Programme description: Health promotion in a social pharmacy course: The Ghana experience

FRANCES OWUSU-DAAKU1 & FELICITY SMITH2,†‡

1Department of Clinical and Social Pharmacy, Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, and 2Department of Practice and Policy, School of Pharmacy, University of London, Brunswick Square, London WC1N 1AX, UK

Abstract
This paper describes the introduction of a novel health promotion module within the undergraduate pharmacy programme. The module involved both classroom activity (mainly group work by students) and “outdoor fieldwork” in which they visited a local resource-poor community to learn about local perspectives of health and develop appropriate health promotion materials.

Ghana, designated by the United Nations as a low-income country, has typical health priorities, many of which could be addressed if pharmacists played a more prominent role in health promotion activities. The Faculty of Pharmacy in Kumasi (currently the only one in Ghana) is attempting to move away from its traditional lecture and laboratory science-based programme that is typical of many developing countries, to one which prepares students more effectively for a health care role in their local communities. The module was evaluated from the perspectives of faculty members, students and members of the local community.

Keywords: Community participation, Ghana, health promotion, pharmacy education

Introduction and context
Ghana, as many countries in sub-Saharan Africa, is classified as a low income country and is a focus of the millennium development goals. These goals and associated targets were set by the United Nations (www.un.org/millenniumgoals) to aid the establishment of frameworks and programmes to address basic needs of the world's poorest people. Some of these are health-related, notably those addressing maternal and child health, and the high prevalence of infectious diseases (especially malaria, TB and HIV/AIDS).

It is widely believed that pharmacy services in developing countries could make a greater contribution to health care (WHO, 1988; 1996). In many developing countries, including Ghana, pharmacists are often the most easily accessible health professional to consult on health problems. Steps to ensure that pharmacy education provides students with the knowledge and skills to contribute to public health priorities of their local populations are increasingly seen as an important goal of pharmacy education. Research, including work in Ghana, (Bierlich, 1995; 1999; 2000; Kirby, 1993; 1997; Gyapong M, Gyapong JO, Adjei, Vlassoff, & Weiss, 1996; Aryeetey et al., 1999) has demonstrated that to be successful, health programmes must take into account the social and cultural contexts in which care in delivered. Students, in developing their professional skills in social and clinical pharmacy, need to appreciate that...
clients will have their own beliefs and perspectives regarding their health and use of medicines which will be important determinants of the success of any health promotion activities.

In Ghana, like many developing countries, especially in Africa, many undergraduate pharmacy programmes remain modelled on traditional laboratory science-based courses that were common in industrialised countries, with only limited focus on the skills and application of knowledge to professional, clinical and public health goals. Also, the shortage of pharmacists in many of these countries, especially with appropriate experience and skills, creates a further challenge to curriculum development. However, in the past few years, pharmacy education in Ghana has also seen change. The establishment of a new Department of Clinical and Social Pharmacy in 2000 enabled the formal introduction of social pharmacy in the curriculum. In addition to traditional lectures focusing on scientific subjects, more diverse approaches to learning were introduced for the first time.

This paper describes the introduction of a novel health promotion module within the social pharmacy teaching programme for fourth (final) year undergraduate pharmacy students in Ghana. The evaluation of the module, took the form of a review from the perspectives of the tutor, students and members of the local participating community.

Description of the module: health promotion

Aims and objectives

The goals of the module were to:

- enable students to appreciate the importance of understanding lay perspectives on health and illness in order to be effective in advice-giving and health promotion;
- allow students to experience the potential value of working with prospective clients to develop their learning;
- provide students with an opportunity to develop their confidence in discussing health issues with members of a local community; and
- provide an opportunity for students to interact with, and learn from, each other through a new approach to learning and teaching.

Teaching and learning activities

To meet these objectives a module comprising classroom and “outdoor” activities both of which represented a departure from the traditional lecture and laboratory-based teaching that remains the basis of the pharmacy programme were designed.

Classroom group work consisted of five weekly 2-hour discussion sessions among students in groups of ten, with an introductory lecture at the start and a plenary at the end of most sessions. In addition to the lecture, written material was prepared on the pharmacist’s role in health promotion and public health, roles of other health care workers, meanings and determinants of health, and communicating with clients/patients. These issues provided a basis for the group discussions and preparation for the outdoor group fieldwork.

Outdoor group fieldwork entailed visiting the Sisankyr community, an urban, resource-poor community situated on the outskirts of Kumasi, the second largest city in Ghana. The students prepared to conduct semi-structured interviews with members of the community, which they would use to inform their development of health promotion materials. Malaria, tuberculosis (TB) and HIV/AIDS are three prominent public health concerns throughout Africa. HIV/AIDS was selected for this module because of its prominence as a public health concern in Ghana and also because the tutor had knowledge and experience in this area.

Once students were ready to commence their interviews, the tutor and a group of students went to the community youth leader who had agreed to assist on the project. The community leader beat the gong–gong to announce that the discussions would be taking place. The students then interviewed residents of Sisankyr regarding their health problems, their perceptions and experiences regarding causes, risks and actions. Following this each group reviewed their interviews and developed a leaflet or poster to address lapses in the HIV and AIDS awareness, in the context of the experiences and perceptions of their respondents.

The experiences and output of each of the groups was shared at a final plenary session in which the students had the opportunity to discuss each leaflet or poster and to select one which was thought to best address the particular needs of the community. A consensus was reached and the work of one group, which was largely pictorial and had both Twi (the predominant language of the locality) and English captions, was the clear favourite, a choice also endorsed by five faculty members who participated in the assessment. The accuracy of the translations was verified by consulting Twi language experts in the university community; and cosmetic changes were made to the pictorial leaflet. The leaflet was then launched at a durbar (a gathering of community members and opinion leaders) in one of the community’s churches on World AIDS Day. Members of the university, including the vice-chancellor’s representative, as well as local pharmacists, also attended.


**Evaluation**

This module was a marked change from the limited interaction in formal lectures which was typical of all other parts of the pharmacy degree programme. To evaluate the module, the views and perceptions of the students, members of the local community and faculty members were gathered.

**Students**

The experiences and views of students were formally gathered using a questionnaire and informally at the last plenary session. The questionnaires were distributed to all 90 students participating in the programme at the end of the final class. The questionnaire, comprising open and closed questions, asked students to comment on their experiences of the group work in terms of time allocation, involvement of fellow students, effectiveness of the learning process and problems encountered. They were also asked for their views of the value of this new approach (including handouts, assignments, group work and fieldwork) to the teaching of health promotion and to comment on its helpfulness (using a three-point scale: more helpful, as helpful, less helpful) compared with more traditional approaches. In Ghana (as in some other African countries) criticism of those in authority is not generally encouraged, formal course evaluation is not common and students would be expected to be wary of being critical. Therefore, it was necessary to reduce barriers that may hinder honest appraisal. In order to obtain valid and useful feedback, questionnaires were completed anonymously and no demographic data was requested. In addition, the lecturer left the class after explaining the task and answering any questions. Eighty-one completed forms were retrieved (response rate: 90%).

Eighty-three percent reported that they found the programme interesting or very interesting. Many positive comments related to the content and delivery of the programme. Students claimed to find the module an engaging, effective and enjoyable learning experience, and commented that fieldwork could be extended. The negative comments focused on the operation of, and co-operation within, the groups rather than the content of the programme and the teaching and learning activities per se. Only 43% respondents reported that most group members participated. Less than half (47%) respondents indicated that everyone shared in the fieldwork assignments. However, group work was clearly successful for some. For example, students commented on the allocation of tasks according to particular skills, such as typing, designing and printing. No negative comments were made on the content of the programme, the conceptual design of the module or the nature of the assignments.

Some students not fluent in Twi (the dominant language of Ghanaians) admitted experiencing a language barrier. Those who were relatively fluent also observed that it was difficult for them to find the Twi translations of some medical terms.

**Members of the local community**

An informal discussion with a group of members from the local community followed the launch of the leaflets. Their views regarding their involvement were gathered orally, as not all community members were literate. Members of the Sisankyr community confirmed the students’ participation in the fieldwork and remarked that they had also learnt a lot from them. They were very appreciative of the feedback and launch of the HIV/AIDS leaflet; and particularly considered it an honour to have been part of teaching and learning in the university. They looked forward to more interaction, which they hoped would help them address their “numerous” health problems, which they recognised included lack of health services and poor sanitation. It was apparent that the community members viewed their involvement as being in receipt of health information, although the tutor tried to stress that they had played a valuable part in the education of the students.

During this session the students also shared their views by presenting a short sketch of their experiences whilst conducting their fieldwork. The sketch mainly focussed on the misconceptions that the public had about HIV/AIDS and involved education on the infection.

**Tutor and faculty members**

A single tutor was involved in the delivery of the programme. From the perspective of the tutor, students seemed to enjoy the opportunity of working together, directing their own learning, and exercising their freedom of expression. From the tutor’s perspective, the format of the course also provided an opportunity for formal review of students’ achievements and feedback on their learning. However, the tutor was also aware that some discussion groups also got off to a slow start, and that some students were reluctant to attend the final plenary because they perceived they had not sufficiently completed their assignments. This perception was corroborated in the feedback obtained from the students.

Although the delivery of the programme was the responsibility of one tutor, the novel approach generated curiosity and a wish to be involved by other faculty members. Thus, others were keen to assist in the assessment and selection of a poster/leaflet, and
along with the vice-chancellor’s representative, attended the durbar when the leaflet was presented to the community. In addition, social pharmacy teaching is relatively new in the curriculum. Despite its novelty, the general acceptance of the module in concept and operation by other faculty members was reflected by agreement for more time and resources to be found.

Future plans

In pharmacy education, world-wide, teaching and learning activities have become more diverse (Seifer, 2001; Droge, 2003; Monk-Tutor, 2003). In addition to traditional lectures and laboratory practicals, patient-centred experiences have become a regular part of learning in many schools of pharmacy. This module represented the first departure from traditional programme delivery in Ghana. The module review focused only on the perceptions of the different stakeholders. It did not enable a full evaluation of the extent to which the module objectives were achieved. However, broad acceptability was apparent and it has provided some useful insights that will be taken into account in its revision.

Many barriers to curriculum development will be similar to those everywhere: change necessitates broader curriculum review, suitable accommodation should be available, investment is required in terms of staff time and resources to plan and execute new programmes. Within the faculty, perhaps because of its novelty, the module generated both interest and general acceptance. To maintain this positive reception, continuation and extension of the module and wider social pharmacy programme will seek to capitalise on this by engaging other faculty members in the programme review and future proposals. This will help ensure that further curriculum developments are workable, relevant, effective and accepted.

Engaging local communities in university learning affords students the opportunity to work in real-life settings. There are a number of satellite communities around the university in Kumasi which could be approached in the future. Local communities are unused to involvement in education. The cooperation of community leaders, continued consultation and fostering of partnership is important if the community is to remain well-motivated to lend its support to the programme and potential future teaching and learning activities. That there were mutual benefits became apparent in this evaluation—this feature may be incorporated into future learning objectives. Mutual benefits are positive per se and may additionally serve as an investment for the future delivery of the pharmacy programme.

Many countries of sub-Saharan Africa share important public health concerns and organisational structures in health care and the wider society. However, whilst it cannot be concluded that a similar experience could be replicated elsewhere, this module did demonstrate that differing approaches to pharmacy education are feasible in a resource-poor setting. It also highlighted some factors that may be expected to feature in other parts of the African region. For example, many languages are spoken in several countries of sub-Saharan Africa. Health promotion, both in education and professional practice requires proficiency in the vernacular. Although Twi is the dominant language in Ghana, language was a hindrance to effective communication for some students. This module comprised a first step in providing pharmacy students with an opportunity to work with a local community to gain insights into local health beliefs and consider how this may inform their professional health promotion activities.

Negative comments from students on this module focused overwhelmingly on the co-operation within the groups and time available for group activity, rather than the goals or content of the programme or fieldwork activities. Group dysfunction is well-recognised as a barrier to effective group learning (Biggs, 1999). In this module it is clear that time allocation and group size (in the context of wider curriculum and resources) should be reviewed.

Acknowledgements

Members of the Sisankyir community, Kumasi. Staff and fourth year students of the Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology, Funding from a DFID-funded, British Council-managed, Higher Education Link programme which enabled the successful implementation of this module.

References


Frances Owusu-Daaku is the vice-president of the Pharmaceutical Society of Ghana and a senior lecturer with a keen interest in developing social pharmacy in Ghana.

Felicity Smith is Professor of Pharmacy Practice at the School of Pharmacy, University of London.