

COMMUNITY-RELATED ISSUES/EDUCATION

## **A Description of a Community-oriented cum PBL Post Graduate Training Course for Health Districts Managers in Central Africa**

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**ABSTRACT** *CIESPAC (Centre inter-états d'Enseignement en Santé Publique pour l'Afrique centrale), a sub-regional public health training institution, originally located in Brazzaville, was created with the vocation of providing Central African countries with qualified health services managers (the turbulent events that occurred in Brazzaville in June 1997 prompted the transfer of the institution to Yaoundé in Cameroon). It offers several courses, the most recent of which culminates with a professional diploma in public health and targets mainly potential health district managers (DPSP—Diplôme Professionnel en Santé Publique). This paper reviews the first four-year experience of implementing the “community-oriented problem-based learning” (PBL) pedagogic approach in francophone Africa. About 70 health professionals (mainly MD and diploma nurses) were trained, using the PBL approach, within a period of three years. Practical field training activities involving the neighbouring urban communities of the institution as training sites were given a key place in the course and thus allowed trainees to perceptively appraise the priority health problems of a district. The most important thing trainees learnt during this course was how to learn. Some of them were also able to participate in some operational research. From this experience, it is clear that trainees are coached to learn solving problems on their own for the rest of their professional career. The neighbouring community of a training institution, when properly approached, can provide a very fertile teaching ground where trainees can acquire first hand practical experience in learning to collaborate with local communities. However, the PBL pedagogic approach requests a mutual understanding between trainees and trainers. As such there is a need for a careful selection of trainees and, even more importantly, for a critical mass of competent and motivated trainers.*

**KEYWORDS** *Training, PBL, health managers, Central Africa.*

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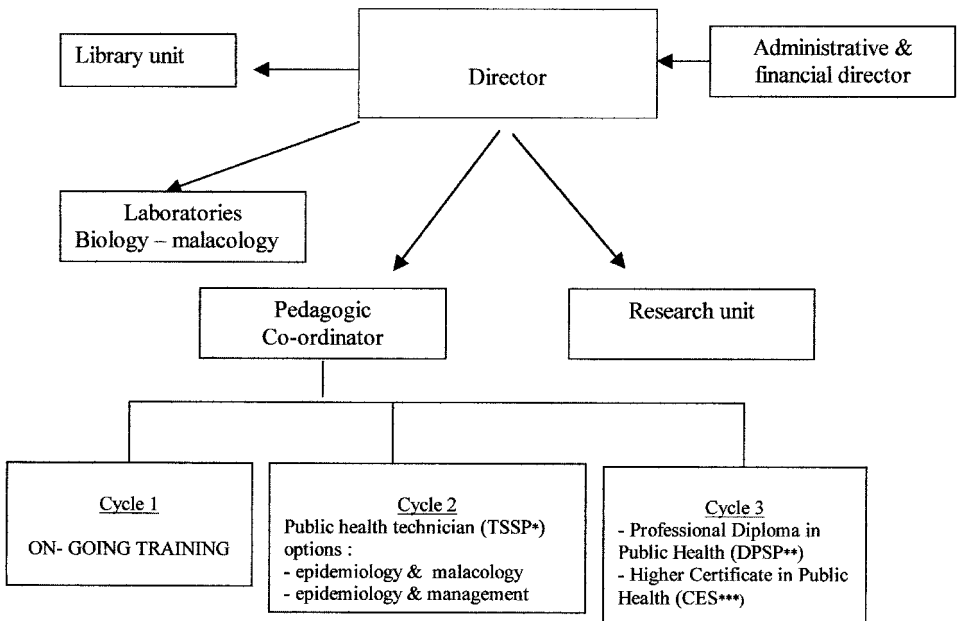
## Background

With an increasing population growth and reorganization of health systems in Central Africa, the need for competent health district managers is rising. Addressing this need has been identified as a priority at the Central African sub-regional level. Ten years ago, an inter-country public health training institution, the Centre Inter-Etats pour la formation en Santé Publique des Etats d'Afrique Centrale (CIESPAC), was created in Brazzaville. It functions under the supervision of ministries of health of six countries, namely: Cameroon, Central African Republic, Chad, Congo-Brazzaville, Equatorial Guinea and Gabon. The aim of this inter-country school is to provide the above mentioned countries with skilled health officers in order to strengthen the health system at central and peripheral levels.

CIESPAC (the Centre) has two independent but complementary departments, a training department and a research department.

Its two major missions are:

- to run long term and short term post graduate training programmes according to the needs of the countries concerned; and



- Technicien Supérieur en Santé Publique
- \*\* Diplôme Professionnel en Santé Publique
- \*\*\* Certificat d'Etudes Spéciales en Santé Publique

**Figure 1.** CIESPAC management structure showing the different post graduate training.

- to develop expertise and relevant operational research activities that would reinforce training.

The experimental phase of training health district managers in CIESPAC lasted four years and was carried out mainly in Brazzaville. This paper is a brief review of that experimental phase.

### **Teaching Method: The “Problem-based Learning” Approach**

Training in the problem-based learning (PBL) method has been described in the literature<sup>1</sup> (Guilbert, 1990; Dumais & Des Marchais, 1996). In most of sub-Saharan countries, strengthening of health services management is in process (Monekosso, 1994; Sandiford *et al.*, 1994; Van Bergen, 1995; Conn *et al.*, 1996).

A few years back, training health district managers was clearly identified as a priority by health authorities of the Central African region. Deans of the faculties of medicine of the countries concerned expected that the institution would produce potential academic leaders in public health for the university level. The Ministry of Health authorities expressed the need for qualified and skilled health managers capable of heading health programmes and managing health districts. The WHO regional office for Africa shared the point of views expressed by ministerial health authorities and supported the implementation of this programme.

The overall objectives of this post graduate training is to prepare learners for the practice of the management of health districts in the Central Africa sub-region to improve health status of the community.

It should be noted that until 1994 a classical approach had been followed in the Centre. Following a preliminary orientation workshop in 1994, bringing together members of interested international organizations, representatives of the Congolese Ministry of Health and the staff of CIESPAC, a one year long training course for health professionals was launched by early 1995. This training programme focuses on capacity building within the peripheral level of the health system (health district). *The challenge consists of providing qualified health workers with self-learning skills that will enable them to effectively continue training themselves independently after graduating from the course.* That is the reason why the Centre embarked on a process of developing a training policy based on a “community-oriented cum problem-based learning” (PBL) student-centred approach (Des Marchais, 1993, 1999; Plante, 1997).

About 70 trainees graduated from the school during the last four years.<sup>2</sup> These 70 graduates were medical officers (20%), diploma nurses (70%) and 10% others (e.g. administrative officers), all with many years of field work experience. At the end of this course, most of them were posted in their

respective countries at central and peripheral level to carry out duties in management of national health programmes or district health teams (McMahon *et al.*, 1993; Monekosso, 1994).

## **Description of the Training Process**

Selection of trainees is carried out in their respective countries by authorities of the Ministry of Health. One of the main criteria for selection was spelt out in the objectives of the institution in a brochure presenting the centre. It includes the statement “A foreign student in Brazzaville has to face and tackle problems daily”. It also states that trainees should be willing to learn using the PBL approach. This is a major criterion, considering that in French speaking African countries, most health professionals are not familiar with this approach.

### *Course Content Definition*

At the beginning of the course, trainees are requested to participate actively in planning their own training programme, thereby adapting the course to the priority health needs of the communities they intend to serve (Guilbert, 1990; Grand'Maison & Des Marchais, 1991). In small groups, they carry out focus group discussions with members of the community and health professionals and, with the help of the health district team, problems are identified and listed.<sup>3</sup>

During the first contact with their professional colleagues in the field, one of the common observations trainees make is that there is no proper job description for most health professionals. They are therefore requested to formulate their own future “professional profile” based on the problems identified and also to propose a job description scheme for the health district manager.

Learning objectives directly derived from the professional profile are then formulated, with priority being given to those problems which generate objectives that are closely linked to the job description of the health district manager. In so doing, a comprehensive one year training programme for acquiring relevant skills in the intellectual, sensorimotor and interpersonal communication domains is designed by trainees themselves with help from the staff of the Centre.

### *Pedagogic Approach*

The pedagogic approach generally follows the following sequence:

1. group meetings of eight to 10 trainees in order to analyse priority health problems, identify professional actions required and the relevant basic knowledge;
2. literature review by trainees and meetings with trainers;

3. plenary sessions during which trainers act as facilitators in helping trainees share information sources with each other.

At the beginning of the course, a minimum of basic references<sup>4</sup> and literature were given to the learners (Guilbert, 1990; McMahan *et al.*, 1993). However, the heterogeneity of the level of the trainees calls for some prerequisites (epidemiology, statistics, anthropology, etc.).

Trainees are permanently in close contact with field realities because:

- They do not live on campus but in apartments located in the community of the suburban district and as such are continuously confronted with the health problems of the population. Trainers are requested to carry out practical illustrations of their modules using examples within the vicinity of the school.<sup>5</sup>
- Course participants are requested to plan and fulfil a one month long professional field assignment in a health district.

### *Professional Field Assignment*

During the one month assignment in the district, trainees are requested to dialogue with members of the community and with health professionals so as to be able to grasp the reality on the spot. It provides an opportunity for them: (1) to identify different actors and appreciate the way they function at district level, (2) to compare the situation they have assessed with the “ideal” that was studied at the centre, and (3) to analyse the main reasons for the differences noticed. Following this phase trainees interview some actors (service users, health professionals and representatives of local institutions), discuss solutions to identify problems with them and concrete proposals are made by both parties. The quality of dialogue between trainees, community members and health professionals is the key to the success of this part of the course.

Once a problem is identified, relevant reading materials are selected by trainees and put together to enable them to analyse the problem through various exercises. These exercises, which are expected to be done on a daily basis while on the field, are considered as a relevant tool for helping trainees initiate solutions with members of the health district team.

On returning from the field, trainees organize discussions centred around their field experiences. Information gathered from these discussions is used for improvement of the field activities of the next cohort of students.

Trainees are assessed on their field report, which includes the daily exercises and a summary of personal observations and opinions about the field training process. Their suggestions for improvement are highly solicited and taken into consideration.

## **Involvement of Trainees in Operational Research**

During the course, trainees are involved in research activities. It gives them an opportunity for analysing health problems within community settings. The Centre's research unit offers short contracts to the most motivated trainees who are ready to implement research activities under the supervision of a senior researcher.

Research activities have been carried out on topics such as “study of health insurance system”, “health priorities problems and community organization at suburban district level” and “HIV and emergence of civil society”. In most cases, such studies provide an opportunity for trainees to meet and discuss situation analysis with representatives of local communities. It is expected that all trainees will have to live this professional experience during their career.

Field research experience is important for both the training and the health research units because it enables trainees to understand the link between operational research and the community-oriented cum PBL pedagogic approach and also because trainers who are equally involved in research use the results to reinforce training (Doyle *et al.*, 1998; Feletti *et al.*, 2000).

The research unit used these studies to build up its own management process regarding identification of pertinent research projects, productivity of the unit, management of junior health personnel involved in such programmes and expertise.<sup>6</sup> Results of this experience were recently taken into account in designing a development project for the health research unit and were proposed to the regional authorities in charge of the training centre.

## **Conclusion**

This training programme has a certain number of strong points. First, trainees are not told what to learn by trainers but helped to learn how to identify and solve problems on their own for the rest of their professional career. Second, the close contact with the community and others health professionals enables trainees to identify and tackle real problems instead of working on abstract case studies. This interaction does also improve collaboration between community representatives and health professionals. One of the major constraints with this pedagogic approach is the absolute necessity for a latent period of mutual understanding between trainees and trainers at the beginning of the course. For this kind of training to be effective, trainers need to be quite motivated by and versed with this approach.

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## Notes

1. In French. The concept was described earlier in English by other authors such as Henk Schmidt, Howard Barrows, etc.
2. The last batch saw its training interrupted for six months before being completed in Yaoundé due to the civil war which started in Brazzaville by June 1997.
3. The required field activities were carried out essentially at the *urban level*. The following cities were successively considered as field training sites: Brazzaville, Pointe Noire, Dolisie, Kinshasa and Yaoundé.
4. *Le CIESPAC tel Quel*. CANONNE F. CIESPAC, Brazzaville, mai 1997 (unpublished document).
5. The last batch did not benefit fully from this approach because they completed their training in Yaoundé, away from the organized training site in Brazzaville.
6. *Place et rôle du Centre Hospitalier Universitaire de Brazzaville dans le système de santé congolais*. CIESPAC—Ministère de la Santé et des Affaires Sociales du Congo—Mission Française de Coopération et d'Action Culturelle (Brazzaville), décembre 1996 (unpublished document).

## References

- CONN, C.P., JENKINS, P. & TOURAY, S.O. (1996). Strengthening health management: experience of district teams in the Gambia. *Health Policy Planning*, 11, 64–71.
- DES MARCHAIS, J.E. (1993). A student-centred, problem-based curriculum: 5 years' experience. *Canadian Medical Association Journal*, 148, 1567–1572.
- DES MARCHAIS, J.E. (1999). L'éducation médicale à l'aube du 21ème siècle: un défi pour les unités françaises d'éducation et de recherche. *Annales de Médecine Interne (Paris)*, 150, 469–475.
- DOYLE, D.B., BURKHARDT, M.A., COPENHAVER, J., THACH, S. & SOTAK, D. (1998). Health professions students as research partners in community oriented primary care. *Journal Community Health*, 23, 337–346.
- DUMAIS, B. & DES MARCHAIS, J.E. (1996). Problem based learning: the vehicle for the educational reform. In: J. DES MARCHAIS *et al.* (Eds), *Learning to become a physician at Sherbrooke* (pp. 79–112). Maastricht: Network Publications.

- FELETTI, G., JA'AFAR, R., JOSEPH, A., MAGZOUB, M., MCHARNEY-BROWN, C., OMONISI, K., REFAAT, A., WACHS, J. & SCHMIDT, H. (2000). Community-based curriculum design: examples and perspectives. In: H. SCHMIDT *et al.* (Eds), *Handbook of community-based education: theory and practices* (pp. 121–146). Maastricht: Network Publications.
- GRAND'MAISON, P. & DES MARCHAIS, J.E. (1991). Preparing faculty to teach in a problem-based learning curriculum: the Sherbrooke experience. *Canadian Medical Association Journal*, 144, 960.
- GUILBERT, J.J. (1990). *Educational handbook for health personnel*, 6th edn. Geneva: World Health Organization (WHO Offset Publication No. 35).
- MCMAHON, E., BARTON, E. & PIOT, M. (1993). *On being in charge: a guide to management in primary health care*, 2nd edn. Geneva: World Health Organization.
- MONEKOSSO, G.L. (1994). *District health management*. WHO, Regional Office for Africa.
- PLANTE, A. (1997). L'encadrement dans l'apprentissage de la médecine. In: L. LANGEVIN & L. VILLENEUVE (Eds), *L'encadrement des étudiants, un défi du XXI<sup>e</sup> siècle* (pp. 147–158). Québec: Editions Logiques.
- SANDIFORD, P., KANGA, G.J. & AHMED, A.M. (1994). The management of health services in Tanzania: a plea for health sector reform. *Internal Journal Planning Management*, 9, 295–308.
- VAN BERGEN, J.E. (1995). District health care between quality assurance and crisis management: possibilities within the limits, Mporokoso and Kaputa District, Zambia. *Tropical Geographical Medicine*, 47, 23–29.