

TOP Paper

Arzneimittelinformation

AM-Info Kongress Köln 2025

Dr. Dorothea Strobach, München

Interessenskonflikte

Affiliation und Mitgliedschaften

- Interessenskonflikte:
 - Keine
- Anstellung:
 - Apotheke LMU Klinikum München
 - Promotionsprogramm Klinische Pharmazie LMU Klinikum München
- Nebentätigkeiten:
 - Lehre (LMU München, PMU Salzburg)
- Drittmittel:
 - Deutsche Krebshilfe, BBraun Stiftung
- Mitgliedschaften:
 - ADKA
 - DGKIPha

Nebenwirkungen

Top Thema der AM-Info

- Dokumentierte Nebenwirkungsanfragen 2018-2022
 - 543 auswertbare Anfragen
 - 8% aller Anfragen
 - 72% bei Verdacht auf UAW
 - 28% vor Ansetzen des AM
 - 165 Anfragen mit > 10 AM
 - Bei 97% mögliche Ursache(n) identifiziert
 - Zusatzinformationen, z.B. Interaktionen bei 25%
 - UKMI Enquiry Level:

I	13%
II	63%
III	24%



Wichtiges
Themengebiet der
AM-Info mit
hohem klinischen
Nutzen!

Nebenwirkung psychiatrischer AM

Was? Wer?

Seifert et al. *Annals of General Psychiatry* (2024) 23:47
<https://doi.org/10.1186/s12991-024-00530-0>







Annals of General Psychiatry

RESEARCH

Open Access



Psychotropic drug-induced adverse drug reactions in 462,661 psychiatric inpatients in relation to age: results from a German drug surveillance program from 1993–2016

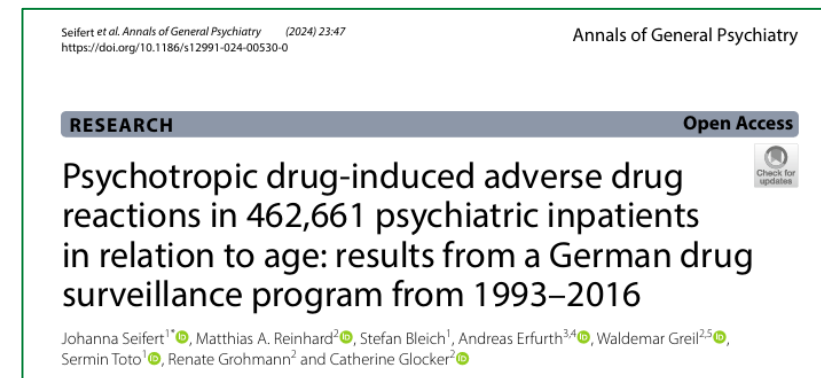
Johanna Seifert^{1*} , Matthias A. Reinhard² , Stefan Bleich¹, Andreas Erfurth^{3,4} , Waldemar Greil^{2,5} ,
Sermin Toto¹ , Renate Grohmann² and Catherine Glocker² 

Nebenwirkungen bei psychiatrischen AM

Seifert et al. 2024

Setting

- Beobachtungsstudie aus dem Pharmakovigilanzprogramm „Arzneimittelsicherheit in der Psychiatrie“
- > 460.000 stationäre psychiatrische Patienten 1993-2016



Fragen:

- Klinische Praxis legt mehr UAW bei Älteren nahe – stimmt das?
- Welche UAW bei welchem Alter?

Nebenwirkungen bei psychiatrischen AM

Seifert et al. 2024

Haben ältere Patienten (> 65 Jahre) mehr UAW?

Table 3 Incidence and relative risk of different types of adverse drug reactions (all imputations) in older vs. younger patients

Adverse drug reaction	Patients ≥ 65 years of age (N = 99,099)		Patients < 65 years of age (N = 363,562)		≥ 65 vs. < 65
	N cases	% of patients	N cases	% of patients	RR (95% CI)
All ADRs	1212	1.223	4517	1.242	0.98 (0.92–1.05)

Nebenwirkungen bei psychiatrischen AM

Seifert et al. 2024

Gibt es altersabhängige Unterschiede bei der Art der UAW?

Table 3 Incidence and relative risk of different types of adverse drug reactions (all imputations) in older vs. younger patients

Adverse drug reaction	Patients ≥ 65 years of age (N=99,099)		Patients < 65 years of age (N=363,562)		≥ 65 vs. < 65
	N cases	% of patients	N cases	% of patients	RR (95% CI)
All ADRs	1212	1.223	4517	1.242	0.98 (0.93–1.05)
Delirium, confusion*	118	0.119	184	0.051	2.35 (1.87–2.96)
Delirium*	109	0.110	170	0.047	2.33 (1.83–2.99)
Psychiatric symptoms, excl. delirium	87	0.088	270	0.074	1.18 (0.93–1.51)

Nebenwirkungen bei psychiatrischen AM

Seifert et al. 2024

Gibt es altersabhängige
Unterschiede bei der Art der UAW?

Häufiger bei > 65 Jahre

Delirium

Hyponatriämie

Orthostatische Synkope

Verschiedene EPS

Akutes Nierenversagen

Merken wir das?

International Journal of Clinical Pharmacy (2024) 46:623–630

<https://doi.org/10.1007/s11096-023-01697-4>

RESEARCH ARTICLE



Effects of inpatient creatinine testing frequency on acute kidney injury identification and staging: a historical cohort study

Catarina Luz Oliveira^{1,2} · Filipa Duarte-Ramos^{1,3} · Filipa Alves da Costa¹ · Fernando Fernandez-Llimos⁴

Results During the study period, 17,269 hospitalizations and 62,255 SCr tests were recorded. Among the 17,032 hospitalizations with a length of stay > 48 h, 46.8% experienced periods with no SCr tests performed for more than 48 h. Any stage of AKI was identified in 7.0% of patients and in 9.1% using AKI and KDIGO criteria, respectively. Ignoring time limits in both criteria revealed potential AKI in 1942 patients (11.2%), indicating a potential underdiagnosis of AKI by 37.5% or 19.1%, depending on the criteria used. A total of 76 drugs requiring dose adjustment in patients with eGFR ≤ 50 ml/min were prescribed in 78.5% admissions. These drugs were prescribed in 87.9% of patients potentially underdiagnosed with AKIN and in 88.9% with KDIGO.

Conclusion There is a need for changes in the established hospital procedures to ensure more frequent testing of SCr levels. Implementing an advanced scope of practice for clinical pharmacists could support these changes.

Akutes Nierenversagen

Was kann man tun?

To cite: Aklilu AM, O'Connor KD, Martin M, *et al.* Personalised recommendations for hospitalised patients with Acute Kidney Injury using a Kidney Action Team (KAT-AKI): protocol and early data of a randomised controlled trial. *BMJ Open* 2023;**13**:e071968. doi:10.1136/bmjopen-2023-071968

- Multizentrische randomisierte Studie an 8 US-amerikanischen Kliniken
- 4000 Patienten in 3 Jahren geplant
- Real-time AKI-Alert aktiviert AKI-Arzt-Apotheker-Team
 - Chart-Review
 - Textbausteine für automatisch generierten Eintrag in elektronische Verschreibungssoftware
- Geplantes Outcome: AKI-Progression, Dialyse, Mortalität

- Erste Ergebnisse:
 - 500 Patienten in 8,5 Monaten
 - 66% Innere, 18% ICU, 16% CHI
 - Empfehlungen: weitere Diagnostik 99%, Volumenmanagement 76%, Medikation 52%
 - Arzneimittel: 25% absetzen, davon 24% NSAR (6% Gesamtkohorte), 34% Dosisanpassung; AM-Klassen: Analgetika, Antibiotika, Antikoagulanten

Qualität in der AM-Info

Was bringt was?



Article

Factors Determining Quality of Drug Information by Hospital Pharmacies—Results from Five-Year Annual Quality Assessment



- Auswertung von 5 Jahren Ringversuch
- Qualität: inhaltlich und formal
- Was bestimmt Qualität?
 - Apotheke: Anzahl Apotheker; Organisation: eigene Abteilung Info, täglich verantwortlicher Apotheker, zu Routineaufgaben dazu
 - Beantwortender: Erfahrung (Jahre in AM-Info)
 - QM-Maßnahmen: second-look, Stationserfahrung, Dokumentationssystem, weitere
 - Komplexität der Frage

Qualität in der AM-Info

Was bringt was?

Kein Einfluss

Anzahl Apotheker gesamt

AM-Info-Erfahrung

Stationserfahrung

Dokumentationssystem

Second look

Inhaltlich: OR 1,47 (p=0,17)

Formal: 1,47-1,97

(p=0,01-0,11) je nach Kriterium



pharmacy



Article

Factors Determining Quality of Drug Information by Hospital Pharmacies—Results from Five-Year Annual Quality Assessment

UK Medicines Information (UKMI) Enquiry Level

Level 1: simple enquiries; answered from one or two standard sources

Level 2: complex enquiries; use of multiple/more specialist sources; available evidence provides a reasonably clear answer/course of action

Level 3: complex enquiries; absence of a clear answer/course of action, professional judgement needed; multiple sources/evaluation of primary literature.

Qualität in der AM-Info

Was bringt was?



Article

Factors Determining Quality of Drug Information by Hospital Pharmacies—Results from Five-Year Annual Quality Assessment

Kein Einfluss	Positiver Einfluss
Anzahl Apotheker gesamt	Komplexizität der Frage mittel/leicht (Enquiry level)
AM-Info-Erfahrung	AM-Info-Abteilung
Stationserfahrung	(second look)
Dokumentationssystem	

Inhaltlich:
 DI center 1 (reference)
 Pharmacist per day 0,74 (p=0,65)
 Routine + DI 0,35 (p=0,02)

Qualität in der AM-Info

Was können wir noch lernen?

Falsche und irreführende Informationen

- 12-18% der Antworten (2019: 44%)
- Beiard et al. 1994: Manual für AM-Info führte zu weniger Fehlinformationen



pharmacy



Article

Factors Determining Quality of Drug Information by Hospital Pharmacies—Results from Five-Year Annual Quality Assessment

Richtige „Verpackung“

Year	2017	2018	2019	2020	2021	2017–2021
Results on structural requirements for test enquiry (max. 10)						
No. of fulfilled structural requirements [median (range)]	7 (1–10)	8 (2–10)	8 (2–9)	8 (2–10)	9 (2–10)	8 (1–10)
Length of answer appropriate [n (%)]	27 (80)	41 (58)	54 (68)	78 (66)	84 (69)	284 (65)
No. of answers with named references [n (%)]	36 (80)	59 (83)	77 (97)	110 (93)	115 (94)	397 (91)
No. of answers with trackable references [n (%)]	21 (47)	50 (70)	53 (67)	98 (81)	107 (88)	327 (75)
No. of answers presenting conclusion/recommendation [n (%)]	27 (60)	40 (56)	63 (80)	70 (59)	107 (88)	307 (71)

Information transportieren

ORIGINAL ARTICLE

Annals of Agricultural and Environmental Medicine 2024, Vol 31, No 4, 529–545
www.aem.pl



Communicating evidence-based information on the effects of health interventions to various types of recipients – a qualitative study on the perception of formats of information among lay and professional audiences

Anna Prokop-Dorner^{1,A-F}  , Joanna Zając^{2,A-B,F} , Małgorzata M Bała^{2,A,E-F} 

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Nurses and physicians (n=6)	Pharmacists (n=7)
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presented to the study participants

<ul style="list-style-type: none"> abstract comic book SoF Recorded PLS infographic blogshot 	<ul style="list-style-type: none"> abstract infographic SoF PLS comic book
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SoF=Summary of findings
PLS=plain language summary

Information transportieren

Was wurde wie bewertet?

POSITIV

- Klare und verständliche Darstellung
- Klare Struktur
 - Gegliedert
 - Stichpunkte oder farbliche Kennzeichnung für Hauptinformationen
- **Praktische Empfehlungen**

NEGATIV

- Unklare Darstellung
- Methodischer Hintergrund nicht erklärt (nicht vertrauenswürdig)
- Missverständliches Vokabular – unterschiedlich bei Laien/Fachpersonal
- Nur Zahlen

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Vielen Dank!

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