

The Availability, Utilisation and Needs for Continuing Professional Development of Rural General Practitioners in the Western and Northern Cape

De Villiers, MR

MB, ChB, MFamMed (Stell)

Department of Family Medicine
and Primary Care
University of Stellenbosch
PO Box 19063
Tygerberg, 7505

Tel: 021 9389563

Fax: 021 9389153

E-mail: mrdv@gerga.sun.ac.za

Keywords: Continuing professional development, rural medical practitioners, general practice
Background:

Abstract

Continuing professional development (CPD) is receiving increasing attention in South Africa. The introduction of recertification based on a system of obligatory CPD by the Health Professions Council of South Africa has precipitated a flurry of activity in the CPD arena, especially in terms of providing CPD. However, despite the fact that the assessment of learning needs has a positive influence on the outcome of CPD, not much has been done in South Africa to assess the real, perceived and expressed educational needs of doctors.

Objective: The aim of this study was to describe the CPD activities available to rural general practitioners in the Western and Northern Cape, how they utilise it, and to assess their expressed CPD needs.

Method: A descriptive, cross sectional survey by posted questionnaire was conducted to assess demographic characteristics, use of CPD activities, needs for CPD, and most and least worthwhile CPD activities experienced.

Results: A 37% response rate (236) was achieved from 639 posted questionnaires. The mean age of the respondents was 41,1 years, 87% were male, and 42% were working in both the public and private sector. The respondents demonstrated a clear preference for clinical topics, with little interest in topics like medical ethics and community health. They utilised mainly CPD activities accessible to them such as journals, medical representatives, and specialist

reports. Availability of computer-assisted CPD rated very low at 9%. The respondents expressed a need for more computer-assisted and audio-visual CPD. Journals topped the list of the most wanted CPD activity, followed by refresher courses and clinical guidelines. Lectures by specialists were named as the most worthless CPD experience the respondents have had.

Discussion: The difficulty for rural doctors to leave their practices to attend CPD elsewhere was reconfirmed, more so as almost one in three doctors in this survey works in solo practice. It is not surprising then that easily accessible CPD activities, such as journals, medical representatives, and specialist reports, were utilised most often in this survey. The ad hoc use of this, without predetermined assessment of educational needs and no evidence of learning is a concern. Disappointingly, the practitioners did not value the importance of the comprehensive primary health care approach and ethics. Honour for our profession is earned by engaging with the moral and ethical issues facing us, and practitioners should be motivated to spend time on learning medical ethics. Improving patient outcomes cannot be reached without an accurate pre-assessment of educational needs, the development of a learning plan around these educational needs and post-course evaluation. Future research should focus on the effectiveness of CPD in terms of practitioner behaviour change and patient health outcomes.

Introduction

Medical practitioners have an obligation to their patients to maintain an acceptable standard of service. The information explosion of the modern era leaves the knowledge of the medical practitioner already outdated at the time of graduation. Practitioners who have been in clinical practice for a number of years lag even further behind in keeping abreast of new trends and developments. Also, communities and patients have an increasing awareness of health and disease, and are no longer satisfied with being passive recipients of health care. These elements place an ever-increasing demand on the professional competency of the medical practitioner.^{1,2}

Continuing Professional Development (CPD) provides doctors with an opportunity to maintain and improve their clinical performance.³ It has become an increasingly important concern not only for doctors but also governments, regulating bodies, and patients.⁴ Recertification is part of an international trend to shift the purpose

of CPD towards assuring adequate performance.

The potential favourable contributions of CPD are however undermined by the widespread use of methods known to be least effective, the absence of learning needs analyses, the ad hoc occurrence of a broad variety of CPD activities, and the use of inappropriate educational formats.^{5,6,7,8} Also, CPD activities are more readily available to general practitioners residing in urban rather than rural areas.⁹

Rural communities have ongoing difficulties in attracting and retaining appropriately trained doctors. Several reports have identified a range of issues, which discourage doctors from entering into, or staying in rural practice. These include, amongst others, the lack of career structure, inappropriate training, spouse satisfaction, schooling for children, and academic isolation.^{10,11} A key recommendation from the World Organisation of Family Doctors (WONCA) Working Party on Training

for Rural Practice is the development of specifically tailored CPD programmes, which meet the identified needs of rural practitioners.¹²

In South Africa, however, little is known of the CPD needs of general practitioners. Objective needs assessment methods have been shown to be a necessary precursor of effective CPD interventions.¹³ The assessment of the educational requirements is therefore clearly a priority.^{14,15} To make specific recommendations regarding future CPD programmes, it is also necessary to know what CPD activities are currently available to rural practitioners, which of these are utilised by them, and which they regard as beneficial to themselves.

The aim of this study was to determine the CPD activities available to general practitioners in rural areas of the Western and Northern Cape Provinces, how these are utilised by them, and to assess the expressed CPD needs of these doctors.

Methods

A descriptive cross-sectional survey was conducted of general practitioners in the Western and Northern Cape Provinces outside the greater Cape Town metropolitan area, excluding large towns with easy access to the metropolis such as Paarl, Somerset West and Stellenbosch. Several definitions of rurality are used in the literature,¹² but for the purposes of this study "rural" was defined as those areas without easy access to CPD programmes in metropolitan areas.

All 639 doctors on the address list obtained from the South African Medical Association were included in the study population. Postal questionnaires were sent out at the end of 1996, numbered and including a self-addressed envelope to ensure anonymity. Follow up of non-responders was not attempted, mainly due to lack of resources and funding. CPD activities were defined as any activity that could be of educational value to the doctor, and the literature was used to compile a list of activities that were used in other studies as examples of CPD activities.

The questionnaire consisted of 4 parts namely (a) demographic characteristics, (b) whether a CPD activity was utilised and the frequency of utilisation, (c) exploring the availability, use and needs for different CPD activities, and (d) defining problems of attending CPD including open questions on the most and least worthwhile CPD ever attended. The questionnaire was piloted to address potential difficulties with the questionnaire, and subsequently adapted.

Results

A total of 639 questionnaires were posted, of which 236 were returned (response rate 37%). Two hundred and sixteen questionnaires were suitable for analysis. The mean age of the respondents was 41,1 years (range 26-78 years), 87% were male, and their average time in practice was 12,3 years (range 1-52 years).

27,9% of the respondents were in solo practice, with an average of three partners per group practice. Table I reflects the university of qualification of the responders, with 58,3% of the respondents having graduated at the University of Stellenbosch. Most responders (52%) were in full time private practice, 6% were employed exclusively in the public sector, and

42% were working in both the public and private sector.

Table II reports the main positive and negative responses to the question on what subjects the doctors would like to be included in their CPD, showing a clear preference for clinical topics, with medical emergencies,

paediatrics, ear, nose and throat disorders and dermatology topping the list. Ethics, rehabilitation and epidemiology were the least preferred topics.

Table III demonstrates the response to the question on what CPD activities are available to the doctors, and whether they make use of it. The respondents rated journals (96,3%), and medical representatives (91,2%), as the CPD activities mostly available to them. Specialist reports (64,8%), telephonic consultations (63,9%), and refresher courses (63%), followed these.

The utilisation of CPD activities followed a similar pattern than the activities rated as being mostly available, with respondents using the CPD activities in the same frequency of preference than the frequency of availability. The availability of computer-assisted CPD activities rated very low at only 9%. Activities in which interest were low included research, telephone conferences, practice audit; students in the practice, and time spend in an academic hospital.

Table IV outlines the difference in CPD activities that were available at that time and CPD activities that the respondents would be interested in having. Computer-assisted CPD and audio-visual material had the biggest discrepancy between availability and interest. Respondents continued to express interest in using journals as CPD, supported by needs expressed for refresher courses, and clinical guidelines.

The problem respondents had with participation in CPD included a high service load, the rendering of after-hour services, cost, family commitments, and travelling distance to the CPD activity. Refresher courses were declared to be the most useful CPD activity attended, and lectures by specialists as the most worthless CPD experience the respondents have had.

Table I: University of basic medical qualification of respondents

University of Pretoria	10,2%
University of the Free State	16,2%
University of Cape Town	9,3%
University of Stellenbosch	58,3%
University of Transkei	0,9%
Medical University of South Africa	0%
University of the Witwatersrand	2,8%
University of Natal	0,9%
Other	1,4%

Table II: What subjects would you like to be included in your CPD? (n=216)

Subject	Yes	No	% Yes
Medical Emergencies	192	4	98
Paediatrics	186	4	97,9
ENT	182	7	96,3
Dermatology	181	7	96,3
Cardiology	178	7	96,2
Gynaecology	174	8	95,6
Internal Medicine	166	8	95,4
Ophthalmology	178	10	94,7
Orthopaedics	172	10	94,5
Trauma	166	10	94,3
Forensic Medicine	106	50	68
Community Health	95	54	63,8
Occupational Health	94	55	63,1
Medical Ethics	75	71	51,4
Rehabilitation	97	48	44,8
Epidemiology	65	76	38

Discussion

Only 13% of the respondents were female, which is an indication that rural practice might not be a popular career choice for women practitioners. The mean time of 12,3 years in practice demonstrates a time commitment to rural practice. It must be difficult for most of the respondents to leave their practices to attend CPD elsewhere, more so as almost one in three works in solo practice. The 42% of doctors working in both the public and private sector reflect the part-time district surgeon system functioning in the Western and Northern Cape at the time of the survey.

It appears that the respondents were not always aware of CPD activities available to them, as conferences and refresher courses are well known for being widely and regularly presented throughout the country. On the other hand, availability could have been confused with accessibility, with respondents similarly rating availability and accessibility. The fact that utilisation patterns followed the patterns identified in the availability results can serve as confirmation of this deduction.

It is not surprising that, given their constraints in attending CPD,¹² easily accessible activities, such as journals, medical representatives, and specialist reports, were utilised most often in this survey. The ad hoc use of this, without predetermined assessment of the educational needs of the doctor, and with no evidence of learning, is a source of concern.⁸

The biggest difference between what was available to the respondents and what they would like to use lies in the field of computer-assisted CPD and audio-visual material. This provides an important window of opportunity for CPD providers. Also, journals remained top of the wanted CPD list, which reaffirms the role of journals in the South African CPD provider market.

The subject preferences for CPD were mainly focused around clinical subjects.

Table III: What CPD activities are available to you and do you make use of it? (n=216)

CPD Activity	Activity Available	% Available	Use Activity	% Use
Journals	208	96,3	215	99,5
Clinical Guidelines	104	48,1	101	46,8
Practice Manuals	87	40,3	87	40,3
Promotional Material	133	61,6	123	56,9
Telephonic Consultation	150	63,9	138	63,9
Outreach by Specialists	74	34,3	71	32,9
Specialist Reports	140	64,8	131	60,6
Medical Reps	197	91,2	186	86,1
Audio-Visual Material	57	26,4	51	23,6
Computer-assisted CPD	17	7,9	22	10,9
Research	9	4,2	11	5,1
Conferences	108	50	99	45,8
Refresher Courses	136	63	120	55,6
Weekend Workshops	97	44,9	90	41,7
Students in Practice	75	34,7	68	31,5
Local CPD Meetings	80	37	84	38,9
Academic Hospital Attachment	13	6	21	9,7
Local Case Discussions	81	37,5	84	38,9
Telephone Conferences	6	2,8	10	4,6
Practice Audit	18	8,3	20	9,3

Table IV: Difference between CPD activities available and CPD activities that the respondents are interested in using (%).

CPD Activity	Available	Interested in Using
Journals	96,2	95,5
Refresher Courses	63	94,3
Clinical Guidelines	48,1	93,4
Specialist Reports	64,8	90,9
Audio-Visual Material	26,4	90,4
Medical Reps	91,2	89,3
Practice Manuals	40,3	88,2
Weekend Workshops	44,9	88
Conferences	50	88
Local CPD Meetings	37	88
Informal Case Discussions	37,5	85
Computer-assisted CPD	7,9	83,5
Specialist Outreach Visits	34,2	82,3

This is partly due to the challenges of managing clinical problems in daily patient care. The bio-medical model of undergraduate training however continues to influence the expressed CPD needs of general practitioners. Only by changing the paradigm of undergraduate training to include the broader systems theory will the expressed, perceived and real CPD needs move closer together.¹⁶

The general practitioners appeared not to value the importance of the comprehensive primary health care approach as subjects such as community health and rehabilitation scored high on the non-preferred topic list. Also, the fact that many of these doctors are involved in the public health sector which invariably involves a lot of forensic work, makes their non-preference of forensic medicine a particular concern. Their expressed needs did not concur with external perceived educational needs in this area.

Lastly, it is particularly disappointing that the doctors did not regard ethics as a priority for their continuing education, especially at a time in the history of medicine in our country where a culture of ethics and social responsibility must be promoted. Honour for our profession is earned over a period of time by engaging with the moral and ethical issues facing our profession in a transforming society that still bears the scars of its grim past.¹⁷ The inclusion of obligatory ethics points in the compulsory re-registration system is therefore supported.

The contributions of CPD, a major facilitator of change in practitioner behaviour, are undermined by difficulties in CPD delivery. CPD that is applicable to clinical practice not only has the greatest impact on improving patient outcomes but also offers physicians a greater sense of satisfaction. This goal cannot be reached without an accurate pre-assessment of

educational needs, the development of a learning plan around these educational needs and post-course evaluation which determines the impact on daily practice.¹⁸

The limitations of this study include the low response rate. Low response rates seem to also be a problem in other parts of the world.¹⁹ However, response bias due to low response rates is viewed as negligible when the surveyed populations are homogeneous, (as in this study), with minor differences on independent variables between respondents and non-respondents.^{20,21}

Also, the wide range of so-called CPD activities as defined by the literature was somewhat confusing and not always practical. Future studies should concentrate on CPD activities traditionally regarded as such by South African doctors. The lack of a qualitative component in this study also limits the value of the study.

Conclusion

Since the introduction of a recertification system of obligatory CPD in 1999, the provision and possible utilisation of CPD have changed

significantly. A follow-up study will be useful to examine new trends. Future research on CPD should focus on clearly defining real and perceived CPD

needs of doctors, as well as the effectiveness of CPD in terms of practitioner behaviour change and patient health outcomes.

Acknowledgements

I wish to thank the SA Academy of Family Practice / Primary Care Western

Cape Region for their financial support of this study, and Mrs J Barnes for her

assistance in the analysis of the results.

References

1. Wilkinson P. Continuing medical education for the trained physician. Recommendations for the introduction and implementation of a CME system. *Postgrad Med J* 1994;70:732.
2. Nel CJC, Kent AP. Maintenance of professional competence, continuing medical education and recertification (MPC, CME and RC). *SA Fr Med J* 1994;84:462-64.
3. Kelly MH, Murray TS. General practitioners' views on continuing medical education. *Br J Gen Pract* 1994;44:469-71.
4. Cantillon P, Jones R. Does continuing medical education in general practice make a difference? *BMJ* 1999;318:1276-79.
5. Davis DA, Thomson MA, Oxman AD, Haynes RB. Changing physician performance. A systematic review of the effect of continuing medical education strategies. *JAMA* 1995;274:700-5.
6. Crozier A. Why don't you ask us? Assessment of GP learning needs. *Aust Fam Phys* 1994;23:783-4.
7. Stanley I, Al-Shehri A, Thomas P. Continuing education for general practice. Experience, competence and the media of self-directed learning for established general practitioners. *Br J Gen Pract* 1993;43:210-14.
8. Fox RD, Bennett NL. Learning and change: implications for continuing medical education. *BMJ* 1998;316:466-468.
9. Wise AL, Hays RB, Adkins PB, Craug ML, Mahoney MD, Sheehan M, Siskind V, Nichols A. Training for rural general practice. *Med J Aust* 1994;161:314-18.
10. Jacques P. Recruitment and retainment of staff in rural areas. *S A Fam Pract* 1994;15:398-400.
11. Craig M, Nichols A. Training curricula in surgery, anaesthesia and obstetrics for rural GPs. *Aust Fam Phys* 1993;22:1218-9.
12. WONCA Working Party on Training for Rural Practice. Policy on Training for Rural Practice. 1995.

References

13. Davis D, Thomson O'Brien MA, Freemantle N, Wolf FM, Mazmanian P, Taylor-Vaisey A. Impact of formal continuing medical education. Do conferences, workshops, rounds, and other traditional continuing education activities change physician behaviour or health care outcomes? *JAMA* 1999;282(9):867-874.
14. Gill D, Game D. Continuing medical education needs of rural GPs in South Australia. *Aust Fam Phys* 1994;23:663-7.
15. Kamien M, Buttfield IH. Some solutions to the shortage of general practitioners in rural Australia. Part 4. Professional, social and economic satisfaction. *Med J Aust* 1990;153:168-71.
16. Mash B, De Villiers MR. Community-based training in Family Medicine – a different paradigm. *Medical Education* 1999;33:725-9.
17. Baldwin-Ragavan L, De Gruchy J, Lewin S, London L. Restoring the honour of our profession. *S Afr Med J* 1997;87:977-978.
18. Blitz J, De Villiers MR. Continuing Professional Development. A guide for Family Practitioners. *S A Fam Pract* 1999;20(1):102-5.
19. Sibbald B, Addington-Hall J, Brennan D, Freeling P. Telephone versus postal surveys of general practitioners: methodological considerations. *Br J Gen Pract* 1994;44:297-300.
20. Leslie LL. Are high response rates essential to valid surveys? *Social Science Research* 1972;1:323-34.
21. Cockburn J, Campbell E, Gordon JJ, Sanson-Fisher RW. Response bias in a study of General Practice. *Family Practice* 1988;5(1):18-23.