

Con il Patrocinio di



APPROCCI INTERDISCIPLINARI IN REUMATOLOGIA

6^a Edizione

GERIATRIA E MALATTIE REUMATICHE



Torino, 12-13 ottobre 2018

Il problema della multiprescrizione

Vittoria Tibaldi

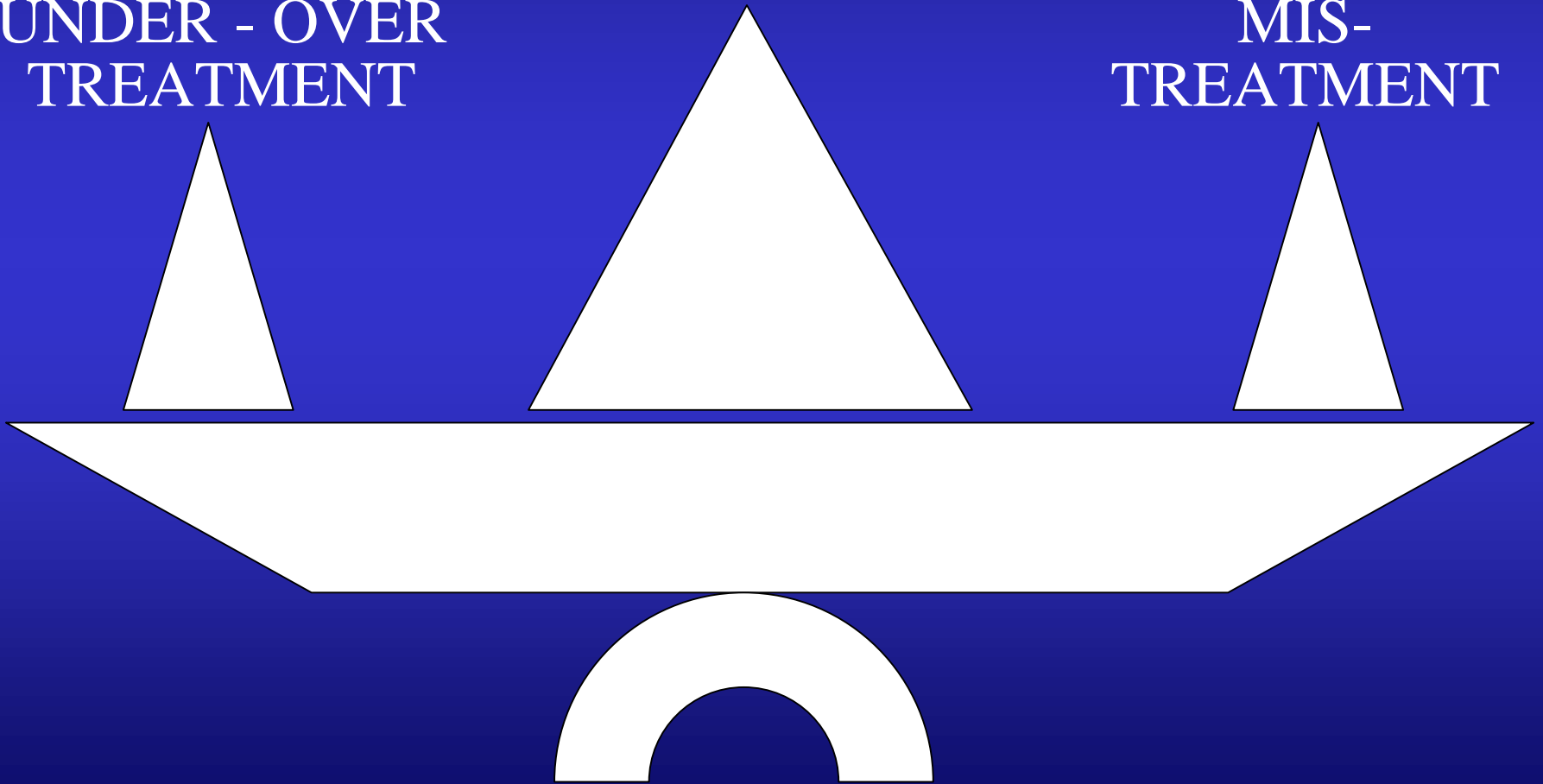
S.C. Geriatria e Malattie Metaboliche dell'Osso
A.O.U. Città della Salute e della Scienza di Torino

**LA MULTIPRESCRIZIONE E'
SEMPRE UN PROBLEMA?**

**CORRETTA
PRESCRIZIONE**

**UNDER - OVER
TREATMENT**

**MIS-
TREATMENT**



RESEARCH ARTICLE

Open Access

What is polypharmacy? A systematic review of definitions



Nashwa Masnoon^{1,2*} , Sepehr Shakib^{3,4}, Lisa Kalisch-Ellett¹ and Gillian E. Caughey^{1,3,4}

Conclusions

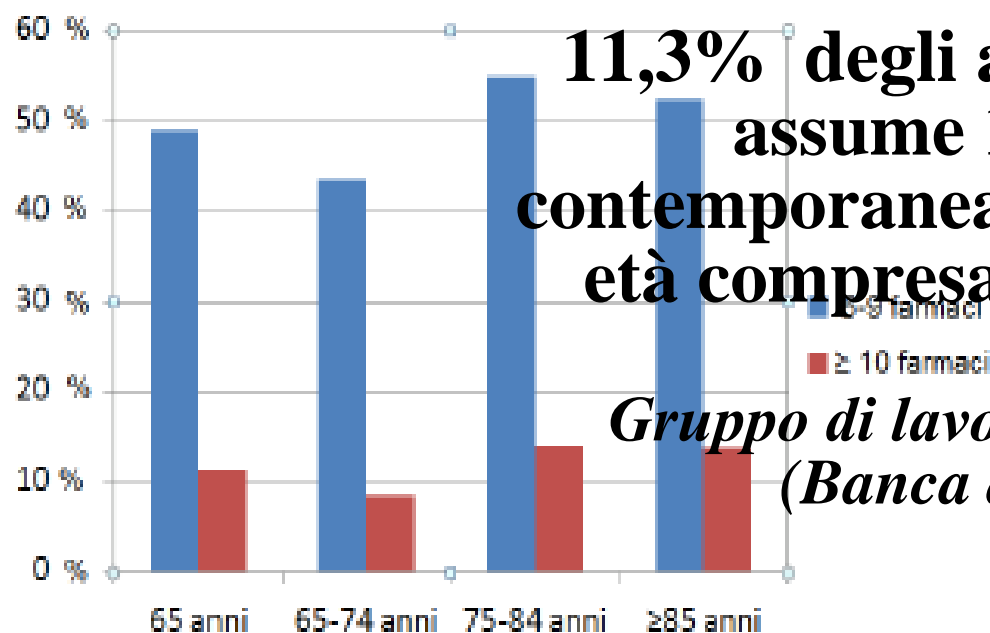
While the most commonly used definition of polypharmacy is being on five or more medicines, definitions are

The most commonly used term was polypharmacy which was defined as five or more medications by 46,4% of studies.

There is a clear need towards adopting the term “appropriate polypharmacy” in order to differentiate between the prescribing of “many” and “too many” drugs instead of a simple numerical count of medications, which is of limited value in practice.

order to optimise health outcomes.

	Anziani (≥ 65 aa) n=12.301.537	65-74 aa n=6.154.421	75-84 aa n=4.474.887	≥85 aa n= 1.672.229
Farmaci				
5-9	6.024.383 (49.0%)	2.681.639 (43.6%)	2.462.378 (55.0%)	880.366 (52.6%)
≥10	1.389.591 (11.3%)	529.506 (8.6%)	629.043 (14.1%)	231.042 (13.8%)



**11,3% degli anziani (> 1,3 milioni)
assume 10 o più farmaci
contemporaneamente, spt i soggetti di
età compresa tra i 75 e gli 84 anni**

*Gruppo di lavoro Geriatrico dell'AIFA
(Banca dati OsMed 2011)*

At age 65 years, approximately 8 years of the 20 remaining years of life (41%) can be expected to be lived with polypharmacy.

More than half of the remaining life expectancy will be spent with polypharmacy after the age of 75 years.

Women had longer life expectancy, but also lived more years with polypharmacy than men.

Wastesson JW et al. JAMDA 2016.

Rapporto Nazionale sull'Uso dei Farmaci - 2012

FARMACI: DATI DI SPESA E DI CONSUMO

- **Spesa e consumo aumentano con l'età: ≥ 75 aa \rightarrow consumi e spesa rispettivamente 22 e 8 volte superiori a persone di età compresa tra 25 e 34 aa**
- **Popolazione > 65 aa assorbe circa 54% della spesa totale e 58% delle dosi**

Circa 1 farmaco su 5 di quelli comunemente usati dai pazienti anziani è inappropriato, ma la proporzione aumenta a 1/3 dei farmaci nei soggetti anziani residenti in nursing home.

Circa il 50% di pazienti anziani ospedalizzati/ambulatoriali/istituzionalizzati riceve 1 o più farmaci non necessari.

POLITERAPIA NELL'ANZIANO

- Possibili Conseguenze -

Aumento di interazioni farmacologiche

L'assunzione contemporanea di 5 principi attivi comporta il 50% di probabilità che si verifichino fenomeni di interferenza con ↑ o ↓ di efficacia terapeutica

Aumentato rischio di gravi reazioni indesiderate/avverse da farmaci (*adverse drug reactions-ADRs, adverse drug events-ADEs*)

↑ ospedalizzazione (% ricoveri ospedalieri varia dal 3.5% al 24.8%), ↑ tempi di degenza, ↑ rischio di ri-ospedalizzazione e istituzionalizzazione, ↑ mortalità e morbidità, ↓ autonomia funzionale e cognitiva

Difficoltà a seguire regimi terapeutici complessi

-> ridotta compliance (fino al 60-70% dei pazienti anziani), spt con farmaci antidepressivi, ipoglicemizzanti, o per il trattamento di ipercolesterolemia e osteoporosi; possibilità di errori nell'assunzione dei farmaci (in difetto o in eccesso)

LA MULTIPRESCRIZIONE E' SEMPRE UN PROBLEMA?

**NO, ma rappresenta sempre un
fattore di rischio nel paziente
anziano ed un indicatore di
potenziale inappropriately
terapeutica**

PERCHÉ SI REALIZZA?

COME POSSO GESTIRLA?

POLIFARMACOTERAPIA NELL'ANZIANO - Possibili fattori causali -


- **Polipatologia, comorbidità**
(> 65 aa 2/3 delle persone hanno 2 o più patologie, 1/4 hanno 4 o più patologie)
- Evidence Based Medicine -> pletora di LG specifiche per singole patologie, spesso inapplicabili nei pazienti anziani comorbidi
- Ricorso a più specialisti (spesso per eccessive aspettative da parte di pazienti/familiari)
- Mancata revisione terapeutica periodica
- Reazioni avverse interpretate come nuove malattie -> cascata prescrittiva
- Uso di farmaci da banco che spesso “ufficialmente” non risultano
(-> ruolo dei messaggi pubblicitari)

RESEARCH ARTICLE

Open Access

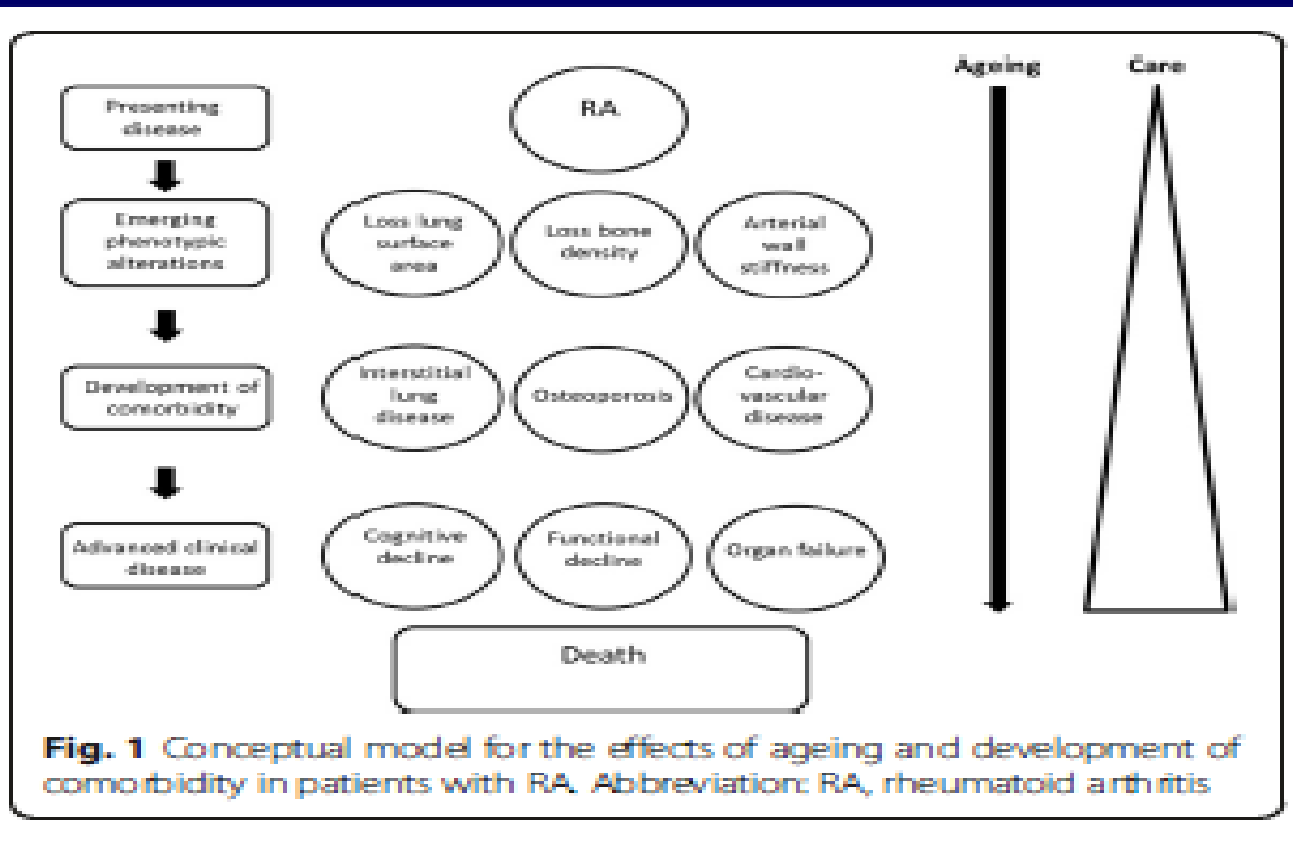


Polypharmacy in older patients with chronic diseases: a cross-sectional analysis of factors associated with excessive polypharmacy

Anja Rieckert^{1*} , Ulrike S. Trampisch², Renate Klaaßen-Mielke², Eva Drewelow³, Aneez Esmail⁴, Tim Johansson⁵, Sophie Keller⁵, Ilkka Kunnamo⁶, Christin Löffler³, Joonas Mäkinen⁶, Giuliano Piccoliori⁷, Anna Vögele⁷ and Andreas Sönnichsen^{1,4}

Conclusion

Our data suggest that frailty, multimorbidity, obesity as well as low physical and mental health status may be risk factors for excessive polypharmacy. Very old age appears to be a protective factor. Sex, educational level, and smoking are not associated with excessive polypharmacy. To avoid excessive polypharmacy with its possibly unfavourable effects, physicians should carefully review the appropriateness of medication, especially in multimorbid, obese and frail patients.



Currently, the average patient with RA has two or more comorbid disorders.

Comorbidities most frequently seen in patients with RA include cardiovascular disease, lung disease, malignancies, osteoporosis, changes in body composition and neuropsychiatric disease.

Van Onna M, Boonen A. BMC Musculoskeletal disorders 2016

CATEGORIE DI INTERVENTI

Valutazione Multidimensionale Geriatrica

Uso di strumenti validati per la valutazione dell'appropriatezza prescrittiva

(criteri di Beers, STOPP&START...)

Sistemi informatizzati di supporto

Team multidisciplinari (medico, infermiere, **farmacista**, paziente, caregiver...)

Formazione del personale (in senso geriatrico)

Educazione paziente/familiari

Effects of geriatric evaluation and management on adverse drug reactions and suboptimal prescribing in the frail elderly

Schmader KE et al. Am J Med 2004;116:394-401

Multisite, randomized controlled study

Impact of inpatient and outpatient Geriatric Evaluation and Management (GEM) unit on drug-related problems in 834 patients at 11 US Veterans Affairs hospitals and clinics

Inpatient GEM reduced unnecessary and inappropriate drug use and underuse significantly during the inpatient period. Outpatient GEM resulted in a 35% reduction in the risk of serious adverse drug reactions.

Inpatient and outpatient GEM reduce suboptimal prescribing, in frail elderly patients.

Fewer than 20% of family and internal medicine doctors consult criteria for potentially inappropriate medications when prescribing for older adults.

Ramaswamy R et al. Eval clin Pract 2011

Fewer than 50% of community-based pharmacists are aware of the prevalence of potentially inappropriate medications in individuals aged 65 and older.

Zou D et al. Can Pharm J 2014

Computerized provider order entry systems (CPOE)

- Programmi che consentono di registrare e trasmettere le prescrizioni terapeutiche direttamente alle farmacie;
- Possono contenere una serie di warning in caso di prescrizioni non appropriate;
- Particolarmente diffusi nel mondo anglossassone con lo scopo di ridurre il rischio di errori medici e supportare il medico nelle scelte terapeutiche.

Recent literature reviews of pharmacy-led interventions have describe positive impact on the appropriateness of prescribing in older patients. Promising results were reported from both interventions of pharmacists working independently or as a part of a multidisciplinary team.

Cullinan S et al. Eur J Hosp Pharm 2017

Is the number of prescribing physicians an independent risk factor for adverse drug events in an elderly outpatient population?

Green JI et al. Am J Geriatr Pharmacother 2007;5(1):31-39

...in a multivariable logistic regression model,
**each additional provider prescribing
medications increased the odds of reporting
an ADEs by 29%...**

Lack of communication between the various levels of care is a known source of suboptimal prescribing.

Spinewine A et al. BMJ 2005
Cullinan S et al. Br J Clin Pharmacol 2015

Special Communication | LESS IS MORE

Reducing Inappropriate Polypharmacy The Process of Deprescribing

Ian A. Scott, MBBS, FRACP, MHA, MEd; Sarah N. Hilmer, MBBS, FRACP, PhD; Emily Reeve, BPharm (Hons), PhD;
Kathleen Potter, PhD, FRACGP; David Le Couteur, PhD, FRACP;
Deborah Rigby, BPharm, GradDipClinPharm, FASCP, FACP, FAICD; Danijela Gnjidic, PhD;
Christopher B. Del Mar, MB, BChir, MD, FRACGP; Elizabeth E. Roughead, PhD; Amy Page, MClinPharm;
Jesse Jansen, MPsyCh, PhD; Jennifer H. Martin, MB, ChB, FRACP, PhD

Deprescribing is part of the good prescribing continuum.

Deprescribing is not about denying effective treatment to eligible patients. It is a positive, patient-centered intervention, with inherent uncertainties, and requires shared decision making, informed patient consent, and close monitoring of effects.

Special Communication | LESS IS MORE

Reducing Inappropriate Polypharmacy The Process of Deprescribing

Ian A. Scott, MBBS, FRACP, MHA, MEd; Sarah N. Hilmer, MBBS, FRACP, PhD; Emily Reeve, BPharm (Hons), PhD; Kathleen Potter, PhD, FRACGP; David Le Couteur, PhD, FRACP; Deborah Rigby, BPharm, GradDipClinPharm, FASCP, FACP, FAICD; Danijela Gnjdic, PhD; Christopher B. Del Mar, MB, BChir, MD, FRACGP; Elizabeth E. Roughead, PhD; Amy Page, MCLinPharm; Jesse Jansen, MPsy, PhD; Jennifer H. Martin, MB, ChB, FRACP, PhD

Instances in Which Deprescribing Should Be Considered

Deprescribing should be especially considered in any older patient

- presenting with a new symptom or clinical syndrome suggestive of adverse drug effects;
- manifesting advanced or end-stage disease, terminal illness, dementia, extreme frailty, or full dependence on others for all care;
- receiving high-risk drugs or combinations;
- receiving preventive drugs for scenarios associated with no increased disease risk despite drug cessation (eg, discontinuing alendronate sodium therapy after 5 years of treatment results in no increase in osteoporotic fracture risk over the ensuing 5 years⁴⁰; ceasing use of statins for primary prevention after some years results in no increase in cardiovascular events 8 years after discontinuation⁴¹).

DEPRESCRIZIONE: STEP

Cartabellotta A. Evidence 2013

- 1. Accertarsi accuratamente di tutti i farmaci assunti dal paziente e della motivazione**
- 2. Identificare i pazienti a rischio ADR o con ADR in atto**
- 3. Valutare aspettativa di vita**
- 4. Definire obiettivi assistenziali generali**
- 5. Verificare le indicazioni per tutti i trattamenti in uso**
- 6. Determinare la reale necessità di farmaci preventivi per singole patologie**
- 7. Determinare le soglie assolute rischi-benefici dei singoli farmaci**
- 8. Rivalutare l'utilità relativa di ciascun farmaco**
- 9. Identificare i farmaci da sospendere e ottenere il consenso del paziente**
- 10. Progettare e implementare un piano di sospensione farmacologica e prevedere uno stretto monitoraggio**

Challenges of deprescribing in the multimorbid patient.

Cullinan S et al. Eur J Hosp Pharm 2017

Difficoltà da parte del medico

Assenza di LG

Difficoltà da parte del paziente



Important note

Currently, the strongest evidence for benefit of deprescribing is from cohort and observational studies of withdrawal of specific medication classes that have shown better patient outcomes, mainly through resolution of adverse drug reactions

Cessation of use has not been studied for many medication classes, and large-scale randomised controlled trials of systematic deprescribing are required before the true benefits and harms can be known.

(Iskandar K. Deprescribing in elderly patients)

Areas Requiring More Research

Future research into the incidence, causes, and remediation of over-prescribing of inappropriate drugs in older patients should consider several key questions:

- To what extent does a standardized deprescribing approach affect patient adherence to essential drugs, overall drug costs (to the individual as well as the public purse), patient satisfaction and self-management, and long-term clinical outcomes?
- Under what circumstances could deprescribing confer negative, irreversible effects in both the short and long term?
- What is the most effective, cost-effective, and practical approach to deprescribing in routine clinical settings?
- What are the absolute estimates of drug-induced benefit and harm, and time until benefit, for specific drug classes of preventive drugs related to specific clinical scenarios?
- How can these benefit-harm estimates be accessed and presented within prescriber-patient encounters in ways that optimally inform deprescribing decisions?

Find out about Deprescribing Guidelines

Deprescribing guidelines support health care providers and patients in reducing or stopping medications that may be harmful or no longer needed.

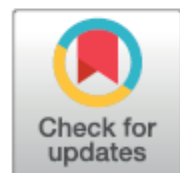
[Learn about the algorithms](#)

RESEARCH ARTICLE

A modified Delphi study to determine the level of consensus across the European Union on the structures, processes and desired outcomes of the management of polypharmacy in older people

Derek Stewart^{1*}, Kathrine Gibson-Smith¹, Katie MacLure¹, Alpana Mair², Albert Alonso³, Carles Codina⁴, Antonio Cittadini⁵, Fernando Fernandez-Llimos⁶, Glenda Fleming⁷, Dimitra Gennimata⁸, Ulrika Gillespie⁹, Cathy Harrison¹⁰, Ulrike Junius-Walker¹¹, Przemysław Kardas¹², Thomas Kempen⁹, Moira Kinnear¹³, Pawel Lewek¹², Joao Malva¹⁴, Jennifer McIntosh³, Claire Scullin¹⁵, Birgitt Wiese¹¹

¹ School of Pharmacy and Life Sciences, Robert Gordon University, Aberdeen, Scotland, United Kingdom



World Health Organization
Action Programme on Essential Drugs
Geneve

Guide to Good Prescribing
A practical manual

Conclusion

In conclusion, IRD management in the elderly is a permanent challenge due to wide heterogeneity in terms of autonomy and comorbidity, several specificities in terms of the clinical presentation and treatment response, and a scarcity of specific literature pertaining to this patient population. Based on an increasing amount of data, bio-therapies, especially parenteral ones, remain effective, primarily due to age. A multidimensional health assessment should be performed in order to build up an integrated therapeutic strategy.

Lahaye C et al. Rheumatology 2018

Gaps in Aging Research as it Applies to Rheumatologic Clinical Care

Una E. Makris, MD, MSc,

UT Southwestern Medical Center and Dallas VAMC

Devyani Misra, MD, MSc, and

Boston University School of Medicine

Raymond Yung, MD

University of Michigan and VA Ann Arbor Health System

Bridging the Gap: A Call to Action

With aging of the population, there is an urgent need for our workforce to be prepared to manage the rapidly rising population of older adults with rheumatologic conditions. A recent New York Times article highlighted, “where are the geriatricians?”⁹⁸ One potential solution