

The Junior-Adverse Drug Event Managers

A unique opportunity for medical students to learn basic pharmacovigilance whilst increasing the number of adverse drug reactions in a hospital setting

Michael Reumerman, Jelle Tichelaar, Milan Richir & Michiel van Agtmael

Department of Internal Medicine, Section Pharmacotherapy, Amsterdam UMC, Amsterdam, the Netherlands
RECIPE (Research & Expertise Center In Pharmacotherapy Education), Amsterdam, the Netherlands

Background

>95%

Underreporting of individual case safety reports (ICSR).



Most interventions to increase reporting have failed.



Screening and reporting could be educational for healthcare students and possibly increase ICSR.

Aim

Investigate the feasibility of a J-ADEMs team and evaluate the clinical and educational value of the intervention.

Methods



J-ADEMS team

✓ Two medical students (1st - 6th year)

J-ADEMS workflow

1. Screening and consultation

J-ADEMS team screens the medical wards for possible adverse drug events (ADEs) AND can be consulted by phone or email.



2. Adverse drug event interview

J-ADEMS take patients medication history and interview them regarding their adverse drug events.



3. Reporting the adverse drug event

J-ADEMS handle the ICSR to the pharmacovigilance center and answer all follow-up questions.



4. Teams reports back

J-ADEMS reports back to healthcare professional and updates patients medical records.



Contact: Michael Reumerman
m.reumerman@amsterdamumc.nl
No conflicts of interests to declare.

Junior-Adverse Drug Event Managers:

- Significant and relevant increase in reported ICSRs.
- High level of patient satisfaction.
- Opportunity to increase pharmacovigilance awareness in healthcare professionals.
- Significant increase in student knowledge regarding "causality assessments".

Results

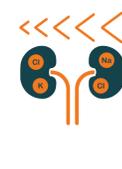
Clinical results

48x ICSR

In 9 months on 2 wards

350% increase

Compared to ICSR in 2017 (VUmc)



Most frequent ADRs

Electrolyte imbalance (n=14)
Bleeds / hematological (n=9)



Most frequent drugs

Diuretics (n=9)
Antithrombotics (n=9)

Patient evaluation

91% Professional

Patients found J-ADEMS professional

97% Another interview

Patients would again agree to an interview



88% ICSR relevant

Patients found reporting ADRs relevant

To increase drug safety

patients main reason that ICSR are relevant

N = 33

Healthcare professionals reasons NOT to report



N = 23



61% Indifference

One case cannot contribute to medical knowledge

35% Lethargy

Lack of interest or time

30% Ignorance

Only severe ADEs need to be reported

How students assess ADR causality

Previously recognized

Look for previous conclusive reports & pharmacological mechanisms.



Time relation★

Assess time and place association



Other causes★

Assess likelihood of other cause



N = 19 / 12