COGNITIVE SERVICES IN COMMUNITY PHARMACY PRACTICE - A LOCAL PERSPECTIVE

Simon Serge

Introduction

Cognitive services are those services that a pharmacist can provide to or for a patient or health care professional that are either judgmental or educational in nature, rather than technical or informational (Cognitive Services Working Group, 1989). Examples are monitoring patients' drug therapy, even by assessing and interpreting clinical parameters, patient counselling, education and screening for disease. Cognitive services reflect a professional evaluation from a product-oriented to a more patient-oriented approach. They are a natural consequence of the clinical pharmacy movement predominant since the mid-sixties. Providing cognitive services entails having pharmacists working in a team with other health care providers.

The full potential of this innovative patient-oriented role has still to be explored in local community pharmacy practice.

Three studies were carried out. The aims of these studies were:

Study A: To assess the willingness and competence perceptions of community pharmacists practising in Malta to provide cognitive services, to identify local barriers to the provision of these services and to document community pharmacists' opinion on directly related aspects.

Study B: To determine the opinion of medical practitioners on cognitive services and to assess doctor-initiated demand and hence the likelihood of a functional health care team relationship in a community setting.

Study C: To study the perceptions of an elderly population of the benefits of a comprehensive pharmaceutical service by a visiting community pharmacist.

Methodology

Study A

152 pharmacists managing a community pharmacy in Malta were asked to fill in a questionnaire. A response of 37.5% was obtained. Respondents were asked to indicate their willingness to provide each of a number of proposed services at varying levels of reimbursement and to self-assess their competence to provide each service. The response was quantified. Respondents' opinion was sought on the perceived role of the community

pharmacist and the effects of cognitive services on the profession's image, on qualifications necessary, patient trust, rapport with patients and perception of patient interest in these services and on the environment within local community pharmacies. They were also asked to indicate the source of reimbursement they felt should be pursued and to assess possible barriers to the provision of cognitive services.

Study B

A postal survey was held on a random sample of 153 doctors registered and residing in Malta. An overall response of 36% was obtained. Respondents were asked to indicate whether they considered each proposed service to be of benefit and whether on the whole they welcomed the provision of cognitive services. They were also asked to indicate whether they were likely to refer patients for such services.

Study C

30 elderly patients residing in residential homes for the elderly or in nursing homes but managing the procurement and administration of their own drug therapy, were interviewed. Their perceptions of the benefits of a comprehensive pharmaceutical service offered by visiting community pharmacists were sought, their drug therapy screened for potential interactions and their willingness to directly reimburse community pharmacists investigated.

Community pharmacies in randomly selected towns and villages were visited.

Results

Study A

Table 1: Quantified mean willingness and mean self-assessed competence of managing community pharmacists

	Mean Willingness	(N)	Mean Competence	(N)
Monitoring of patients' therapy	2.92	(51)	2.63	(52)
Patient counselling	3.76	(54)	2.55	(56)
Patient education	2.74	(53)	2.12	(51)
Blood pressure assessment	2.52	(52)	2.38	(47)
Diabetes screening	2.52	(50)	2.35	(52)
Cholesterol screening	2.43	(51)	2.23	(48)
Family planning services	2.44	(45)	2.05	(41)
Comprehensive services for housebound patients	1.96	(51)	2.35	(43)

Mean willingness 1 = minimum, 5 = maximum
Mean competence 1 = minimum, 3 = maximum

Table 2: Perceived barriers to the local provision of cognitive services

Lack of a professional fee	68%
Insufficient liaison with the medical profession	67%
Patients' unwillingness to pay for the service	65%
Insufficient funds	61%
Attitudes of other pharmacists	47%
High pharmacy: patient ratios	32%
Lack of demand	32%
Legal restrictions	30%

(Expressed as percentage of respondents - n=57)

Study B

89% of respondents stated that they would welcome the provision of cognitive services. 93% of general practitioners and 82% of consultants/specialists expressed a will to refer patients for such services if they are of the highest possible standard.

Table 3: Doctors perceiving of patient benefits through the provision of cognitive services by community pharmacists

Monitoring of patients' therapy	52 (94%)
Patient counselling	42(76%)
Patient education	47(87%)*
Blood pressure	27(50%)*
Diabetes screening	28(51%)
Cholesterol screening	28(51%)
Family planning services	26(48%)*
Comprehensive services for housebound patients	44(80%)

* n = 54
Sample size unless otherwise indicated = 55

Study C

22 (73%, n=30) of the patients interviewed recognised the positive benefits of a comprehensive pharmaceutical service by a visiting community pharmacist. 8 (36%, n=22) of these recalled a particular instance when they would have sought their pharmacist's advice. All those taking four or more different drugs (n=10) recognised the benefits of such a service. 5 potential drug interactions were identified, representing an incidence of 17%. 4 patients indicated some confusion in following their drug regimen and all of these were taking at least five different drugs.

Discussion

The services considered in Study A have been classified as follows:

I. Services with above average willingness and competence:
   - Monitoring of patients' therapy
   - Patient counselling

II. Services with above average willingness but below average competence:
   - Patient education

III. Services with below average willingness but above average competence:
   - Blood pressure assessment
   - Diabetes screening
   - Comprehensive services for housebound patients

IV. Services with below average willingness and competence:
   - Cholesterol screening
   - Family planning services

The Student-t test showed no significant difference at $\alpha = 0.05$ between the willingness of pharmacist with less than 5 years experience and those with at least 5 years experience except for patient counselling, between the willingness of those with up to 20 years experience and those with more than 20 years experience except for diabetes screening and between the competence of pharmacists with less than 5 years experience and those with at least 5 years experience or those with up to 20 years experience and those with more than 20 years experience. Membership in the professional body of pharmacists was not found to have a significant effect on willingness or on perceived competence. Nor were pharmacists practising in a very busy pharmacy or those who did not consider themselves to be members of a health care team significantly less willing to provide cognitive services. Pharmacists practising in a pharmacy with a patient base limited to the immediate community it was in were not significantly more willing to provide the services.

The favoured mode of reimbursement was directly by the patient (65% of respondents), followed by national health insurance available to all

(47%), private health insurance (30%), profits on other items as a result of increased patronage (28%) and social assistance (26%).

Cognitive services presently having the highest potential for introduction and expansion in community pharmacy practice have been identified, as have those to which a cognitive barrier exists. A marked relationship is shown between those services which pharmacists are more willing to provide and those which most doctors consider to be of benefit and would thus be more likely to request or recommend, but for one exception, providing housebound patients with a comprehensive pharmaceutical service. A greater appreciation of the need for this service by pharmacists is desirable. Elderly patients have shown a marked perception of the community pharmacist's role in this respect, more so if their drug regimen was complex.

Doctor-initiated demand for cognitive services is likely to be considerable as long as high standards are maintained.

Perceived barriers to service provision are linked to insufficient remuneration and inter-profession liaison. Yet, Study B has shown the latter to be unfounded. Foreign research and experience have shown the former to be unfounded too (A.P.L.A. National Survey, 1983). Situational and attitudinal barriers are not unsurmountable. Prospects for the provision of cognitive services by local community pharmacists are good.

References

A.P.L.A. National Survey: Willingness of Consumers to pay for Pharmacists' Clinical Services. Amer Pharm 1983 NS23: 314-320.

Cognitive Services Working Group Bibliography: Payment for Cognitive Services: The Future of the Profession. Amer Pharm 1989 NS29: 768-772.