Themes in 2016: Selected non-interventional papers focused on themes of adherence determinants, adherence communication and adherence outcomes

Delivery of treatment (hypertension; adults) PDC ≥80%. Adherence higher in fixed dose vs. unfixed combination angiotensin receptor blocker (55 vs. 16%); and in high vs. low FDC doses. Levi et al, Italy

Type of treatment (atrial fibrillation/stroke; adults) Presc. Refill persistence with oral anticoagulants was higher with non-vitamin K agonist than with vitamin K agonist at 1 year (79 vs. 64%). Martinez et al, Australia

Benefits, harms and dose frequency (hypertension; adults) Intention to persist with treatment was associated with willingness to accept decreased treatment benefit for reduced risk of AEs or once daily dosing. Holmes, UK

Demographics, polypharmacy and comorbidity (hypertension; adults) Female, young, foreign national, rural, low BP, polypharmacy, mental comorb. predicted poor persistence MPR <80%. Calerdon-Larranga, Europe

Adherence phenotypes (asthma; adults) Cluster analysis to identify adherence belief “phenotypes”: Rationally accepting; Illness stimulated accepting, Indifferent, Ambivalent, Skeptical to target different intervention Unni, USA

Primary care HPs talk differently with asthma patients if they know their attitudes a-priori? With prior info. HPs more likely to discuss attitudes to treatment use and complementary medicine but used ineffective communication. George et al, USA

Do primary care HPs talk to patients about adherence? Survey, 10 nations: regular assessment/intervention around adherence occurs in only half of HCPs. Nurses intervened > Dr/Pharmacists. Clyne et al, Europe

Forgiveness vs. adherence behaviour Doxycycline vs. Azithromycin. Forgiveness is more or less important factor for prescribing choice depending on if adherence is directly observed or not. Quinn et al, USA

Forgiveness vs. regimen tailoring An adherence metric to incorporate regimen dose tailoring to the individual patent as well as drug forgiveness. Assawasuwanakit et al, Thailand, New Zealand

Is adherence as important as other common medication problems? Need for additional drugs, Dose too low were more common problems than adherence in drug reviews by pharmacists. Sorenson et al, USA
Management of Adherence in 2016: New adherence intervention research centred on financial incentives, SMS reminders, and communication

Financial incentive (reduction of LDL cholesterol in high risk heart patients: adults)  
12 month cluster RCT of doctor vs. patient vs. shared financial incentive (~$1000) to meet clinical goal (<LDLChol). Only shared incentive grp. sig. reduced LDLChol (and > elect. monitored adher.) by a modest amount. Dose increases seemed to drive this outcome but AEs weren’t reported. Asch et al, USA

SMS for missed medication doses (asthma; child 4-11yrs)  
12 month RCT of SMS for missed doses vs. control group; all rcvd electronic monitoring. Mean adherence sig. higher in SMS than control group (69% vs. 57%). No sig different in clinical outcomes. Vasbinder et al, The Netherlands

Multi-faceted pharmacist-delivered intervention incl. 1 x empathic MI interview (hypertension; adults)  
12 month RCT of Active Usual Care (2-4 consults with physician/nurse.) vs. AUC + Intervention (Med. review + adherence interview + a min. 2 phone follow-up phone calls). Median MPR adherence 0.91 (AUC) vs. 0.93 (AUC+I) (p=0.02). No sig different in clinical outcomes. Hedegaard et al, Denmark
Management of Adherence: New systematic review, meta analysis and opinion papers examined SMS interventions, use of theory for intervention design and clinical outcomes


Efficacy of SMS intervention (chronic disease, adults) 16 RCTs in meta-analysis. SMS doubled odds of medication adherence. But trials are short (median 12 weeks), rely on self-reported adherence and only one study texted only when doses were missed. Thakkar et al, Australia-UK-USA

Efficacy of behavior change theory (BCT) in adherence intervention design. BCT more common in effective vs ineffective interventions; (40 vs. 26%). Of HPs pharmacists delivered more effective interventions. McCullough et al, Ireland-UK-Australia

Control of hypertension white paper
The working group identified 5 actions 1. identify standard clinical target, 2. simplify treatment regimens, 3. decrease therapeutic inertia, 4. improve patient empowerment, 5. reduce focus on drug costs in healthcare systems. Redon, Europe