Panel Discussion 2, *Patient Safety in an Ageing Society* 13 April 2018, Tokyo, Japan

Medication Safety Challenges in Older Adults

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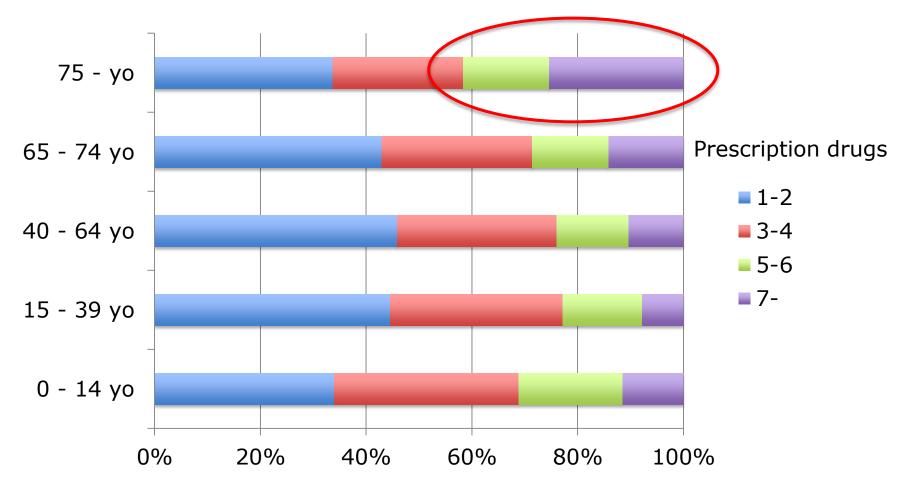
What is "polypharmacy"?

The use of a number of different drugs, possibly prescribed by different health care providers and filled in different pharmacies, by a patient who may have one or several health problems.

Mosby's Medical Dictionary, 9th edition. © 2009, Elsevier



Multiple drug use among the elderly in Japan



Data from statistics by social medical and clinical practice behavior in June 2015

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Loxoprofen 1 tab x 3 times/d
Rebamipide 1 tab x 3 times/d
Pregabalin cap 1 cap x 2 times/d
Calcium L-aspartate 1 tab x 3 times/d
Ezizolam 0.5 1 tab x 3 times/d
Alfacalcidol 1 1 cap x 1 time/d
Zolpidem 5 1 tab before sleep
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Aspirin 81 1 tab x 1 time/d
Nicergolin 5 1 tab x 3 times/d
Spironolactone A25 1 tab x 1 time/d
Furosemide 20 1 tab x 1 time/d
Olmesartan 20 1 tab x 1 time/d
Amlodipine 2.5 1 tab x 2 times/d
Donepezil 5 1 tab x 1 time/d
Pitavastatin 1 1 tab x 1 time/d
Sitagliptin 50 1 tab x 1 time/d
Glimepiride 1 1 tab x 1 time/d
Voglibose 0.1 1 tab x 3 times/d before meals
Brotizolam 0.25 1 tab before sleep
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L-carbocysteine 250 2 tab x 3 times/d
Betahistine 12 1 tab x 1 time/d
Clarithromycin 200 1 tab x 1 time/d
Ambroxol L45 1 cap x 1 time/d
Ezizolam 0.5 1 tab before sleep
Zaltoprofen 80 1 tab x 2 times/d

Systolic BP 110mmHg HbA1c 6.2% LDL98/HDL58 mg/dL



Alfacalcidol 1 1 cap x 1 time/d

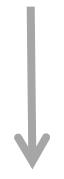
Aspirin 81 1 tab x 1 time/d

Olmesartan 20 1 tab x 1 time/d

Donepezil 5 1 tab x 1 time/d

Sitagliptin 50 1 tab x 1 time/d

Systolic BP 110 level HbA1c 6.2% LDL98/HDL58



Systolic BP 140 level HbA1c 7.6% LDL119/HDL56

Sleeps well No dizziness No pain aggravation

Why Polypharmacy? (not polydrug use)

- Elderly people concurrently have multiple health problems (often non-communicative diseases)
- Physicians are too specialized, patients prefer specialist
- Patients get prescription drugs from the pharmacy, often near the clinic

Attention!

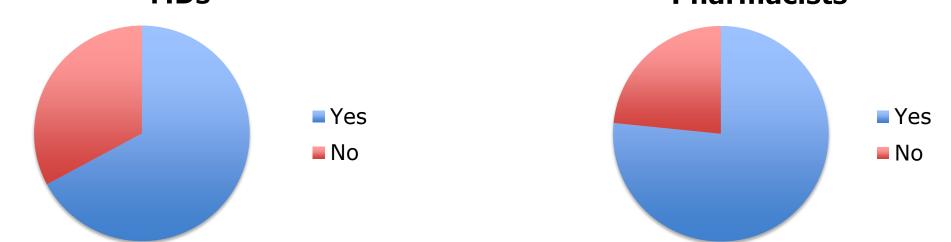
There are 'appropriate' and 'inappropriate' polypharmacy

Recognition of polypharmacy

• Do you know the word 'polypharmacy'?

MDs

Pharmacists



Do you take any action to rectify polypharmacy?
 MDs

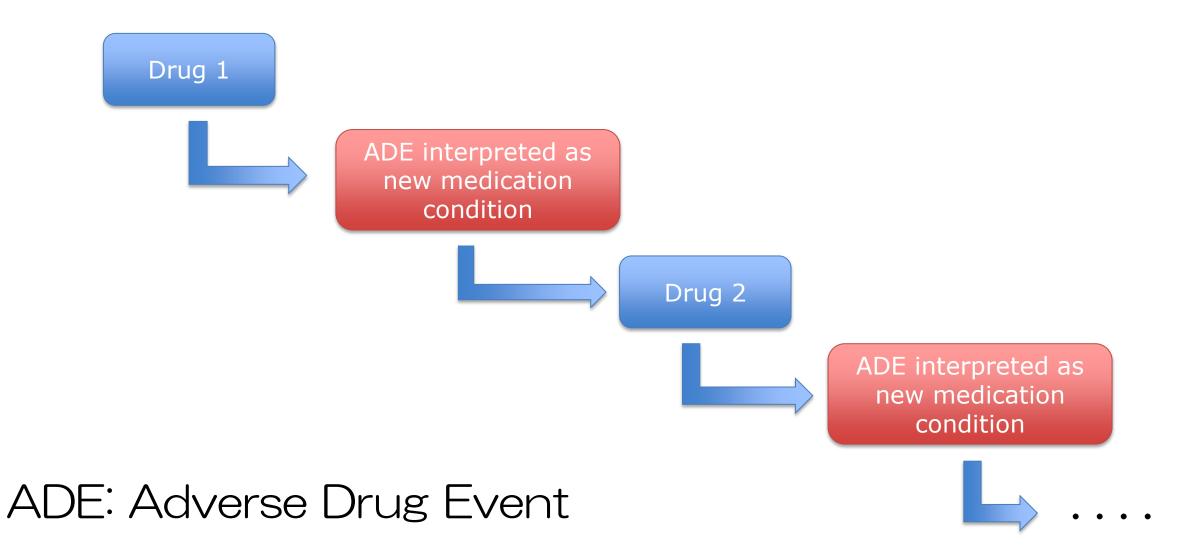
Pharmacists



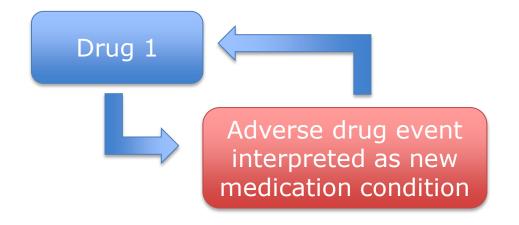
How does the prescribing cascade begin?

- Doctors and nurses do not recognize that adverse drug events in patients are due to medication
- Further medication may then be prescribed for the supposed new condition
- Prescription reviews are needed: often pharmacists are qualified persons

Prescription Cascade



Prescription Cascade



Extremely difficult to evaluate whether it is ADE or progression of illness

Evaluate patient condition from multiple viewpoints for prescription review

- Interprofessional collaboration is essential
 - Sharing information is important

Understand and respect each other's expertise and opinions

Japanese-style Separation of Pharmacy and Medicine

- The prescription is decided by the doctor
- The pharmacist merely dispenses drugs
- Many dispensing pharmacies accept adjacent clinic's prescriptions
- Pharmacists find it hard to give a different opinion against the physician

IPW programs in Kobe University



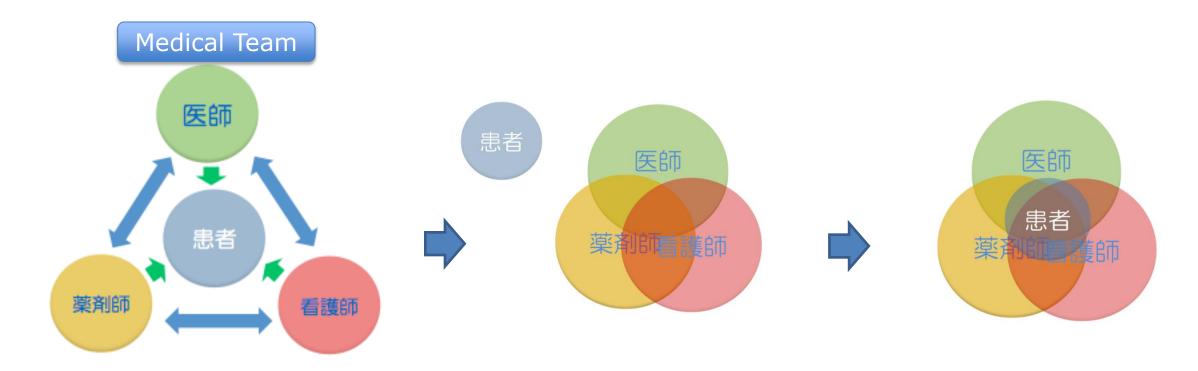






Ideal goal of IPW team care

- Make a team that functions properly
- Fill the gaps between professionals



Multidisciplinary Team Care and IPW



Interprofessional collaboration in regional medical care

- Collaboration between medical care and welfare is not progressing smoothly
- First, collaboration among medical staff is necessary in Japan
- Hospital pharmacists, community pharmacists, hospitals and home doctors begin to collaborate from the standpoint of medication review

Collaboration among medical staffs in the Yawata area, Kitakyushu city



Trends of Medication Review

• Research _____ Evidence

 Review meeting for safe medicine use by the elderly in the Ministry of Health, Labour and Welfare

Making guideline

- Medical fee revision in 2018
 - Both physician and pharmacist can get medical fee when optimizing prescription

 Collaboration progress



Activities of Japanese Society of Geriatric Pharmacy (JSGP)

- Certified pharmacist system
- Publish "Textbook of Geriatric Pharmacy"
- Prescription Review Workshop (Case discussion)
- Communication training with simulated patient participation
- Lecture on geriatric pharmacy
- Annual academic meeting

Summary

- Collaborative practice among multiple healthcare professionals is indispensable for safe drug treatment of the elderly
- Pharmacists must play a central role in providing proper medication treatment
- The prescription review by pharmacists and doctors has just begun
- Education of Interprofessional Work (IPW) for healthcare students is necessary