Scandinavian Journal of Primary Health Care

ISSN: 0281-3432 (Print) 1502-7724 (Online) Journal homepage: https://www.tandfonline.com/loi/ipri20

Belgian General Practitioners on their Vocational Training: A Postal Inquiry

Jo Goedhuys & Dani Leroy

To cite this article: Jo Goedhuys & Dani Leroy (1990) Belgian General Practitioners on their Vocational Training: A Postal Inquiry, Scandinavian Journal of Primary Health Care, 8:4, 249-253, DOI: 10.3109/02813439008994967

To link to this article: https://doi.org/10.3109/02813439008994967

Published online: 12 Jul 2009.

Scand J Prim Health Care 1990; 8: 249–53

Belgian General Practitioners on their Vocational Training: a Postal Inquiry

JO GOEDHUYS AND DANI LEROY

Interuniversitary Center for Vocational Training of General Practitioners (I.C.H.O), Minderbroedersstraat 17, B-3000 Leuven, Belgium

Goedhuys J, Leroy D. Belgian general practitioners on their vocational training: a postal inquiry. Scand J Prim Health Care 1990; 8: 249–53.

Vocational training of general practitioners in Belgium consists – among others – of 34 seminars to be followed in small groups during a period of two years. The purpose of this study was to develop an instrument for continuing evaluation of this system, and to gather evaluative data. 58% of 177 young general practitioners responded to our postal inquiry, in which ten open-ended questions were put, and 50 statements were to be rated on a six-point-scale. The inquiry revealed that the Belgian vocational training has a large influence on the evolution from inexperienced young doctor to self-confident general practitioner. Factor analysis on the scores of the 50 statements uncovered three dimensions: (1) working climate, (2) learning results, and (3) identification. The reliability of the scales, constructed for each of these factors, was between 0.80 and .86 (Cronbach's α). Mean scores on these scales were all high. The Belgian vocational training seems to be accepted and appreciated by the young GPs, but improvements might be suggested.

Key words: general practice, postgraduate education, vocational training, evaluation, postal inquiry, peer review, Belgium.

Jo Goedhuys, ICHO, Minderbroedersstraat 17, B-3000 Leuven, Belgium.

The Belgian system of vocational training was established in 1984 and modified in 1987 to fit in with the European guidelines (1). In many aspects it resembles the Norwegian system (2, 3, 4).

After qualifying, candidates start their own practices and are allowed to practice medicine independently. However, to be able to receive full pay and to function within the system of social security after 1995, the GP has to become "authorized". He must follow 200 hours of specific theoretical courses on general practice, before or after qualifying, and he has to attend 34 seminars of 3 hours' duration during a period of two consecutive years, while working as a GP. These seminars are given for semi-permanent groups of 10 to 15 candidates. There are about 4O of these groups, spread over Flanders. The topics dealt with in the seminars are determined by the needs of the participants. The seminars are led by experienced GPs ("moderators") who receive an on-the-job training in problem solving with small groups. For these purposes a handbook was written by the authors (5). These "moderators" are also responsible for the individual guidance of the members of their group, i.e. visiting the practice, availability for advice, feedback about shortcomings, etc. Therefore, this vocational training is also called "guided practice". Our aim was to find out how young authorized GPs look back at their two years of guided practice. Have changes taken place in their functioning as a doctor? What did they learn at the seminars? How do they evaluate the methods used by the moderator? Similar evaluation research has been undertaken by our Norwegian colleagues (6). We also wanted to refine the questionnaire, so that it could become a reliable and valid instrument to measure important aspects of the vocational training in the future.

Table I. *Characteristics of the responders (n=102; M=72, F=30).*

University	Louvain 51.0%	Ghent 22.5%	Antwerp 12.7%	Brussels 13.7%
Year of graduation	1986 54.0%	1985 37.2%	1984 7.8%	1981 1.0%

MATERIAL AND METHODS

During the spring of 1988 the authors held 15 in-depth interviews with doctors who were about to finish their vocational training (7). From these interviews a) we obtained the topics for questioning, which were to cover the whole field of the doctors' experiences in relation to their evolution as GPs, including the role of their vocational training, and b) we constructed 50 statements which could be scored on a six-point-scale, six meaning "I fully agree" and one meaning "I fully disagree".

This questionnaire was sent in January 1989 to 177 doctors who had become authorized GPs during the autumn of 1988.

The answers to the open questions were grouped under catchwords having meanings that could stand for the answers grouped under them. The data from the scored statements were processed using the SPSS-computer program (8). $\bar{X}$ and SD, proportion of scores $\geqq 4$, differences between population-subgroups, and intercorrelations were computed for each statement. A factor analysis was carried out to validate the instrument, i.e. to look for the basic dimensions that could explain the intercorrelations. From the "principal component analysis", factors were withheld that explained more than five per cent of the variance, and afterwards they were "varimax" rotated.

With the statements that were discovered as belonging to one of these dimensions (loadings > .40 and no loadings on other dimensions) scales were constructed, meant to measure these basic dimensions. For these scales, Cronbach's α, $\bar{X}$, and SD were computed.

RESULTS

Characteristics of the responders

102 questionnaires (58%) were returned from 40 different seminar-groups, with one to seven questionnaires per group. The sample showed no significant differences from the total group with respect to sex, university, or year of graduation (Table I). Moreover, the proportions of responders from the different universities were not significantly different from the proportions of doctors who graduate yearly from these universities.

Answers to the open-ended questions

1) *Evolution.* 58% spontaneously mentioned increased selfconfidence, while 56% saw changes in clinical reasoning and felt they had become "family physicians" instead of "hospital doctors". Improvement in communication-skills was mentioned by 34%. Asked for causes of these evolutions, 65% mentioned their growing number of patients (experience) and 54% the seminars, the moderator, or the deliberation among equals.
2) *Seminars.* 72% of all remarks were positive. The negative were mostly about organizational aspects of the seminars, such as the time schedule, the room, the distance. When directly asked about what they missed at the seminars, 61% of the responders mentioned training in skills or problem-directed, scientifically-based expertise. When asked about personal gains, 55% mentioned the social support of the colleagues, "being in the same boat", and the consecutive reduction of uncertainty. 52% mentioned a change in self-imposed tasks and attitudes towards the profession. Other frequently cited gains can be summarized under "learning about organizational as-

Table II. *The three factors and their respective scales.*

Factor	Number of statements	Reliability (Cronbach's α)	$\bar{X}$	SD	%>3.5
Working atmosphere	9	.86	4.68	0.78	93.5
Learning results	9	.86	3.74	0.95	61.9
Identification	10	.80	4.18	0.80	84.6

Table III. *Factor "working atmosphere".*

Statements	%≧4	$\bar{X}$	SD	loading
Moderator was a good discussion leader	95.0	5.0	1.00	.81
Atmosphere at seminars usually good	89.9	4.6	1.02	.79
Got on well with moderator	90.0	4.7	1.12	.72
Felt understood by moderator	88.7	4.5	0.98	.69
Open discussion about differences of opinion	98.0	5.0	0.82	.63
Atmosphere too serious	19.2	2.6	1.20	−.63
Moderator's hobbies too often discussed	17.0	2.2	1.28	−.51
Seminars experienced as under "equals"	89.0	4.6	1.15	.47
Too many endless discussions	23.0	2.6	1.37	−.47

pects of the practice, and orienting oneself in the local primary health care" (51%).

3) *Moderator.* 78% of the comments about his methods were positive -the negative ones mostly pointing to a lack of directive when leading a discussion. The moderator was labelled as a good physician by 68% of the responders. Concerning individual guidance, 33% said they had no contact with their moderator outside the seminars.

Scores on the 50 statements

The factor analysis yielded three factors, explaining 33.9% of the variance. Each factor contained at least nine statements with loadings higher than .40. These items were considered together as one scale, and the results of the analysis of these scales are shown in Table II.

A first dimension, which explained 19% of the variance, can be called "working atmosphere". It describes the degree to which candidates considered that the conditions for effective learning in the seminars were being fulfilled: it contains items about the way the moderator conducts the seminars, and the atmosphere in the group (Table III). A second group of items reflects a dimension we called "learning results". It refers to the degree to which candidates felt that the vocational training had improved their practice. This factor explained 9.4% of the variance (Table IV). A third dimension (5.5% of the variance) exists of the "identification" with the professional role of general practitioner, as it was presented to the candidates throughout the vocational training and through the moderator. The scale measures the degree to which candidates could accept and appreciate this particular way of postgraduate learning (Table V). The mean score of woman practitioners on this "identification" scale was significantly lower than the one of their male colleagues: $l_w = 3.83 < l_m = 4.31$ ($p < .05$). No other significant differences among groups of responders could be found.

DISCUSSION

It is not impossible that non-responders (42%) would have a more negative attitude towards the vocational training. Social desirability can also have played a role while answering questions or scoring items (9). Nevertheless, the positive majority on some items was so high that the balance would re-

Table IV. *Factor "learning results".*

Statements	%≧4	$\bar{X}$	SD	loading
Learnt to see the patient as a whole	62.2	3.7	1.47	.79
Better insight in doctor-patient relationship	70.0	3.9	1.29	.71
Guided practice didn't make any difference	35.7	3.3	1.32	−.59
GP-knowledge positively influenced	89.9	4.4	1.04	.58
Learnt to tackle medical problems in a systematic way	59.6	3.6	1.20	.53
Prescriptions better aimed	54.1	3.4	1.46	.49
Felt safe by possible appeal on moderator	68.1	3.8	1.37	.47
Got significant feedback from trainer	68.7	3.9	1.28	.47
Good that seminars were obligatory	43.3	3.2	1.66	.47

Table V. *Factor "identification".*

Statements	%≧4	$\bar{X}$	SD	loading
Agreed with view of moderator on general practice	69.1	4.0	1.14	.60
Did not dare to ask questions in the seminars	26.0	2.3	1.44	–.60
Moderator did not tell enough from his experience	25.0	2.6	1.37	–.57
Intention to continue this method of case disscussions with colleagues	37.9	2.9	1.44	.53
Visit of moderator useful	52.7	3.4	1.56	.50
Self-confidence as a G. P. has increased	96.8	5.1	1.02	.47
Learnt to know colleagues, with whom medical discussions outside seminars	57.6	3.6	1.20	.44
Visit of moderator annoying	15.1	2.2	1.40	–.42
Moderator stil very eager to learn	91.7	4.6	0.95	.40
Told cases to get new ideas	82.5	4.4	1.38	.37

main positive, even if all non-responders would have scored negative.

The seminars seem to function as a source of emotional and intellectual support for the uncertainties and problems of the starting GPs. Regularly testing and checking one's own thinking and acting with young colleagues and an experienced GP is clearly an appreciated way of assimilating the diverse aspects of the professional role. In particular this appears to be the significance of the guided practice, rather than what has been "learnt" in the sense of new cognitive contents. This "developing of a general practitioner identity" is one of the benefits that has also been reported by others (10). Candidates, scoring high on the "identification" scale, have the feeling of belonging to a professional group, meeting in the seminars and doing a useful job there. As reported elsewhere, this is accompanied by an increased consultation with colleagues outside the formal situations (11). For the lower score of female GPs on this scale, we can only formulate hypotheses. Are the seminars dominated by a professional profile to which women GPs can less easily subscribe? This might be caused by the overwhelming majority of male moderators. Or is there an ambivalence in the way young women see their professional future?

The expressed need for more training of technical skills and more problem-directed scientifically-based expertise has to be thoroughly looked into. Real needs should be examined and assessed as objectively as possible. What are the diagnostic and therapeutic gaps in the way young Belgian GPs act? Moreover, the question must be answered as to whether the universities, the seminars, or the continuing education will have to take up those needs. Anyhow, it is clear that responders do expect a still larger relevance for their practices.

About one of three responders had a rather reticent attitude in contacting their moderator personally. This is a pity, especially since we know that most of the 67% who did have individual contacts outside the seminars found them useful.The Interuniversitary Center for Vocational Training of GPs has already set up a programme for moderators, to explore the reasons for this lack of individual contacts among the participants, and to stimulate the moderators to take initiatives in this matter.

The questionnaire itself seems to have interesting qualities and has already been refined for future use. The items belonging to the reliable scales can be kept for a regular evaluation, and new items can be added, e.g. to explore the sex difference on the "identification" scale. Whether the vocational training also has an impact on the actual behaviour of young Belgian GPs needs further investigation.

REFERENCES

1. Anonymous. Richtlijn 86/457/EEG van de Europese Raad van 15–09–86 (Guide-line 86/457/EEG of the European Council of 15–09–86). Huisarts Nu 1987; 16: 26–9.
2. Aanjesen T, Westin S, Östensen AI. Small group teaching, a decentral system of training for general practice, training the trainers for general practice. In: Heyrman J & Spreeuwenberg C (eds). Vocational Training in General Practice, Proceedings of a workshop on 15–18th October 1987 organized by the New Leeuwenhorst Group, Louvain, 1988, 43–53.
3. Westin S, Östensen AI. A group-based training pro-

gramme for general practitioners: a Norwegian experience. Fam Pract 1988; 5: 244-52.
4. Westin S, De Vibe M, Lindebø JO, Myhre T, Aanjesen T. Group-based training for general practice in Norway: making a new model work. Scand J Prim Health Care 1989; 7: 173–8.
5. Jaspaert H, Leroy DR, Goedhuys J. Handboek voor moderatoren (Handbook for moderators). Leuven, I.C.H.0., 1987, 133 pp.
6. Hoftvedt BO, Westin S, Holm A. Group training of general practitioners: evaluation based on participants' expectations of an educational programme. Med Educ 1988; 445–8.
7. Leroy D. Een jonge huisarts aan het woord over de beroepsopleiding (A young G.P. about his vocational training). Huisarts Nu 1989; 2: 73–5.
8. Nie NH, Hull, CH, Jenkins JG, Steinbrenner K, Bent DH. Statistical package for the social sciences. New York, McGraw-Hill, 1975, 2nd ed., 675pp.
9. Billiet J, Loosveldt G, Waterplas L. Het survey interview onderzocht: effecten van het ontwerp en gebruik van vragenlijsten op de kwaliteit van de antwoorden (Research on the survey-interview: effects of design and use of questionnaires on the quality of the answers). Dept. Sociologie, K.U.Leuven, 1986.
10. Hoftvedt BO, Nore AK. Spesialistutdanningen i allmennmedisin: evaluering av det to-årige utdanningsprogrammet (Training for general practice: evaluation of the group-based educational programme). Tidsskr Nor Laegeforen 1988; 108: 2823–5.
11. Kuyvenhoven M, Pieters R, Jacobs M, Touw-Otten F, Spreeuwenberg C. Consultation among peers in general practice; from no consultation to peer review. Scand J Prim Health Care 1988; 6: 5–12.

Received March 1990
Accepted July 1990