Doctor-pharmacist communication in hospitals: strategies, perceptions, limitations, opportunities

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Background

Effective communication between health care professionals is crucial to high quality, safe and efficient patient care. Communication breakdowns contribute to increases in healthcare expenditure and adverse patient outcomes, including death.

Aim

To identify communication methods used between hospital pharmacists and doctors, usage patterns, and perceptions of different communication methods.

Method

Location: 4 teaching hospitals, metropolitan area, Australia
Participants: 1520 doctors, 120 pharmacists
Data collection: Pilot questionnaire, semi-structured interviews informing an online survey.

Data analysis:

- Thematic analysis of interview transcripts and free text
- For online survey data summary statistics were described and logistic regression was used to study the effect occupation, convenience, time taken to use and accuracy had on predicting a high perception of effectiveness for each communication method.

Results: Thematic Analysis – dominant themes

Rapport & relationships:

- important for both doctors and pharmacists
- communication is often viewed as uni-directional or transactional
- workload stress and time pressure affects communication
- doctors would value increased pharmacist presence and participation on ward rounds

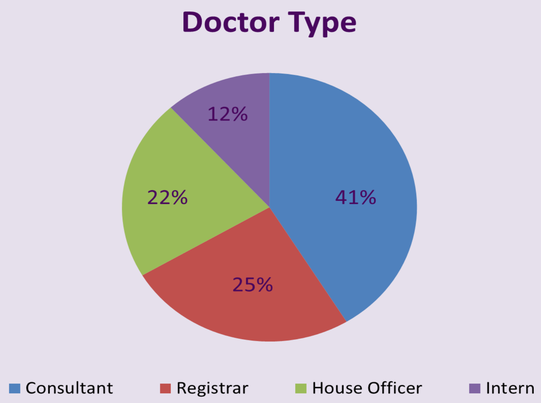
Effectiveness:

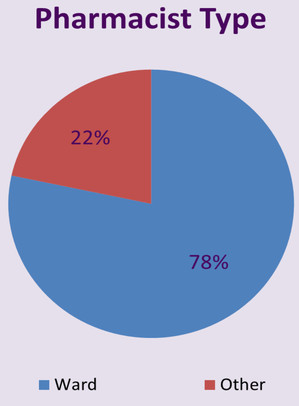
- accessibility and convenience influences choice of communication method
- accuracy of communication method is essential
- written communication is often overlooked or not seen

Ownership: perceptions of professional "ownership" over methods i.e. pharmacists - Medication Management Plan (MMP), doctors - progress notes

Results: online survey

Of 1650 invitees, 331 valid survey responses were returned,, comprising of 257/1520 (17%) doctors and 74/120 (62%) pharmacists.





Results: online survey (continued)

Frequency of overall use to communicate with each other:

1. Progress notes: 57% doctors, 81% pharmacists
2. MMP: 64% doctors, 92% pharmacists
3. Face-to-face: 96% doctors, 100% pharmacists
4. Phone calls: 97% doctors, 99% pharmacists

Table 1. Proportion perceived as high by occupation and communication method

		Doctors	Pharmacists
Progress Notes	Convenience	46%	41%
	Time taken to use	59%	82%
	Accuracy	52%	81%
	Effectiveness	34%	38%
MMP	Convenience	70%	76%
	Time taken to use	43%	57%
	Accuracy	81%	87%
	Effectiveness	71%	54%
Face To Face	Convenience	86%	84%
	Time taken to use	28%	17%
	Accuracy	91%	94%
	Effectiveness	97%	96%
Phone Call	Convenience	87%	84%
	Time taken to use	28%	17%
	Accuracy	87%	86%
	Effectiveness	91%	87%

Both doctors and pharmacists frequently use the MMP, face-to-face and phone calls and perceive them as effective means of communication. Views on progress notes differ between occupations (table 1). Occupation, convenience, time taken to use and accuracy influence communication methods differently however perceived accuracy appears to be the most significant influencing factor for a perception of effectiveness (Table 2).

Table 2: Logistic regression models for a perception of high effectiveness

Explanatory variable	Odd ratio for high perception of effectiveness (95% CI)			
	Progress notes (n=246)	MMP (n=259)	Face-to-face (n=289)	Phone call (n=291)
Occupation - Pharmacist	0.69 (0.33 - 1.47)	0.26 (0.12 - 0.54)	0.50 (0.10 - 2.45)	0.50 (0.19 - 1.31)
High Convenience	6.22 (3.02 - 12.81)	5.81 (2.70 - 12.51)	3.07 (0.66 - 14.19)	2.20 (0.78 - 6.22)
Longer Time Taken To Use	0.80 (0.37 - 1.72)	0.60 (0.30 - 1.22)	0.44 (0.10 - 1.95)	0.35 (0.14 - 0.87)
High Accuracy	23.46 (8.94 - 61.59)	20.49 (7.46 - 56.26)	15.78 (3.66 - 67.99)	12.61 (5.16 - 30.83)

Limitations & Conclusions

Limitations: low return rate from doctors proportional and over-representation of consultants

Conclusions: Phone calls and face-to-face are the most common methods of communication between doctors and pharmacists. A perception of accuracy appears to influence the perception of effectiveness of a method most significantly.