

Risk factors for medication non-adherence among Victorian patients receiving Home Medicine Reviews

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Background

Referrals to HMRs are often made to improve patients' adherence and understanding of their medicines. However, the eligibility criteria should be revisited to ensure efficient use of the service, and that the right patient receives the service. Understanding what contributes to patients' non-adherence will provide an insight into how these criteria could be better defined.

Aim

Identify risk factors that predict non-adherence among HMR patients.

Methods

Medication lists and HMR reports of 109 patients were examined to identify non-adherence and the possible factors that contribute to it. These factors include those commonly associated with non-adherence and prevalent conditions identified in this cohort of patients.

Logistic regression analysis of non-adherence predictors was used, in two stages. The 1st stage analysed all factors, and those found to have a $P < 0.15$ were further analysed in the 2nd stage.

Possible risk factors identified from patients' medication lists & HMR reports. First stage of regression analysis evaluated these as possible predictors of non-adherence.

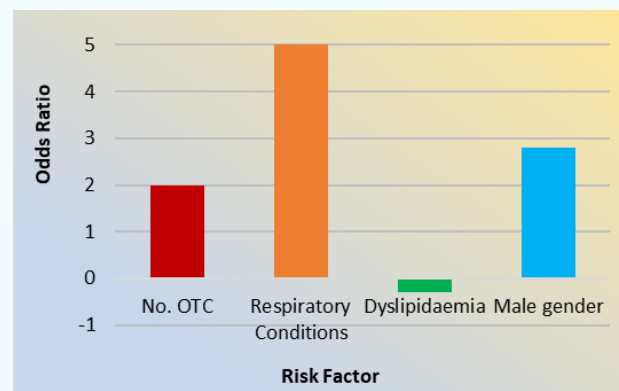
Age	Gender	CALD status	No. medicines	No. comorbidities
Use of OTC/CAM	Carer/family support	Pillbox use	Need for education	Heart failure
Diabetes	Pain	Respiratory conditions	dyslipidaemia	

The 2nd stage of the regression model analysed the factors of: *use of OTC/CAM*, *respiratory conditions*, *dyslipidaemia*, *age* and *gender*. Statistical significance was reached when P was equal to or less than 0.05.

Results

Overall Model Fit							
Chi Square= 30.0901; df=5; p= 0.0000							
Variable	Coeff.	StdErr	p	O.R.	Low	High	
No. OTC	1	0.6899	0.2272	0.0024	1.9935	1.2771	3.1118
Respiratory Conditions	2	1.6131	0.7031	0.0218	5.0185	1.2651	19.9078
Dyslipidaemia	3	-1.1555	0.4672	0.0134	0.3149	0.1260	0.7867
Age	4	-0.0270	0.0190	0.1538	0.9733	0.9378	1.0102
Gender	5	1.0325	0.4888	0.0347	2.8081	1.0773	7.3201
Intercept		1.0918	1.3960	0.4341			

The overall regression model ($p < 0.00001$) demonstrated that three variables were risk factors for non-adherence among patients who received HMRs. The degree of risk each factor conferred varied, but most risk was due to the presence of a respiratory condition.



Conclusions

- The use of OTC products, the male gender and respiratory conditions are risk factors for non-adherence among HMR recipients.
- Patients with these risk factors should be specifically screened for medication non-adherence and referred to the HMR service.
- HMR eligibility criteria should be re-evaluated, to accurately define patients who would benefit the most.