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ORIGINAL ARTICLE

Perceptions and Barriers towards Provision of Health Promotion Activities among Community Pharmacists in the State of Penang, Malaysia

HASSALI MA *, SUBISH P**, AA SHAFIE***, MIM IBRAHIM****

ABSTRACT

Introduction: Health promotion is the process of enabling people to increase control over their health and to improve their health. Within this context, the community pharmacist, as one of the most accessible healthcare practitioners, plays a major role in the provision of health promotion activities to the society at large.

Objectives: To document the current level of involvement with health promotion activities among community pharmacists in the State of Penang, Malaysia

Methods: A cross-sectional study using a validated questionnaire was undertaken with a convenient sample of community pharmacists practicing in the State of Penang. The completed questionnaires were analyzed as per the study objectives.

Results: A total of 100 questionnaires were distributed to 100 community pharmacists practicing in Penang state. At the end of the survey, 80 questionnaires were collected back (response rate: 80%). The top five health promotion activities currently undertaken by community pharmacists, were weight management (n=74, 92.5%), diabetes counseling (n=73, 91.3%), traditional and complementary medicine counseling (n=67, 83.8%), nutrition and physical activity (n=66, 82.5%) and asthma counseling (n=65, 81.3%). Most of the respondents (n=60, 75.1%) either strongly agreed or agreed that lack of time is the barrier limiting them from involving in health promotion activities. Only 23 (28.8%) respondents stated lack of profitability as a reason for not taking part in health promotion activities. A majority of the respondents (n=79, 98.8%) were aware that health promotion is part of the pharmacist's responsibility. We found 62 (77.5%) respondents who provided health education and promotion programs to the public.

Conclusion: Most of the community pharmacists in Penang showed a high confidence in providing health promotion activities. Still, there are lots of obstacles for the community pharmacists to overcome in order to involve themselves in health promotion activities. Training and continual support in terms of continuing professional development and life-long learning is essential to empower the community pharmacists.

Key Words: Community pharmacists, perception, barrier, health promotion activities.

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Introduction

The World Health Organization (WHO) defines health as the 'state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity' [1]. This WHO definition emphasizes wellness and the social, environmental, and economic factors that may influence the behaviours affecting the people's health. Public health is defined as an organized community effort to protect, promote, improve, or restore the community's or population's health [2]. Health promotion and disease prevention technologies and interventions encompass the 3 core functions of public health, that include assessing and monitoring at-risk populations to identify health problems and priorities; formulating public policies in collaboration with community and government leaders; and assuring that people have access to appropriate and cost-effective care[2],[3]. Health promotion is any combination of interventions (i.e., health education and related organizational, economic, and/or political interventions) designed to facilitate behavioural or environmental changes that will improve or protect public health [3]. Health promotion strategies focus on community-based interventions and partnerships to maintain wellness and to help modify individual behaviours such as unhealthy lifestyles. In other words, health promotion involves community interventions that help a person increase control over and improve his or her own health [4].

Pharmacists are knowledgeable specialists who are currently under utilized in the primary health care team. They are experts in medicines, minor illnesses and health, they have 4 years of undergraduate training and a pre-registration competency based training year, and are expected to undertake continuing professional development. Community pharmacists can be accessible sources for health promotion [5], [6], [7]. Pharmacies are recognized as the most accessible healthcare services in the community, with over 90% of the population visiting them during one year [5], [6], [7] and [8]. Community pharmacists are patronized by both healthy and sick people, thus having access to a large proportion of the population—before a major illness or disease is evident [9].

It is well recognized that pharmacists act as health advisors to the general public [10] and they are acknowledged as highly credible sources of health information [11], [12]. Because they are recognized as credible sources of information and because of their accessibility, availability and frequent contact with the public, community pharmacists could provide an important channel for the delivery of these kinds of activities[13],[14],[15].
This recurring interest of pharmacists as health educators in the public health role is considerable [16], [17]. Partially, because of these continuing reassessments and the ongoing changes in the health care system, professional pharmacy associations are increasingly interested in health promotion and disease prevention as a way to effectively position this profession in the 21st century [13], [14], [17].While evidence that people can do much to promote their own health is intensifying, the role of pharmacists in assisting patients is not well documented [18], [19], [20]. In one of the few studies reported to date, Paluck et al [21] reported that there is considerable room for increasing pharmacist involvement in health education and disease prevention activities. Implementing changes in health behaviours among community residents is challenging. O'Loughlin et al [9] has suggested that there is less interest in prevention activities targeting smoking, diet, and physical activity, because the pharmacists may feel that these areas are too far removed from the traditional role of dispensing medication. So far, there is no study in Malaysia that has evaluated the perceptions and barriers towards the provision of health promotion activities among community pharmacists. Hence, we undertook the present study with the following objectives.

1. To identify the involvement and the types of health promotion activities provided by the community pharmacists and

2. To identify the barriers which limit the Involvement of community pharmacists in health promotion activities.

Methods

Study Design

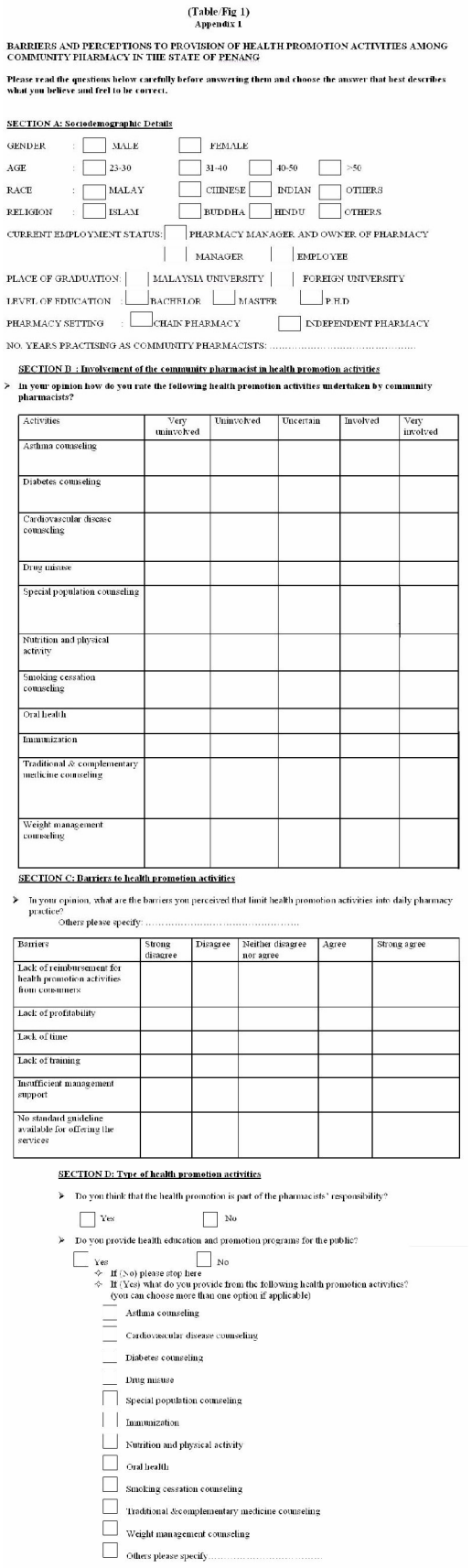
A cross-sectional survey design.

Sample Size and Sampling Method

Using the convenience sampling method, 100 community pharmacists in Penang State were approached by the researchers and were invited to participate in the research. Face-to-face and individual interviews were carried out in the workplace of the pharmacists and the questionnaires distributed were collected immediately to minimize the bias that might occur. At the end of the study period, a total of 80 respondents participated in the study (Response rate: 80%).

Questionnaires

[Table/Fig 1]The questionnaire used, was divided into four domains. The first domain consisted of the demographic details of the respondents. The second domain consisted of questions related to the degree of involvement in health promotion activities. The third domain consisted of questions relating to the types of health promotion activities that were currently provided by respondents. The final domain consisted of questions pertaining to the barriers that limited the involvement of community pharmacists in health promotion activities.



(Table/Fig 1)
Appendix 1

BARRIERS AND PERCEPTIONS TO PROVISION OF HEALTH PROMOTION ACTIVITIES AMONG COMMUNITY PHARMACY IN THE STATE OF PENANG

Please read the questions below carefully before answering them and choose the answer that best describes what you believe and feel to be correct.

SECTION A: Sociodemographic Details

GENDER : ☐ MALE ☐ FEMALE

AGE : ☐ 23-30 ☐ 31-40 ☐ 40-50 ☐ >50

RACE : ☐ MALAY ☐ CHINESE ☐ INDIAN ☐ OTHERS

RELIGION : ☐ ISLAM ☐ BUDDHA ☐ HINDU ☐ OTHERS

CURRENT EMPLOYMENT STATUS: ☐ PHARMACY MANAGER AND OWNER OF PHARMACY ☐ MANAGER ☐ EMPLOYEE

PLACE OF GRADUATION: ☐ MALAYSIA UNIVERSITY ☐ FOREIGN UNIVERSITY

LEVEL OF EDUCATION : ☐ BACHELOR ☐ MASTER ☐ P.H.D

PHARMACY SETTING : ☐ CHAIN PHARMACY ☐ INDEPENDENT PHARMACY

NO. YEARS PRACTISING AS COMMUNITY PHARMACISTS: .....

SECTION B : Involvement of the community pharmacist in health promotion activities

- **In your opinion how do you rate the following health promotion activities undertaken by community pharmacists?**

Activities	Very uninvolved	Uninvolved	Uncertain	Involved	Very involved
Asthma counseling					
Diabetes counseling					
Cardiovascular disease counseling					
Drug misuse					
Special population counseling					
Nutrition and physical activity					
Smoking cessation counseling					
Oral health					
Immunization					
Traditional & complementary medicine counseling					
Weight management counseling					

SECTION C: Barriers to health promotion activities

- In your opinion, what are the barriers you perceived that limit health promotion activities into daily pharmacy practice?

  Others please specify: .....

Barriers	Strong disagree	Disagree	Neither disagree nor agree	Agree	Strong agree
Lack of reimbursement for health promotion activities from consumers					
Lack of profitability					
Lack of time					
Lack of training					
Insufficient management support					
No standard guideline available for offering the services					

SECTION D: Type of health promotion activities

- Do you think that the health promotion is part of the pharmacists' responsibility?

  ☐ Yes ☐ No

- Do you provide health education and promotion programs for the public?

  ☐ Yes ☐ No

  - If (No) please stop here
  - If (Yes) what do you provide from the following health promotion activities? (you can choose more than one option if applicable)

  ☐ Asthma counseling
  ☐ Cardiovascular disease counseling
  ☐ Diabetes counseling
  ☐ Drug misuse
  ☐ Special population counseling
  ☐ Immunization
  ☐ Nutrition and physical activity
  ☐ Oral health
  ☐ Smoking cessation counseling
  ☐ Traditional &complementary medicine counseling
  ☐ Weight management counseling
  ☐ Others please specify.....

Data Analysis

All the data obtained was then examined and the responses were coded. The data was then descriptively analysed and an appropriate non-parametric test (Chi-square tests) was applied, using the Statistical Package for the Social Sciences software (SPSS version 15.0). A P-value of less than 0.05 was considered as statistically significant.

Results

A total of 80 community pharmacists were interviewed. Among the 80, 43 (53.8%) were males and 37 (46.3%) were females. The demographic characteristics of the respondents are listed in [Table/Fig 2].

(Table/Fig 2) Demographic characteristics of the respondents (n = 80)

Demographic Characteristics		Number	Percentage
Age (in years)	23-30	24	30
	31-40	32	40
	40-50	16	20
	>50	8	10
Ethnics	Malay	7	8.8
	Chinese	69	86.3
	Indian	4	5
Religion	Islam	7	8.8
	Buddha	57	71.3
	Hindu	2	2.5
	Others	14	17.5
Current employment status	Pharmacy manager and owner of pharmacy	44	55
	Manager	12	15
	Employee	24	30
Place of graduation	Malaysia	51	63.8
	Foreign	29	36.3
Level of graduation	Bachelor	69	86.3
	Master	10	12.5
	Others	1	1.3
Pharmacy Setting	Chain pharmacy	12	15
	Independent pharmacy	68	85

Involvement of Community Pharmacists in Health Promotion Activities

Pharmacists were found to be involved in health promotion activities at variable degrees, but the activity that most pharmacists were very involved in, was diabetes counseling (n = 6, 32.5%). The details regarding the involvement of the community pharmacists in health promotion are listed in [Table/Fig 3].

(Table/Fig 3) Involvement of community pharmacists in health promotion activities

Activities	Responses				
	VU [n (%)]	UI [n (%)]	UC [n (%)]	IN [n (%)]	VI [n (%)]
Asthma counseling	3 (3.8%)	2 (2.5%)	10 (12.5%)	59 (73.8%)	6 (7.5%)
Diabetes counseling	2 (2.5%)	4 (5.0%)	1 (1.3%)	47 (58.8%)	26 (32.5%)
Cardiovasculau Disease	2 (2.5%)	5 (6.3%)	12 (15.0%)	51 (63.8%)	10 (12.%%)
Drug misuse	3 (3.8%)	7 (8.8%)	21 (26.3%)	43 (53.8%)	6 (7.5%)
Special population counseling	3 (3.8%)	21 (26.3%)	31 (38.8%)	24 (30.0%)	1 (1.3%)
Nutrition and physical activity	2 (2.5%)	4 (5.0%)	8 (10.0%)	50 (62.5%)	16 (20.0%)
Smoking cessation counseling	2 (2.5%)	7 (8.8%)	11 (13.8%)	55 (68.8%)	5 (6.3%)
Oral health	1 (1.3%)	13 (16.3%)	20 (25.0%)	43 (53.8%)	3 (3.8%)
Immunization	5 (6.3%)	31 (38.8%)	24 (30.0%)	20 (25.0%)	0 (0%)
Traditional & complementary medicine counseling	1 (1.3%)	7 (8.8%)	5 (6.3%)	49 (61.3%)	18 (22.5%)
Weight management counseling	2 (2.5%)	2 (2.5%)	2 (2.5%)	54 (67.5%)	20 (25.0%)

Note: VU - Very Uninvolved, UN – Uninvolved, UC – Uncertain, IN – Involved, VI – Very Involved

Types of Health Promotion Activities That Community Pharmacists Provide

Most **c**ommunity pharmacists were found to provide diabetes counseling (n = 53, 66.3%), but very few provided immunization and special population counseling. The various types of health promotional activities that are provided by the community pharmacists are listed in [Table/Fig 4].

(Table/Fig 4) Types of health promotion activities that community pharmacist provides

Type of activities	Yes [n (%)]	No [n (%)]	Missing [n (%)]
Asthma counseling	38 (47.5%)	24 (30.0%)	18 (22.5%)
Cardiovascular disease counseling	36 (45.0%)	26 (32.5%)	18 (22.5%)
Diabetes counseling	53 (66.3) %	9 (11.3%)	18 (22.5%)
Drug misuse	22 (27.5%)	40 (50.0%)	18 (22.5%)
Special population counseling	12 (12.5%)	52 (65.0%)	18 (22.5%)
Immunization counseling	10 (12.5%)	52 (65.0%)	18 (22.5%)
Nutrition and physical activity	44 (55.0%)	18 (22.5%)	18 (22.5%)
Oral health	15 (18.8%)	47 (58.8%)	18 (22.5%)
Smoking cessation counseling	33 (41.3%)	29 (36.3%)	18 (22.5%)
Traditional & complementary medicine counseling	37 (46.3%)	25 (31.3%)	18 (22.5%)
Weight management counseling	46 (57.5%)	16 (20.0%)	18 (22.5%)

Barriers That Limit the Involvement of Community Pharmacists in Health Promotion Activities

Most community pharmacists (n = 60, 75.1%) identified lack of time as the barrier that limited their involvement in conducting health promotion activities. The barriers that limited the involvement of community pharmacists in health promotion activities are listed in [Table/Fig 5].

(Table/Fig 5) Barriers that limit the involvement of community pharmacists in health promotion activities

Statement	Response				
	Strongly disagree [n (%)]	Dis agree [n (%)]	Neutral [n (%)]	Agree [n (%)]	Strongly agree [n (%)]
Lack of reimbursement for health promotion activities from consumers	2 (2.5)	24 (30.0)	25 (31.3)	26 (32.5)	3 (3.8)
Lack of profitability	4 (5.0)	37 (46.3)	16 (20.0)	17 (21.3)	6 (7.5)
Lack of time	1 (1.3)	13 (16.3)	6 (7.5)	51 (63.8)	9 (11.3)
Lack of training	1 (1.3)	23 (28.8)	18 (22.5)	37 (46.3)	1 (1.3)
Insufficient management support	2 (2.5)	15 (18.8)	21 (26.3)	40 (50.0)	2 (2.5)
No standard guideline available for offering the services	1 (1.3)	13 (16.3)	19 (23.8)	41 (51.3)	6 (7.5)

Discussion

Recently, there has been an increased interest in broadening the role of community pharmacists beyond the traditional product-oriented functions of dispensing and distributing medication, to involve them in a greater role in public health. More specifically, counseling with the objective of providing patients with risk-management information or of improving compliance with prescribed medication, are viewed as tasks particularly well suited to pharmacists [8]. Because they are recognized as credible sources of information[8] and because of their accessibility, availability, and frequent contact with the public, community pharmacists could provide an important channel for the delivery of these kinds of activities[12],[22],[23].

There are many case reports describing the engaging of community pharmacists in nontraditional tasks including patient education[16],[23],[24],[25],[26], counseling [27],[28],[29],[30], follow-up to detect noncompliance [32], referral [33] and screening for risk factors of chronic diseases [31],[32],[33]. However, there are almost no systematic studies documenting the level of participation by pharmacists in health education and disease prevention activities. In one of the few studies reported to date, Paluck et al [21] surveyed a random representative sample of 485 community pharmacists (one-quarter of all the communities in British Columbia), concerning their level of participation in health education and disease prevention activities.

In the present study, there are no statistically significant differences noted between the sociodemographic aspects and the barriers that limit the community pharmacists from providing health promotion.

It was observed that most of the respondents (n=60, 75.1%) agreed that lack of time was a barrier that limited them from involving in health promotion activities. However, Hidalgo Cabrera et al. noticed that the ‘‘lack of time’’ priority diminished with increasing knowledge in pharmaceutical care issues. These issues have only recently been incorporated in pharmaceutical education [34].

The non-availability of standard guidelines for offering health education was also highly agreed by the respondents as a barrier, which limited them from providing health promotion activities. This was followed by insufficient management support which has also hindered community pharmacists from not involving themselves in health promotion activities. The total numbers of respondents that agreed with the statement was 42 (52.5%). The fourth and fifth barriers that have a higher number of respondents, agreed with them as barriers that limit pharmacists from involving in health promotion activities are lack of training 38 (47.6%) and lack of reimbursement for health promotion activities from consumers 29 (36.3%). There were a small number of respondents (n=23.28.8 %) who agreed that lack of profitability was the barrier that limited them from involving in health promotion activities. At the international level, ‘‘lack of

time'' and ''lack of specific training'' are ranked as major barriers [34],[35],[36],[37].

Limitations of Our Study

Our study had a few limitations. The survey that was conducted was only confined to the community pharmacists in the state of Penang. Thus, the findings that were obtained only show the perceptions of community pharmacists in the state of Penang, which might not be generalized to community pharmacists in other states of Malaysia.

Conclusion

A majority of the community pharmacists participated in diabetes counseling. The study showed that lack of time is the major barrier that limits the community pharmacists to remain active in health promotion activities. A majority of the respondents were aware that health promotion is part of the pharmacist's responsibility. Most of the community pharmacists have provided health education and promotion programs for the public.

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References

[1]. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference. New York, 19-22 June, 1946. Available at: http://www.who.int/about/definition/en/ Accessed on October 18, 2008.
[2]. Turnock BJ. Public health: what it is and how it works, 3rd ed. Sudbury, Mass; Jones and Bartlett Publishers, 2004.
[3]. Institute of Medicine. The Future of Public Health. Washington, DC: National Academy Press, 1988.
[4]. World Health Organization. Health Promotion Glossary. Available at: http://www.wpro.who.int/hpr/docs/glossary.pdf. Accessed on January 31, 2009.
[5]. Anderson C. Health promotion in community pharmacy: the UK situation. Patient Educ Couns 2000; 39: 285-91.
[6]. Krass I, Hourihan F, Chen T. Health promotion and screening for cardiovascular risk factors in NSW: a community pharmacy model. Health Promot J Aust 2003; 14: 101-7.
[7]. Mayer JA, Eckhardt L, Stepanski BM, Sallis JF, Elder JP, Slymen DJ, et al. Promoting skin cancer prevention counseling by pharmacists. Am J Public health 1998; 88: 1096-9.
[8]. Benrimoj SI, Frommer MS. Community pharmacy in Australia. Aust HealthRev 2004; 28: 238-46.
[9]. Blenkinsopp A, Panton R, Anderson C. Health promotion for pharmacists.2nd ed. Oxford: Oxford University Press; 2000.
[10]. De Young M. Research on the effects of pharmacist-patient communication in institutions and ambulatory care sites, 1969-1994. Am J Health-Syst Pharm. 1996; 53:1277-91.
[11]. Molzon JA. What kinds of patient counseling are required? Am Pharm. 1992; NS32(3):50-7.
[12]. Zellmer WA. Reassessing patient counseling. Am J Hosp Pharm 1991; 48:1453
[13]. American Pharmaceutical Association. Pharmacist Practice Activity Classification 1.0. [On-line] 1998. Available at http://aphanet.org /APhA/practiceclass.html. Accessed May 10, 1999.
[14]. American Association of Colleges of Pharmacy. Educational Outcomes. Alexandria, Va; 1994.
[15]. Trinca CE. The pharmacists' progress toward implementing pharmaceutical care. Am Pharm. 1995 (suppl 13):8-15.
[16]. Maguire T. Is the community pharmacist a health educator? Pharm J. 1990; 245: 556-9.
[17]. Dombrowski SR. Pharmacist counseling on nutrition and physical activity -- part 1 of 2: understanding current guidelines. J Am Pharm Assoc. 1999; 39:479-91.
[18]. O'Loughlin J, Masson P, Dery V, Fagnan D. The role of community pharmacists in health education and disease prevention: A survey of their interests and needs in relation to cardiovascular disease. Prev Med. 1999; 28:324-31.
[19]. Kotecki JE, Elanjian SI, Torabi, MR, Clark JK. Pharmacists' concerns and suggestions related to the sale of tobacco and alcohol by pharmacies. J Comm Hlth. 1998;23:359-70.
[20]. Kotecki JE, Fowler JB, German TC, et al. Kentucky pharmacists' opinions and practices related to the sale of cigarettes and alcohol in pharmacies. J Comm Hlth. 2000; 25:343-55.
[21]. Paluck EC, Stratton TP, Eni, GO. Community pharmacists' participation in

health education and disease prevention activities. Can J Public Hlth. 1994; 85:389-92.
[22]. World Health Organization. Health Promotion Glossary. Available at: http://www.wpro.who.int/hpr/docs/glossary.pdf. Accessed on January 31, 2005.
[23]. Anderson C. Health promotion by community pharmacists perceptions, realities and constraints. J Soc Admin Pharm 1998; 15:10–22.
[24]. Anderson C. Health promotion by community pharmacists: consumers' views. Int J Pharm Pract 1998; 6:2–12.
[25]. Coper L. Encouraging health professionals to be effective health educators. Hygie 1993; 12:5–8.
[26]. Fincham JE, Smith MC. Pharmacists' views about health promotion practices. J Community Health 1988; 13:115–23.
[27]. Consumer Advisory Board. Patient education materials: suggestions for improvement. Am Pharm 1989; NS29:34–6.
[28]. Hodges ID, Wilkie A, Drennan C, Toop L, Thornley P, O'Hagan J, Town GI. A community wide promotion of asthma self-management: process evaluation. N Z Med J 1993; 106:354–7.
[29]. Rudolph N, Jones IF. Community pharmacists and the extended role. Pharm J 1989; 242 Suppl. R:R1–R3.
[30]. Martin S. Traditional values, innovative practices: pharmacists who provide cognitive services. Am Pharm 1990; NS30:22–7.
[31]. Einarson TR, Bootman JL, Larson LN, McGhan WF. Blood level testing in a community pharmacy: consumer demand and finan cial feasibility. Am Pharm 1988; NS28:76–90.
[32]. Furmanga EM. Pharmacist management of a hyperlipidemia clinic. Am J Hosp Pharm 1993; 50:91–5.
[33]. Smith MD, McGhan WF, Lauger G. Pharmacist counseling and outcomes of smoking cessation. Am Pharm 1995; NS35:29–9.
[34]. McKenney JM. An evaluation of cholesterol screening in commu nity pharmacies. Am Pharm 1993; NS33:34–40.
[35]. Crawford N. The pharmacists officentre: providing quality care Am Pharm 1992; NS32:36–8.
[36]. Nykamp D, BarnettCW. Use of stationary automated blood pres sure devices in pharmacies. Am Pharm 1992; NS32:33–6
[37]. Martı´nez-Martı´nez F. Barreras para la implementacio´n del Martı´nez-Martı´nez F. Barreras para la implementacio´n del seguimiento farmacoterape´utico en farmacias comunitarias de Granada (Espan˜a). [Barriers for implementing pharmacotherapy follow-up in community pharmacies from Granada (Spain)] Seguimiento farmacoterape´utico 2005;33:144–9.