



Does Objective Adherence Data Match what Patients Report when asked about their AED Adherence?

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Background

- AED adherence is a major step in achieving the goal of reduced seizure burden in patients with epilepsy
- Decreased AED adherence is associated with increased morbidity & mortality (Faught, et al. 2008)
- One objective measure of adherence is the Medication Possession Ratio (MPR)
 - Calculated from pharmacy refill records
 - Typically between 0 and 1
 - Closer to 1 = ↑ adherence
 - MPR ≥ 0.8 considered "Adherent"
- Preliminary MPR data (ongoing project) raised concerns about our outpatient clinic population
 - Objective adherence data (MPR) did not match what patients stated when asked about their adherence (subjective adherence)

Objective

- To determine if a gap exists in subjective and objective measures of AED adherence

Support

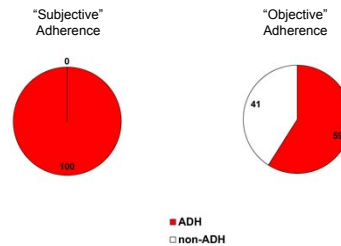
- Partial support from OSU College of Pharmacy Undergraduate Research Scholarship (ED) and Community Pharmacist Foundation

Methods

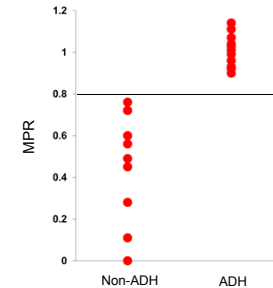
- Cross-sectional study in 27 patients with epilepsy recruited from outpatient clinic appointment
- Subjective & objective adherence (ADH) data were compared
- During clinic interviews, patients asked to self-assess their AED adherence (subjective measure of adherence)
- Objective measure of adherence (MPR) calculated using 6-month refill records after contacting community pharmacy

Results

Patient Demographics	
N	27
Age (years)	35.2 (± 11.2)
Male : Female	10 : 17
AED Monotherapy	14 (52%)
Patients with seizures in last 30 days	18 (67%)



Results



	AED Therapy		Seizures within last 30 days	
	Mono	Poly	Yes	No
ADH (n=16)	44%	56%	69%	31%
Non-ADH (n=11)	64%	36%	64%	36%

Summary

- Despite 100% of patients stating they were "adherent", 41% were "non-adherent" when evaluated by an objective measure (MPR)
 - Not explained by drug burden or recent seizure activity
- Reason for gap between objective & subjective adherence is unclear
 - Factors could include:
 - Patients not completely truthful
 - Limitations in MPR calculations
 - lack of sensitivity to change in AED doses (e.g. tapering dose up or down)
 - patients could use >1 pharmacy