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Community pharmacy in Ghana: enhancing the contribution to primary health care

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It is widely believed that pharmacists could make a greater contribution to the provision of primary health care, especially in developing countries. Particular strengths of pharmacy services commonly cited include their accessibility within many communities and the opportunities for advising on the management of health problems. The potential for pharmacy to respond to health care needs and contribute to specific health policy objectives is receiving greater prominence both internationally and in individual countries. However, despite this widely acknowledged potential, developments have been limited.

Pharmacy is concerned with promoting the safe and appropriate use of drugs. Drug use in developing countries has frequently been described as irrational. It is influenced by a wide range of factors, including health and drugs policy, the organization and provision of health care, the availability of objective information, and health beliefs and cultural perspectives regarding health and drug therapy. The practices of pharmacy retailers, which are conducted in the context of wider structures and processes of health care provision, have also been questioned.

The aim of this paper is to consider possible directions for community pharmacy service development in Ghana. The paper draws on the literature relating to health care, drug use and pharmacy in Ghana to describe the background against which pharmacy services operate. In the context of current directions in pharmacy practice and policy, potential opportunities and barriers regarding the development of services are then addressed.

Key words: community pharmacy, primary health care, review, Ghana

Introduction

The World Health Organization (WHO) has long believed that pharmacists could make a greater contribution to the provision of health care (WHO 1988; WHO 1996). This is particularly the case in developing countries, where health needs are greater and public sector health care provision is limited. The profession of pharmacy is concerned with promoting the safe and appropriate use of drugs. Pharmacists are viewed as being well placed to advise on the management of common symptoms and long-term conditions, and to participate in health education and promotion. In many parts of the world, pharmacies are increasingly recognized as a source of professional advice. Their potential to contribute more extensively to health care continues to be addressed on both national and international levels.

With the particular needs of developing countries in mind, the International Pharmaceutical Federation (FIP) set up a working party, which produced recommendations for stepwise implementation of Good Pharmacy Practice in these countries (FIP 1998). These recommendations focused on four aspects of services: access to pharmaceutical personnel, with the ultimate aim that all people should have access to a qualified pharmacist; the training needs of pharmacy personnel, ranging from the provision of basic training for community health workers to continuing professional development for qualified pharmacists; the promotion of high standards regarding premises, dispensing, labelling, advice-giving, pharmaceutical care and record keeping; and the establishment of legislation for national drugs policies.

In addressing the education and professional development of pharmacists, a WHO consultative group identified seven roles around which 'preparing the future pharmacist' should aspire (WHO consultative group, 1997). The framework describes the activities of a 'seven-star pharmacist' as care-giver, decision-maker, communicator, leader, manager, life-long learner and teacher. The concept of pharmaceutical care has also become prominent in pharmacy policy and service development in many countries. Pharmaceutical care refers to an extended professional role in which pharmacists assume responsibility for pharmaceutical and health outcomes (that impact on a patient's quality of life, e.g. identifying and resolving potential drug-related problems) (Hepler and Strand 1990), rather than a more limited drug supply role. For example, in Britain, pharmacist prescribing, medication review and responsibility for repeat prescriptions, with associated monitoring and records, are being introduced.

Drug use in developing countries has been described as 'irrational' by many authors; the prescribing and/or consumption of ineffective, unsuitable, sub-optimal or unsafe pharmaceutical products has been widely documented. A wide range of contributing factors has been identified. These include difficulties in ensuring the continuous availability of

essential drugs, limited finance for health care and drugs, shortages of trained personnel, lack of enforcement of regulations, the prevalence of counterfeit products, access to objective drug information, controversies regarding the role of the pharmaceutical industry, costs to individuals of purchasing drugs, and health beliefs and cultural traditions regarding their use.

In 1981, WHO set up its Action Programme on Essential Drugs to provide operational support and guidance to developing countries in the establishment of national drugs policies, in particular to address the problems of non-availability of essential drugs to large proportions of the population in developing countries (WHO 1992). Over 80% of African countries, including Ghana, now have a national drugs programme, many of which extend to wider issues of promoting rational drug use.

The Ghana National Drugs Programme (GNDP) was established by the Ministry of Health in 1997 to improve and sustain the health of the population of Ghana by ensuring access to safe, effective, good quality and affordable pharmaceutical products (GNDP 2002a). Prior to the establishment of the GNDP, under-development of the pharmaceutical sector was recognized, as well as shortcomings relating to poor prescribing practices and inappropriate use of drugs, lack of monitoring of adverse effects, sub-standard products, lack of availability of essential drugs, inadequate financial management systems, weak enforcement of outdated legislation, and a largely uncontrolled private sector (GNDP 2002b).

In Ghana, the vast majority of pharmacists (and other health personnel) live and work in and around the cities. Greater Accra (the capital city) and the Ashanti region together have 837 of the country's 964 pharmacies (Owusu-Daaku 2002). This reflects a common pattern in the provision of formal health care in many sub-Saharan African countries in which there is a discrepancy between urban and rural areas; a problem which can probably only be fully addressed as the country achieves greater socio-economic advancement. In Ghana, in common with other African countries, pharmacies are not the sole source of drugs. Other retail outlets, including licensed chemical sellers and drug peddlers (itinerant salespeople who sell drugs alongside other products, often without formal training), are important sources of drugs in many communities (Owusu-Daaku 2002). In recognition of the shortage of pharmacists in many parts of the country, the Pharmacy Council licenses chemical sellers and provides some training for them.

Internationally, the potential for pharmacy to enhance its contribution to health care is widely recognized. Many aspirations and endeavours of the pharmacy profession, as well as the difficulties in achieving them, span international boundaries. However, all countries have their own priorities in health policy, patterns of health care and pharmacy service provision, and individual socio-cultural contexts affecting the uptake of care. These varying features provide pharmacists in different countries and settings with their own barriers to, and opportunities for, service development.

The aim of this paper is to consider possible directions for community pharmacy service development in Ghana leading to an enhanced primary care role, the vast majority of pharmacists being community-based. The paper firstly draws on relevant literature relating to health care, drug use and pharmacy in Ghana to describe the background against which community pharmacy services operate. In the context of directions in the development of pharmacy services internationally, it then considers potential opportunities and barriers for pharmacy in Ghana.

Health and health care in Ghana: the context for pharmacy service development

Although there are many similarities between countries in terms of health care needs, health policy agendas and aspirations regarding the development of pharmacy services, if pharmacy services are to be successful, developments must be relevant to the health needs of the country, work synergistically with others parts of the health care system (whether formal or informal) and be mindful of the socio-cultural contexts regarding the delivery and uptake of care. While there is only limited literature regarding the development of pharmacy services *per se*, many authors have addressed the health and health care contexts against which pharmacy services operate in Ghana.

In common with many African countries, infectious diseases – in particular malaria, diarrhoeal disease and specific bacterial and parasitic diseases – are major health problems in Ghana. Advising on the management of prevalent conditions is central to the activities of community-based health professionals and potential service development. Whilst it is widely recognized that many health problems have to be tackled on a wider inter-sectoral basis, health initiatives and drug therapy are central to the management of disease.

The structures and processes of health care provision have been found to have a direct effect on both drug use and pharmacy services. The cash-and-carry system, in which people are required to pay for their drugs and often other items and services, was introduced in 1992 (Asenso-Okyere et al. 1998). This incorporated 'revolving drug funds' to ensure a source of finance for continuous availability of essential drugs. Researchers in Ghana have investigated the impact of co-payments on the provision and demand for health care (Biritwim 1994; Asenso-Okyere et al. 1998; Asenso-Okyere et al. 1999). One consequence reported was an increase in self-medication, for which the authors advocated enhanced training of drug peddlers and staff in drug stores (Asenso-Okyere et al. 1998).

Researchers have also identified ways in which the revolving drug funds increased inequities in access to care (Agyepong 1999; Nyonator and Kutzin 1999). A study to assess the possible impact of revolving drug funds on prescription patterns and the quality of care in three districts in southern Ghana found that whilst the availability of safe and effective drugs had improved, not all patients could meet the costs (Nyonator and Kutzin 1999). As a result, poorer patients may

take fewer drugs or smaller quantities than effective for their needs. It is also widely acknowledged that many people in developing countries go directly to a pharmacy for medication to avoid the costs of a medical consultation. Thus, pharmacy staff are requested to fulfil a health need for population groups that cannot afford proper health care.

On coming to power in 2001, the newly elected government in Ghana pledged to abolish the cash-and-carry system and to replace it with a system of health insurance. As part of the health care system review, an opportunity may exist for formally extending the roles and responsibilities of pharmacists and/or establishing financial incentives for specific activities or higher standards of service, for example, as part of contracts with health insurance organizations.

The influence of socio-economic factors on health status, health behaviours and access to care is widely documented. The needs and perspectives of different population groups are important considerations in the development and execution of community-based services. Researchers analyzing data from the Ghana Demographic and Health Survey, 1993, found level of education, religious background and region of residence to be important factors influencing the use of maternal and child health services in rural Ghana (Addai 2000). A study in Accra found that household resources were associated with better preventive health-seeking and hygiene behaviours (Armar-Klemesu et al. 2000). Researchers comparing two districts in Accra found that when treating children for malaria, people in the poorer community were more likely to purchase drugs without a prescription and less likely to take the children to a hospital (Biritwum et al. 2000). It has also been shown that poorer households spend a higher proportion of their income on drugs than richer ones (Mills and Lee 1993). Addressing discrepancies in health care needs of, and provision to, different population groups is central to health policy initiatives worldwide. It is, therefore, also an issue for pharmacy as well as other health care providers.

In most communities and households across the world, women are the principal carers. Increased emphasis on the education of girls and women contributes to the health status of a population, and in Ghana, the education of girls is seen as important for its socio-economic development. Educated carers are in a position to understand more about health problems and the use of drugs and other therapies. In Ghana, women's education has been shown to be associated with immunization uptake for children under 5 years (Matthews and Diamond 1997), child feeding practices, health care-seeking behaviour and hygiene (Armar-Klemesu et al. 2000). Literacy will have important implications for pharmacists when advising on the management of health problems and providing instructions on the use of drugs. Bierlich (1999), in a study among the Dagomba in northern Ghana, reported that most clients of the drug peddlers were women. It is to women that information about health and medicines should be principally targeted. Services to address the specific needs and perspectives of women in advising and supporting them in their health caring activities could be an important focus for pharmacy service development.

The different traditions and beliefs that govern perceptions of disease have been shown to influence health behaviours, such as the use of medicines. While many aspects of pharmacy services will be appropriate to the needs of different populations, developments within particular communities must also be sensitive to their traditions and beliefs in order to be effective. These issues have been explored by sociologists and anthropologists among many communities in Ghana (Kirby 1997; Nyame and Biritwum 1997; Opare et al. 2000). In particular, Senah (1994), in studying the perceptions and use of medicines from the perspective of a Ghanaian coastal community, also attempted to explain patterns of medicine use in the context of local beliefs about health and medicines.

As is common in many societies with pluralism in the provision of health care, people frequently combine approaches, choosing practitioners and therapies depending on health beliefs regarding causation, the symptoms or condition or other factors (Yartey et al. 1993; Denno et al. 1994; Bierlich 1995; Fosu 1995; Kirby 1997; Tsey 1997). The use of home remedies and herbal products as alternatives to, and in conjunction with, Western medicines has also been documented.

To ensure the effectiveness of health care programmes, the need for health policymakers and professionals to be cognizant of local traditions and beliefs in planning and delivering health programmes has been highlighted by many researchers (Kirby 1993; Bierlich 1995; Gyapong M et al. 1996; Kirby 1997; Aryeetey et al. 1999; Bierlich 2000). In a study of notions and treatment of guinea worm in northern Ghana, Bierlich (1995) described how health educators had taken a simplistic view of the problem with insufficient account of local, albeit non-scientific, understandings of guinea worm. He stressed the importance of the context of local perceptions and practices in health promotion activity, as well as awareness of the practicalities or potential problems of following advice.

In another paper, Bierlich (2000) explored the cultural beliefs and local experiences that surrounded the use of injections as a pharmaceutical form, and offered explanations of how these factors may affect acceptance or rejection of Western medicine. In the development of services to promote rational drug use, it is important to take into account the traditions and beliefs of local people.

The practicalities of following advice must also be considered. Knowledge does not necessarily translate into practice. Agyepong and Manderson (1999) found that understanding of the causes of malaria did not predict bed net use, but that other factors such as costs, convenience or other personal or social factors must be taken into account.

Enhancing the contribution to primary health care: opportunities and barriers

The potential development of pharmacy services in Ghana will be considered in the light of international policy directions – in particular, the framework described by the FIP

working party which specifically addressed the situation in developing countries (FIP 1998) – as well as health policy, socio-cultural background and research relevant to the operation and role of pharmacy services in Ghana

Access to services

The presence of pharmacy services at a community level is often regarded as one of pharmacy's major selling points. The accessibility of pharmacy personnel and services to the vast majority of the population (which is typical in many developed countries) is often taken for granted by proponents when arguing that the pharmacy's potential to contribute to health care is largely unrealized. In developing countries, this accessibility cannot be assumed. Access to pharmacy services and personnel is the first of the four areas highlighted in the FIP working party recommendations for the implementation of Good Pharmacy Practice in developing countries. Whilst their ultimate aim is that everyone should have access to a qualified pharmacist, the working party recognized that shortages of personnel are common (FIP 1998).

Accessibility may refer to the location of pharmacies, the availability of professional staff, affordability of services and drugs, approachability of staff and/or sensitivity to consumers' needs and perspectives.

The unequal distribution of pharmacies in Ghana, especially between urban and rural areas, is a limiting factor regarding the provision of a uniform nationwide pharmacy service. In Ghana, 619 pharmacists serve the 2.9 million people of Greater Accra, while there are only 13 pharmacists serving the 3.3 million people of the rural north (Owusu-Daaku 2002). However, the city dwellers are a sizeable proportion of the population who do have access to pharmacy services. The irrational use of drugs, inappropriate health actions and poor understanding of disease aetiology in urban and peri-urban areas, where health care facilities and pharmacies are most prevalent, are well documented. This indicates that there are potential opportunities for pharmacy to contribute to the health care needs of their local communities.

The frequent absence of professional staff in pharmacies is widely recognized. Thus, even in areas in which there are many pharmacies, professional activities are frequently undertaken by staff who may have no formal training. In Ghana, the situation is acknowledged by the Pharmacy Council, which has regulatory responsibility for the practice of pharmacy (personal communication, 2002). The Pharmacy Council acknowledges the shortage of personnel, the expense of employing additional or locum pharmacists (which currently may be seen as an unnecessary expense), and the implications for the public if access to medication is restricted to times when a pharmacist is present. Thus, enforcing regulations that require the continuous presence of pharmacists may be beyond the *de facto* powers of the Pharmacy Council and not necessarily in the best interests of the clients. In discussing the shortcomings of public health care provision in Ghana and addressing the potential role of the Pharmacy Council, Agyepong (1999) suggested revising licensing procedures to take into account population needs and local circumstances; one suggestion was to lower fees for those operating in remote or under-served areas. The health care reforms in Ghana may offer an opportunity to introduce incentives for changes to the structure and operation of pharmacy services.

Pharmacy services and drug therapy, as other private sector services, are available only to people who can afford them. Increased self-medication has been documented as a result of the cash-and-carry system (Asenso-Okyere et al. 1998). Thus, especially among poorer communities, pharmacists may have an important role in advising on cost-effective options in response to the health problems of their clients. A new system of health care provision, as well as impacting on access to care and uptake of services, will also present new considerations and opportunities for the pharmacy profession in identifying and responding to the specific needs of different population groups.

The informality of the pharmacy setting is often viewed as an important strength. Patient-centred care that is sensitive to the needs and perspectives of consumers is a prominent feature in health and pharmacy policy. In developing countries, many researchers have highlighted the approachability of private sector practitioners, often in comparison with staff in public sector health care facilities. A study among a rural population in Ghana (Wolf-Gould et al. 1991) contrasted limited patient education in consultations with public sector health care workers, who were often not conversant in the local language, with that in chemist shops. These shops were open for long hours, offered treatment that was quick and inexpensive, and the chemists (who had not received formal training) were friendly local people who were integrated well in the community. This model of care was seen by the authors as displaying features of culturally accessible care. Bierlich (1999), in reviewing the literature, also claimed that private vendors of pharmaceuticals (again, not pharmacists) gave greater attention to customers' points of view than practitioners in formal government health services. In the development of services, it is important that the informality and approachability associated with the pharmacy setting is valued and enhanced.

Training of pharmacy staff

The FIP working party identifies self-sufficiency in the training of pharmacy personnel to be the ultimate goal of developing countries regarding training (FIP 1998). In recognition of the absence of qualified pharmacists in many parts of Ghana, the Pharmacy Council provides training for, and licenses, chemical sellers.

Although pharmacists are not always present in the pharmacy or in a position to intervene in all transactions and consultations with clients, they carry ultimate responsibility. Thus, the training of others should be a key priority. Ofori-Adjei and Arhinful (1996) assessed the effect of training medical assistants in Ghana in the management of malaria. In a similar initiative, community health volunteers were recruited and trained to diagnose and treat trachoma in the north of Ghana (Solomon et al. 2001). Training of pharmacy

counter assistants to advise on the management of common health problems and provide health education advice (now a requirement in some countries) could be a valuable public health initiative.

The profession is also addressing the education needs to prepare pharmacists for the future. The Faculty of Pharmacy at Kwame Nkrumah University of Science and Technology (the only university in Ghana offering an undergraduate degree programme in pharmacy) has recently established a Department of Clinical and Social Pharmacy. The Faculty, the Ghana National Drugs Programme, the Pharmacy Council and the Pharmaceutical Society of Ghana support postgraduate programmes and continuing professional development. A high level of education and training is required to provide an enhanced primary care role and/or to aspire to the goal of 'seven-star' pharmacist (WHO consultative group 1997), as care-giver, leading and teaching staff, taking responsibility for good pharmaceutical care, communicating with patients, prescribers and other health care providers, and continually developing their services.

Pharmacy services

In addressing standards of pharmacy services, recommendations of the FIP working party refer to premises, dispensing, containers, labelling, instruction of patients, records, health information, patient counselling, pharmaceutical care and self-medication (FIP 1998).

Supply of appropriate medicines and advice-giving are central to the dispensing activities of pharmacists. A study undertaken by the GNDP identified aspects for improvement in the dispensing process, including labelling, pre-packing and provision of containers (GNDP 1999). In developing countries, many products are requested and supplied without a prescription. In these instances, good pharmaceutical practice would require that the pharmacy staff ensure appropriate products are supplied with relevant labelling and advice.

It is widely recognized that compliance or adherence to recommended medication regimens is often poor. A study among parents and guardians of children in Accra identified poor knowledge or understanding of dose directions, costs, lack of availability at the dispensary, availability of similar drugs in the home and resolving of symptoms as factors influencing compliance with drug therapy (Osei and Commey 1994). However, improved information to patients and drug labelling in public health facilities has also been shown to lead to better adherence (Agyepong et al. 2002). In a survey undertaken by the GNDP, only 23% of clients were able to recall how to take their medicine in terms of dose, frequency and duration (GNDP 1999). The researchers in all these studies highlighted a need for the education of pharmacy staff regarding appropriate instructions, as well as interventions to improve communication between them and their clients on drug use, and proper labelling. However, compliance is influenced by many factors, including an individual's beliefs about the use of medicines. In promoting appropriate use of drugs, attention to the concerns and perspectives of individual clients is important in ensuring that advice is relevant to their needs. This is also in line with a 'patient-oriented' approach to care, which is promoted by the pharmacy profession in Ghana.

Advice-giving and recommending appropriate medicines are fundamental to community pharmacy activity. Pharmacy staff everywhere may be presented with a wide range of different health problems. These require a broad knowledge base, awareness of social and cultural contexts in which advice is sought, and skills in providing advice relevant to a client's needs and situation. Whilst this advice-giving role is greatly valued, researchers (in both industrialized and developing countries) have identified cases of questionable advice from pharmacy staff and other drug retailers, including for common but potentially serious conditions (van der Geest and Whyte 1988; Etkin and Tan 1994). In Ghana, inappropriate use of drugs for malaria, for which pharmacies are a major source, has been documented (Ofori-Adjei and Arhinful 1996). An important focus in the education of pharmacists and their staff is the development of the necessary knowledge and skills base that enables them to provide a high quality advisory service.

For many of the most prevalent diseases, causes and/or risk factors are clearly identifiable and health education and promotion is prominent in health policy. Because of their presence in many communities, pharmacies are often considered well placed to contribute to these policy objectives. Specific needs regarding health education have been identified. For example, in a study in the Greater Accra region, self-medication with chloroquine and paracetamol was a common treatment approach for malaria; however, the researchers reported limited understanding of the role of mosquitoes (Agyepong and Manderson 1994). Similarly, researchers studying malaria-related beliefs and behaviour in two areas of southern Ghana found that while caretakers were well informed about the major symptoms, there were many misconceptions regarding the causes (Ahorlu et al. 1997). Amofah et al. (1998), examining the perceptions of care-takers of pre-school children on acute respiratory infection in rural Ghana, found a high correlation between perceptions of cause and prevention measures. Pharmacies, especially in urban areas, are an important source of medication for the management of these conditions and should be an integral part of health education programmes. Pharmacists and their staff could be involved in the development and operation of protocols, both at an individual pharmacy level and/or at a local or national level. However, they commonly remain overlooked as a potential contributor to or participant in local or national health promotion programmes. This may be partly a result of pharmacy's place as part of the private rather than the public sector.

Legislation and health policy

Adequately enforced legislation is regarded as a fundamental prerequisite for Good Pharmacy Practice (FIP 1998). The Ghana National Drugs Programme was established in 1997. The objectives of the programme included the promotion of rational use of drugs, strengthening of quality assurance to

ensure safety and effectiveness of products, and establishment of financing mechanisms to ensure equity and access to essential drugs (GNDP 2002a). To these ends, the GNDP has, amongst other things, set up a 5-year programme with a review of its objectives, established an essential drugs list and provided training for health personnel in the rational use of drugs (Ministry of Health 2000).

Professional responsibilities and business contexts of service provision

Pharmacists in the community are generally private practitioners, their incomes derived principally through the sale of pharmaceuticals and other products. Potential conflicts between the business and professional interests of pharmacists are frequently highlighted. In particular, many studies have questioned the suitability of medicine sales, highlighting the possible clash between maximizing profits and providing the most cost-effective care. Bierlich (1999), researching in northern Ghana, identified chemical sellers (not pharmacists) who were explicit about their principal objective being to make money. According to research cited by Cederlof and Tomson (1995), interventions to influence the selling behaviours of drug retailers that resulted in no financial losses to the retailer were more likely to be successful than those which had a negative impact on income. They suggested that there should be financial incentives for retailers to provide essential rather than non-essential drugs within health policy. Also in Ghana, health care system reforms in which financial rewards acknowledge standards of practice could promote quality in services. Observance of ethical codes is also central to the achievement of high professional standards.

A research base to inform service development

Many researchers from a range of disciplines have investigated different aspects of health care and drug use in Ghana that have relevance for pharmacy service development. However, there is little systematic documentation focusing specifically on pharmacy services: describing health care roles in service provision, assessing the quality of services or evaluating the effectiveness of current services or potential developments. A research base would provide the profession with reliable, systematic documentation and experimental evidence for use in addressing the future of pharmacy services, to ensure that they effectively meet the health needs of the populations they serve. Participation in research also demonstrates the profession's commitment to identifying strengths, weaknesses and opportunities, as well as developing practice to meet the changing needs and demands of the populations they serve.

A number of descriptive studies have documented drug use in hospitals and other health facilities; for example, patterns of outpatient drug treatment for hypertension in Korle-Bu teaching hospital (Hesse and Nuama 1997) and antibiotic prescribing in health facilities in the Wassa West district of Ghana (Bosu and Ofori-Adjei 1997a). Base-line information regarding patterns of prescribing and drug use enables pharmacists to identify areas in which their involvement may be of most value (Bosu and Ofori-Adjei 1997).

Regarding new initiatives, two studies have evaluated the training of pharmacists in the management of sexually transmitted diseases (Adu-Sarkodie et al. 2000; Mayhew et al. 2001). Amoah et al. (2000) described a diabetes care and education programme delivered at regional and sub-regional level in which pharmacists were trained to offer care and education to patients in the community. In addressing specific drug use problems in Ghana, Yeboah-Antwi et al. (2001) demonstrated that pre-packaging of anti-malarial drugs into unit doses improved compliance. Hall et al. (1999) investigated the possibility of using height as a proxy for body weight in determining appropriate doses of Praziquantel to treat schistosomiasis. This was found to be of adequate accuracy, and the authors proposed the use of a pole marked with the number of tablets to determine doses. Agyepong et al. (2002) described an intervention study in which adherence to medication was improved by a combination of information-giving and drug labelling.

Of particular importance in future studies is the assessment of the feasibility of service developments. If new proposals are to be effective, potential problems in their implementation must be identified, and the extent to which proposals are workable in the environments and settings for which they are intended needs to be assessed. Also, their acceptability to all stakeholders (including health personnel and clients) must be assured.

Conclusion

The potential for community pharmacy to contribute more extensively to primary health care is widely recognized within and outside the profession. Both internationally and within countries, including Ghana, pharmacy services are becoming more prominent in health and pharmacy policy. Despite the widely recognized potential for an enhanced role, there are also limiting factors. Widespread accessibility to pharmacy services cannot be assumed. However, there are opportunities for pharmacies to contribute to health care in the communities in which they operate, even though a more equitable distribution of services across the country may be contingent on wider socio-economic developments, improved infrastructure and amenities. The availability of pharmacists or other suitably qualified personnel within pharmacies (a situation which is often not achieved at present) is important in ensuring a high quality service. The wider health care reforms may present opportunities for a structured approach to the expansion of services and enhancing the quality of care.

In addition to measures to ensure high standards of advice-giving to individuals on the use of medicines and the management of health problems, pharmacy could also contribute to health promotion objectives as formal participants in national or local health programmes. Pharmacies are frequently not included in health education plans and strategies. Their exclusion represents a lost opportunity on the part of policymakers.

Some integration of pharmacy services into the formal health care system and/or towards the achievement of specific

health policy objectives could benefit pharmacists (and their staff), health policymakers and the public. However, in promoting change to pharmacy services and practices of pharmacy staff, proposals must be realistic and feasible in the settings for which they are intended, recognise and address potential problems (e.g. potential conflicts between professional and business interests), and ensure acceptability to clients and other stakeholders.

Many researchers have demonstrated how local social and cultural factors influence the uptake of health care and patterns of drug use. In a society where there is pluralism in health care and drugs are used in the context of local health beliefs, it is important that services are sensitive and responsive to consumers' needs and perspectives.

To date, many researchers have highlighted problems of inappropriate drug use and limitations of pharmacy service provision. A number of policy documents have acknowledged the potential for an enhanced contribution by pharmacy to primary health care. However, little attention has been paid to the implications of specific proposals for developing countries. Few studies have set out to address the feasibility of initiatives and to identify possible problems in their operation so these can be addressed. Such evaluation is a prerequisite to ensure that new ideas are effective in meeting health care objectives.

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