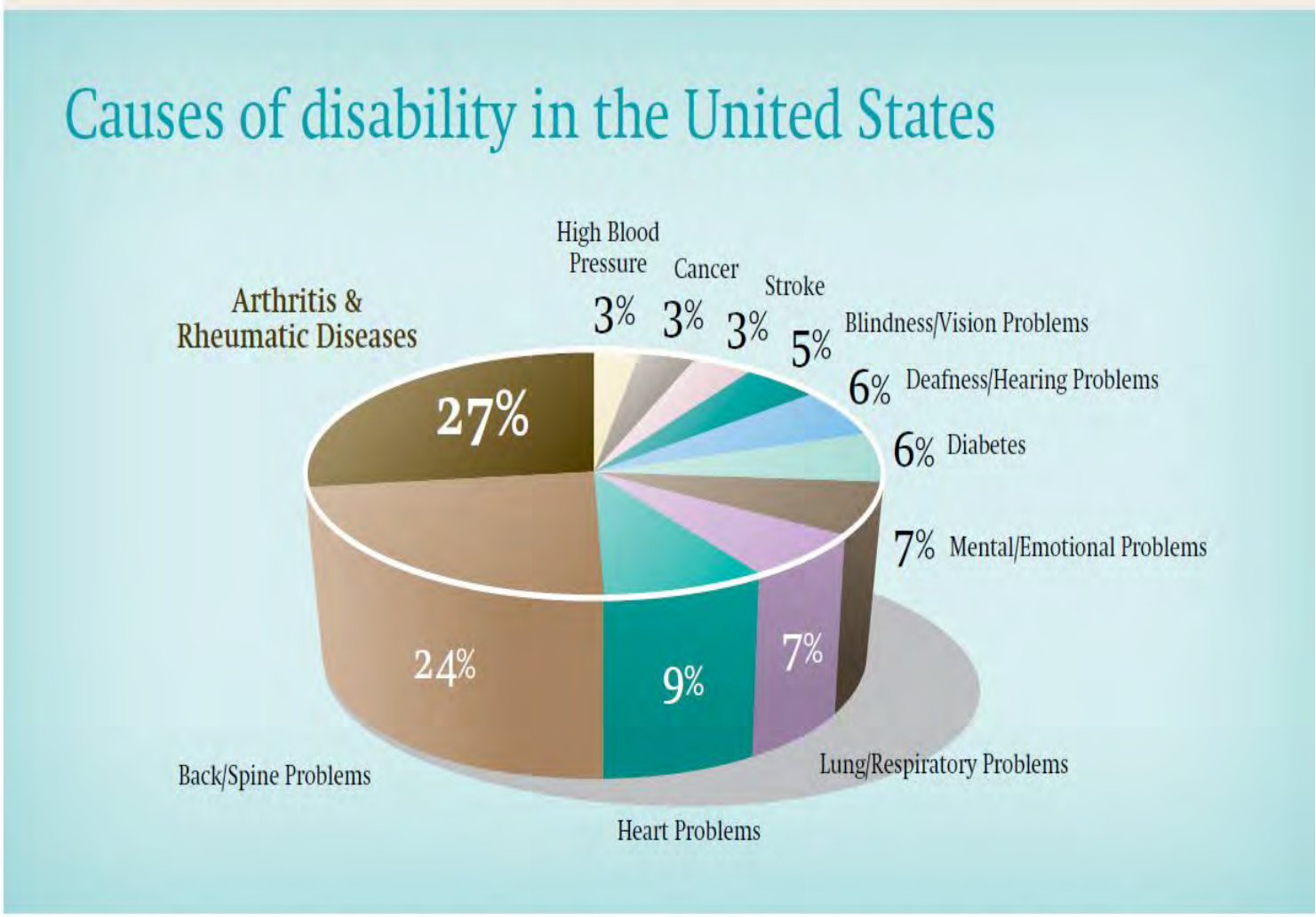
It is estimated that 1 in 12 women will develop a rheumatic disease during her lifetime, and she is likely to be affected in the prime of her life. Left untreated, it can affect all aspects of a woman's life – from dating and starting a family to raising children and being a productive worker.

Ninety percent of people with lupus are women between the ages of 15 and 45,[42] and the risk of miscarriages, stillbirths and premature deaths is substantially increased for these women.[43]

Arthritis Foundation®

… inflammatory rheumatic diseases with arthritis, cause more disability in America than heart disease, cancer or diabetes.[2]

MALATTIE REUMATICHE E DISABILITA'



Source: CDC. 2009. Prevalence of disabilities and associated conditions among adults – United States, 1999. *Morbidity and Mortality Weekly Report*. 58(16);421-426

MALATTIE REUMATICHE E DISABILITA'

Yokota *et al. Archives of Public Health* (2015) 73:37
DOI 10.1186/s13690-015-0083-y

ARCHIVES OF PUBLIC HEALTH

RESEARCH Open Access

Contribution of chronic diseases to the mild and severe disability burden in Belgium

Renata T. C. Yokota[1,2*], Johan Van der Heyden[1,3], Stefaan Demarest[1], Jean Tafforeau[1], Willma J. Nusselder[4], Patrick Deboosere[2] and Herman Van Oyen[1,3]

Abstract

Background: Population aging accompanied by an increased longevity with disability has raised international concern, especially due to its costs to the health care systems. Chronic diseases are the main causes of physical disability and their simultaneous occurrence in the population can impact the disablement process, resulting in different severity levels. In this study, the contribution of chronic diseases to both mild and severe disability burden in Belgium was investigated.

Methods: Data on 21 chronic diseases and disability from 35,799 individuals aged 15 years or older who participated in the 1997, 2001, 2004, or 2008 Belgian Health Interview Surveys were analysed. Mild and severe disability were defined based on questions related to six activities of daily living and/or mobility limitations. To attribute disability by severity level to selected chronic diseases, multiple additive hazard models were fitted to each disability outcome, separately for men and women.

Results: A stable prevalence of mild (5 %) and severe (2–3 %) disability was observed for the Belgian population aged 15 years or older between 1997 and 2008. Arthritis was the most important contributor in women with mild and severe disability. In men, low back pain and chronic respiratory diseases contributed most to the mild and severe disability burden, respectively. The contribution also differed by age: for mild disability, depression and chronic respiratory diseases were important contributors among young individuals, while heart attack had a large contribution for older individuals. For severe disability, neurological diseases and stroke presented a large contribution in young and elderly individuals, respectively.

Conclusions: Our results indicate that the assessment of the contribution of chronic diseases on disability is more informative if different levels of disability are taken into consideration. The identification of diseases which are related to different levels of disability – mild and severe – can assist policymakers in the definition and prioritisation of strategies to tackle disability, involving prevention, rehabilitation programs, support services, and training for disabled individuals.

Keywords: Severe disability, Mild disability, Activity of daily living, Mobility limitations, Chronic diseases, Belgium

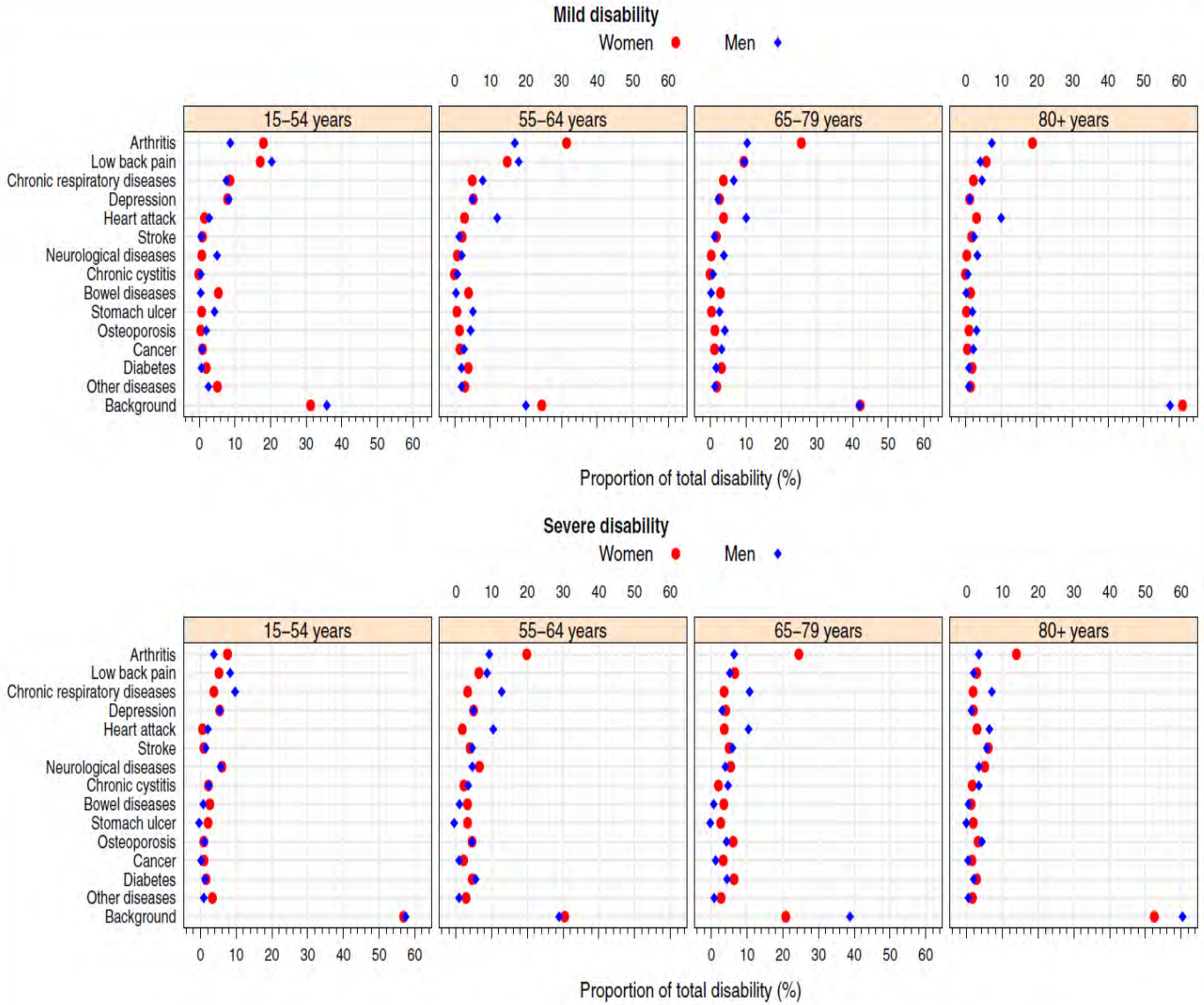
Table 3 Prevalence of chronic diseases in women according to disability severity. Health Interview Survey, Belgium, 1997, 2001, 2004, and 2008

Diseases	15–54 years			55–64 years			65–79 years			≥80 years		
	Not disabled	Mild	Severe	Not disabled	Mild	Severe	Not disabled	Mild	Severe	Not disabled	Mild	Severe
n	10732	393	140	1950	247	78	2100	657	344	688	593	858
Chronic respiratory diseases	6.0	20.7	15.4	6.9	16.0	15.2	7.9	21.3	24.4	7.9	10.5	15.1
Diabetes	1.2	5.0	3.1	4.9	12.2	14.0	8.0	12.2	18.3	5.6	8.9	11.1
Cancer	0.7	3.7	3.2	2.1	6.1	5.7	4.1	4.2	8.1	1.9	2.9	6.0
Depression	6.0	21.7	14.5	7.2	24.0	21.3	6.7	14.4	17.6	3.9	7.2	11.2
Neurological diseases	0.6	2.0	12.0	1.2	3.2	3.2	0.5	2.2	8.4	1.6	1.8	6.5
Stomach ulcer	2.2	9.5	2.7	4.3	9.8	18.0	4.3	9.7	10.1	3.4	5.7	10.7
Bowel diseases	2.4	14.1	6.9	3.7	9.3	18.7	4.7	11.0	15.2	1.8	7.4	7.7
Chronic kidney diseases	1.1	3.7	1.1	1.3	1.3	6.6	0.8	5.7	6.7	0.9	1.6	4.0
Liver diseases	0.4	1.7	1.0	0.8	1.7	2.1	1.5	2.1	2.6	0.2	1.5	2.0
Gall-stones	0.6	1.5	0.7	1.2	1.4	4.1	1.9	2.5	8.0	1.5	4.0	3.4
Glaucoma	0.6	1.0	0.7	3.1	9.0	6.1	4.9	7.5	10.0	5.4	8.8	8.3
Cataract	0.2	1.1	0.3	1.0	1.6	8.0	8.2	12.8	12.1	16.5	15.0	15.4
Migraine	15.5	29.8	24.6	10.9	26.9	25.7	7.8	13.5	18.8	5.9	5.7	9.9
Thyroid problems	4.6	11.5	7.8	8.8	9.5	10.4	9.5	12.3	14.6	4.7	10.7	12.0
Chronic skin diseases	3.4	5.7	0.4	2.9	8.2	2.9	3.2	4.9	3.8	3.2	1.5	7.5
Chronic cystitis	1.9	4.4	4.0	2.4	3.5	9.9	2.3	7.2	8.0	2.9	5.7	8.7
Cardiovascular diseases												
Heart attack	0.7	4.7	0.9	2.9	7.4	8.4	7.1	14.5	15.8	7.5	13.1	20.7
Stroke	0.1	2.7	4.0	0.9	2.7	5.1	1.0	4.0	7.6	2.1	2.6	9.5
Musculoskeletal diseases												
Low back pain	9.7	40.8	18.9	16.2	46.4	40.6	19.7	35.4	39.1	15.0	26.7	23.9
Osteoporosis	1.4	4.3	7.7	9.9	16.8	28.7	16.8	27.2	27.6	13.4	25.4	28.1
Arthritis	7.6	37.8	20.5	27.8	63.6	61.6	41.5	67.7	70.0	40.9	58.8	65.8

n: number of individuals

Arthritis: osteoarthritis and rheumatoid arthritis; chronic respiratory diseases: asthma, chronic bronchitis, chronic obstructive pulmonary disease, emphysema; neurological diseases: epilepsy and Parkinson's disease

MALATTIE CAUSA DI DISABILITA' NELLE DONNE SECONDO L'ETA'



The cause-specific contribution across age group and gender sum to 100%. Arthritis: osteoarthritis and rheumatoid arthritis; chronic respiratory diseases: asthma, chronic bronchitis, chronic obstructive pulmonary disease, emphysema; neurological diseases: epilepsy and Parkinson's disease

Fig. 4 Relative contribution of diseases (proportion of total disability prevalence) to the prevalence of mild and severe disability. Health Interview Survey, Belgium, 1997, 2001, 2004, and 2008

- In molti Paesi occidentali le MMS costituiscono la seconda-terza causa di richiesta di visita medica e causano il 10-20% dell'attività dei medici di medicina generale.
- Le conseguenze economiche sono stimate in 1-2,5% del PIL.

GOTTA

“King of Diseases”

&

“Disease of Kings”

Alexander the Great

Charlemagne

Charles V

Henry VIII

George IV

James Gillray, 1799

Arthritis Foundation℠ | Gout Blog

Tuesday, March 6 | Arthritis Foundation

Are Women at Risk for Gout?

It was once thought that gout, the so-called "disease of kings," typically spared queens. But in the last 20 years, cases of gout have more than doubled among women. Today, 2 million women – and 6 million men – in the U.S. have this inflammatory form of arthritis that causes joint swelling and telltale pain at the base of the big toe.

La Gotta nelle donne

- Esordio più frequentemente poliarticolare
- Impegno più frequente delle articolazioni interfalangee delle mani
- Maggiore associazione con comorbidità

CLINICAL RESEARCH STUDY

THE AMERICAN JOURNAL of MEDICINE®

Comorbidities of Gout and Hyperuricemia in the US General Population: NHANES 2007-2008

Yanyan Zhu, PhD,[a] Bhavik J. Pandya, PharmD,[b] Hyon K. Choi, MD, DrPH[a,c]

[a]Clinical Epidemiology Unit, Boston University School of Medicine, Boston, Mass; [b]Global Health Economics and Outcomes Research, Takeda Pharmaceuticals International, Inc., Deerfield, Ill; [c]Section of Rheumatology, Department of Medicine, Boston University School of Medicine, Boston, Mass.

ABSTRACT

PURPOSE: The objective of this study was to estimate the latest prevalence of major comorbidities associated with gout and hyperuricemia in the US based on a recent, nationally representative sample of US men and women.

METHODS: Using data from 5707 participants aged 20 years and older in the National Health and Nutrition Examination Survey 2007-2008, we calculated the national prevalence and population estimates of major comorbidities according to gout status and various hyperuricemia levels, compared with those without these conditions. Case definitions of gout and comorbidities were based on an affirmative answer to a question that asked whether a physician or a health professional had diagnosed the corresponding condition.

RESULTS: Among these individuals with gout, 74% (6.1 million) had hypertension, 71% (5.5 million) had chronic kidney disease stage ≥2, 53% (4.3 million) were obese, 26% (2.1 million) had diabetes, 24% (2.0 million) had nephrolithiasis, 14% (1.2 million) had myocardial infarction, 11% (0.9 million) had heart failure, and 10% (0.9 million) had suffered a stroke. These proportions were substantially higher than those among individuals without gout (all *P*-values <.67). With increasing levels of hyperuricemia, there were graded increases in the prevalences of these comorbidities. In the top category (serum urate ≥10 mg/dL), 86% of subjects had chronic kidney disease stage ≥2, 66% had hypertension, 65% were obese, 33% had heart failure, 33% had diabetes, 23% had myocardial infarction, and 12% had stroke. These prevalences were 3-33 times higher than those in the lowest serum urate category (<4 mg/dL). Sex-specific odds ratios tended to be larger among women than men, and the overall comorbidity prevalence was highest among individuals with both gout and hyperuricemia.

CONCLUSIONS: These findings from the latest nationally representative data highlight remarkable prevalences and population estimates of comorbidities of gout and hyperuricemia in the US. Appropriate preventive and management measures of these comorbidities should be implemented in gout management, with a preference to strategies that can improve gout and comorbidities together.

 • *The American Journal of Medicine (2012) 125, 679-687*

KEYWORDS: Gout; Hyperuricemia; Comorbidities; NHANES

Table 1 Prevalence of Comorbidities According to Presence of Gout, NHANES 2007-2008

Comorbidities*	Gout		No Gout	Age-† and Sex-adjusted OR (95% CI)	*P* Value for Interaction by Sex
	Population Estimates (in Millions)	Prevalence, % (95% CI)	Prevalence, % (95% CI)		
Hypertension	6.1	73.9 (67.9-79.9)	28.9 (26.6-31.2)	4.19 (2.75-6.39)	.55
Men	4.4	71.5 (63.2-79.8)	27.2 (23.6-30.7)	4.02 (2.27-7.13)	
Women	1.7	80.6 (68.4-92.8)	30.5 (27.8-33.1)	5.18 (2.54-10.55)	
CKD stage ≥2 (GFR <60)	5.5	71.1 (65.4-76.8)	42.1 (38.0-46.1)	1.75 (1.23-2.49)	.42
Men	4.1	72.1 (63.4-80.7)	38.9 (34.1-43.6)	2.04 (1.17-3.56)	
Women	1.3	68.2 (50.0-86.4)	44.9 (40.5-49.3)	1.13 (0.40-3.22)	
Obesity (BMI ≥30 kg/m^2)	4.3	53.3 (44.8-61.9)	32.8 (30.3-35.3)	2.35 (1.55-3.57)	.48
Men	3.2	53.3 (44.0-62.5)	30.7 (27.4-34.0)	2.32 (1.46-3.70)	
Women	1.1	53.5 (41.4-65.6)	34.8 (32.3-37.2)	2.18 (1.24-3.82)	
Diabetes	2.1	25.7 (15.8-35.6)	7.8 (6.3-9.3)	2.36 (1.49-3.73)	.006
Men	1.3	20.6 (12.5-28.8)	7.6 (6.3-8.9)	1.73 (1.06-2.83)	
Women	0.8	39.4 (22.9-55.9)	8.1 (5.8-10.3)	4.23 (2.47-7.23)	
Nephrolithiasis	2.0	23.8 (16.8-30.7)	8.4 (7.1-9.6)	2.10 (1.39-3.18)	.54
Men	1.7	27.3 (17.7-36.8)	10.6 (8.8-12.4)	2.09 (1.16-3.76)	
Women	0.3	14.0 (5.1-22.8)	6.4 (5.1-7.7)	1.83 (0.79-4.21)	
CKD stage ≥3 (GFR <30)	1.5	19.9 (15.4-24.3)	5.2 (4.1-6.4)	2.32 (1.65-3.26)	.61
Men	0.9	16.0 (10.9-21.1)	3.8 (2.2-5.4)	2.16 (1.10-4.24)	
Women	0.6	31.4 (17.9-45.0)	6.5 (5.2-7.9)	2.82 (1.19-6.71)	
Myocardial infarction	1.2	14.4 (10.0-18.7)	2.9 (2.2-3.5)	2.37 (1.54-3.65)	.012
Men	0.7	11.5 (8.2-14.8)	3.8 (2.7-4.9)	1.45 (0.82-2.54)	
Women	0.5	22.1 (10.6-33.7)	2.0 (1.5-2.6)	6.86 (2.87-16.41)	
Heart failure	0.9	11.2 (6.9-15.5)	2.0 (1.5-2.6)	2.68 (1.88-3.83)	<.001
Men	0.5	8.3 (6.0-10.6)	2.3 (1.7-2.8)	1.72 (1.17-2.54)	
Women	0.4	19.1 (8.0-30.3)	1.8 (1.1-2.6)	5.84 (3.59-9.51)	
Stroke	0.9	10.4 (3.8-17.0)	2.9 (2.2-3.6)	2.02 (0.98-4.19)	.67
Men	0.5	8.3 (3.0-13.7)	2.3 (1.8-2.9)	1.86 (0.67-5.16)	
Women	0.4	16.0 (0-32.8)	3.4 (2.2-4.6)	2.37 (0.81-6.92)	

BMI = body mass index; CI = confidence interval; CKD = chronic kidney disease; GFR = glomerular filtration rate (mL/min per 1.73 m^2); NHANES = US National Health and Nutrition Examination Survey; OR = odds ratio.

*Comorbidities were ordered by the descending prevalence of comorbidities among all individuals with gout.

†For sex-specific data, age-adjusted estimates were provided.

Zhu Y et al, Am J Med 2012

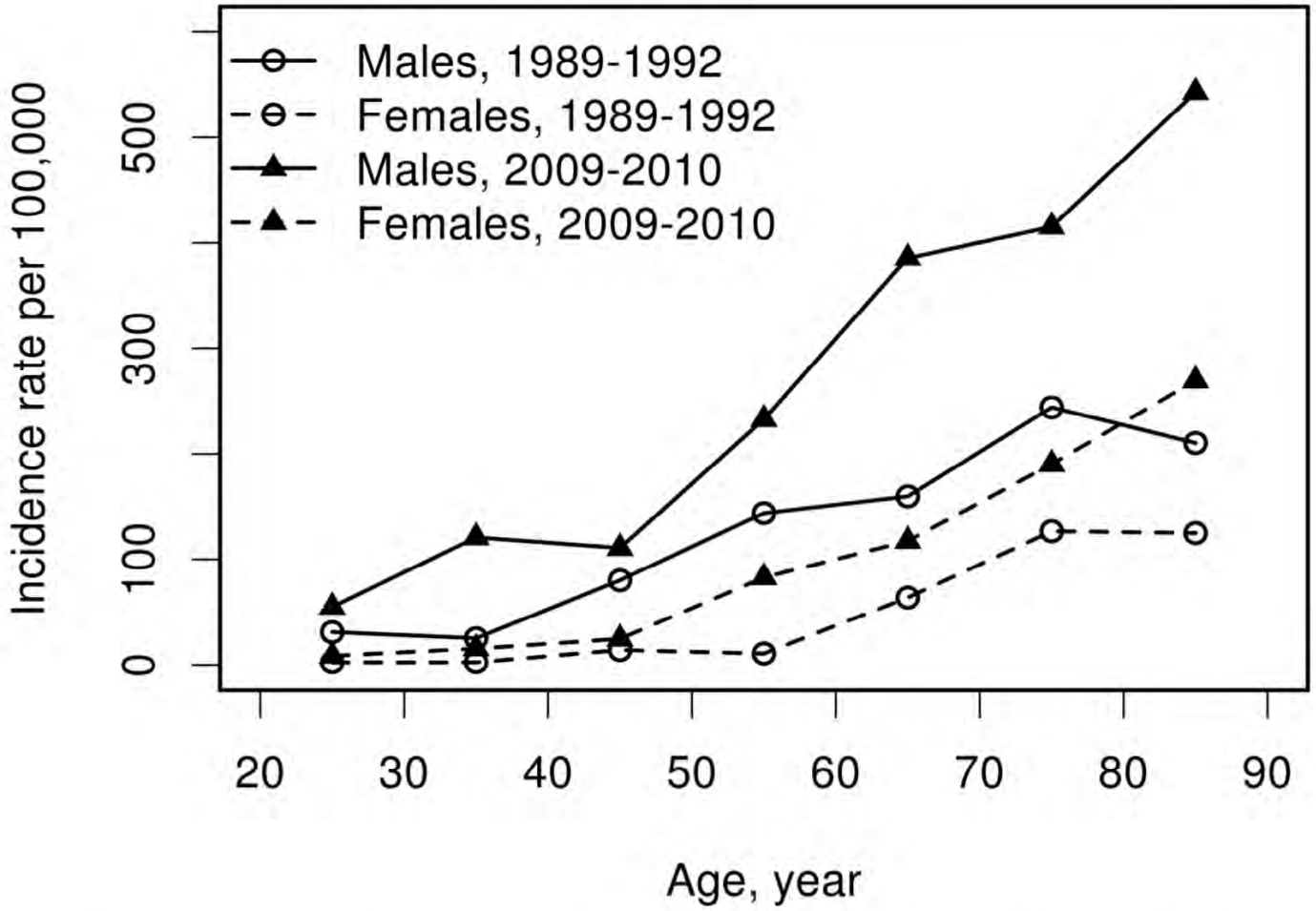


Figure 1. Incidence of gout among adult (age ≥ 18 yrs) Olmsted County, Minnesota, USA residents in 1989–1992 and 2009–2010, based on the earliest date of fulfillment of the 1977 American Rheumatism Association, Rome, or New York criteria, according to age and sex.

Elfishawi MM et al. J Rheumatol 2018

Hindawi Publishing Corporation
Mediators of Inflammation
Volume 2014, Article ID 386148, 11 pages
http://dx.doi.org/10.1155/2014/386148

Review Article

Predictive Factors of Response to Biological Disease Modifying Antirheumatic Drugs: Towards Personalized Medicine

Claire I. Daïen and Jacques Morel

Department of Rheumatology, Lapeyronie Hospital, University Montpellier I-II and IGMM-UMR5535, CNRS 1919, Route de Mende, 34295 Montpellier Cedex 5, France

Correspondence should be addressed to Claire I. Daïen; cidaien@gmail.com

Received 2 October 2013; Accepted 27 November 2013; Published 12 January 2014

Academic Editor: Vera L. Petricevich

Many therapies are now available for patients with rheumatoid arthritis (RA) who have an inadequate response to methotrexate including tumor necrosis factor inhibitors, abatacept, tocilizumab, and rituximab. Clinical response to drugs varies widely between individuals. A part of this variability is due to the characteristics of the patient such as age, gender, concomitant therapies, body mass index, or smoking status. Clinical response also depends on disease characteristics including disease activity and severity and presence of autoantibodies. Genetic background, cytokine levels, and immune cell phenotypes could also influence biological therapy response. This review summarizes the impact of all those parameters on response to biological therapies.

Table 2: Main predictive factors of response to biological therapy.

Factors associated with good response to	Tumor necrosis factor inhibitors	Tocilizumab	Abatacept	Rituximab
Patients characteristics	Male (C) [7–9] Younger (C) [7, 8] Nonsmoker (C) [10, 19–21] Nonobese for IFX (C) [16, 17] Use of MTX (C) [7, 8, 10, 11]	Older (NC) [12]	Younger (NC) [13]	Male (NC) [15]
Disease characteristics	Low HAQ (C) [7, 10, 17, 20] High DAS28 (C) [7, 8, 17] ACPA or RF negativity (C) [20, 31] Low number of previous biological therapies (C) [8]	Low HAQ and high DAS28 [13]	High DAS28 [14] RF positivity (C) [32]	Low HAQ and high DAS28 [15, 32] RF positivity +++ (C) [32] Low number of previous biological therapies (C) [29]
Immunogenicity	Antidrug antibodies against ADA or IFX for response to ETN (NC) [39]			
Genetic background	PTPRC = CD45 (rs10919563) (C) [41, 42], 7 SNPs including EYA4 (rs17301249) and PDZD2 (rs1532269) (NC) [43]			158VV FCGR3A in European countries (C) [44, 45]
Cytokines and immune cells	High TNF bioactivity in blood [5] or in synovium [49] (NC), high LPS-stimulated whole blood IL-1b (NC) [48], low IL-17 (NC) [6] 24-biomarker ETN response signature including autoantibodies and cytokines (C) [53]	High serum IL-6 levels (NC) [54]	Low levels of CD4+ and CD8+ CD28− T cells (NC) [61]	Memory B cells (NC) [57, 58]

C: confirmed; NC: not confirmed. To be confirmed, the data had to be validated at least by two independent teams.

Grazie

HEALTH AND MOTION VENICE ASSOCIATION
HEMOVE